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TEACHERS' SUSTAINED CULTURALLY RESPONSIVE PRACTICES THREE YEARS AFTER PARTICIPATION IN PROFESSIONAL DEVELOPMENT

Brittany Manion
University of Kentucky, brittanymanion222@gmail.com
Author ORCID Identifier:
https://orcid.org/0009-0008-8104-0827
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Brittany Manion, Student

Dr. Susan Cantrell, Major Professor

Dr. Ryan Crowley, Director of Graduate Studies

TEACHERS' SUSTAINED CULTURALLY RESPONSIVE PRACTICES THREE YEARS AFTER PARTICIPATION IN PROFESSIONAL DEVELOPMENT

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Education
at the University of Kentucky

By
Brittany Manion
Lexington, Kentucky
Director: Dr. Susan Chambers Cantrell Professor of Curriculum and Instruction
Lexington, Kentucky
2023

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https://orcid.org/0009-0008-8104-0827

ABSTRACT OF DISSERTATION

TEACHERS' SUSTAINED CULTURALLY RESPONSIVE PRACTICES THREE YEARS AFTER PARTICIPATION IN PROFESSIONAL DEVELOPMENT

Teacher professional development (PD) on culturally responsive practices (CRP) provides teachers the opportunity to increase their knowledge and change their practices to better support students from culturally and linguistically diverse backgrounds. This study sampled from a year-long intensive PD on effective instructional practices for English learners (ELs). Grounded in transformative and situated learning theories, this study was designed to understand teachers' sustained CRP and their experiences four years after participating in a CRP PD. Several questions were investigated in this study: What CRP do teachers sustain? What are factors and supports related to teachers' sustained implementation? What challenges do teachers experience in sustaining implementation?

This research was an intrinsic case study that provided a better understanding of teachers' sustained CRP three years after participating in a CRP PD. The qualitative case study included classroom observations and teacher interviews. Qualitative data analysis included open and pattern coding as well as a thematic organization of the codes based on their relation to the research questions. This methodology enabled a comprehensive analysis of teachers' sustained CRP four years after they participated in a CRP PD.

Findings from classroom observations showed that two of the three teachers sustained CRP implementation. Findings pertaining to teachers reported or observed sustained CRP that emerged from the classroom observation data can be categorized into three themes: teachers had an asset-based mindset when it came to their approach and inclusion of families of their students, teachers expanded their classroom literature to include multicultural content that reflects multiple perspectives and lastly, teachers implemented several instructional practices learned in the CRP PD. Findings from teacher interviews concerning supports and factors related to teachers' sustained CRP can be categorized under four overarching themes: aspects of the CRP PD, teachers' school context, teachers seeing themselves as experts and educating other teachers of CRP, and higher student engagement and growth when CRP is implemented. Although the data

revealed variation across the three teachers, they all showed similarities with factors and supports related to these four themes. Furthermore, findings from teacher interviews concerning challenges experienced in sustaining CRP implementation can be categorized into two themes: implementation of Critical Consciousness and teachers' school context. Although the data presented variation across the three teachers related to these two themes, they all showed similarities in the challenges they experienced.

Implications of this study include more focus on Critical Consciousness across school contexts for PD facilitators and allowing teachers autonomy to implement CRP for school stakeholders. This research fills a gap in the limited research conducted on the sustainability of CRP after participation in a PD. This research study provides educators, administrators, and PD facilitators with knowledge on how to best educate and support teachers when implementing CRP. Teachers have unlimited responsibilities and understanding their supports and challenges in implementing CRP is essential when considering how educate teachers through PD and help them best meet the needs of all their students.

KEYWORDS: Teacher Professional Development, Culturally Responsive Practices, Sustained Professional Development Practices

Brittany Manion

07/20/2023

Date

TEACHERS' SUSTAINED CULTURALLY RESPONSIVE PRACTICES THREE YEARS AFTER PARTICIPATION IN PROFESSIONAL DEVELOPMENT

By
Brittany Manion

Dr. Susan Chambers Cantrell
Director of Dissertation

Dr. Ryan Crowley
Director of Graduate Studies

07/20/2023
Date

DEDICATION

This dissertation is dedicated to my loving husband, Tommy, and my two incredible children, Maddie and Jack. To Tommy, my partner in life and my unwavering source of support, thank you for your endless encouragement, patience, and belief in my abilities. Your faith in me has been the foundation upon which I have built my academic journey. Your understanding during late nights and countless hours spent in front of the computer is deeply appreciated. Your love and presence have given me strength and motivation to overcome challenges and pursue my academic dreams.

To Maddie and Jack, you are my greatest blessings and sources of inspiration. Your infectious laughter and boundless curiosity have reminded me of the joy in every moment, even during the most demanding times of this dissertation. Your steadfast love and understanding, as I retreated to my study, have fueled my determination to push forward. Your belief in me has shown me the importance of resilience and pursuing one's passions. I dedicate this work to you, with the hope that it may serve as a testament to the power of hard work, perseverance, and the pursuit of knowledge. To my family as a whole, thank you for standing by my side throughout this academic journey. Your constant love, support, and sacrifices have made it possible for me to embark on this challenging endeavor. Your belief in me, even during moments of self-doubt, has been a guiding light.

Finally, to all the individuals who have supported me, mentored me, and encouraged me along the way, I express my deepest gratitude. Your wisdom, guidance, and constructive feedback have shaped my research and enriched my academic growth. This dissertation is dedicated to my husband Tommy, my daughter Maddie, and my son Jack, as well as my entire family, with profound love and appreciation for the resolute support and inspiration you have provided throughout this journey.

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I would like to acknowledge my family for their love, support, and encouragement. Their belief in my abilities and their sacrifices have been a constant source of inspiration. I am forever grateful for their understanding during the demanding periods of this research. I am indebted to my friends and colleagues, who have provided both moral and intellectual support. Their insightful discussions, encouragement, and camaraderie have lightened the load and made this journey more enjoyable. Finally, I express my gratitude to all the participants who generously shared their time and insights for this study. Their willingness to participate has made this

research possible and contributed significantly to its outcomes. Although I have attempted to mention everyone who has been instrumental in my dissertation, I apologize for inadvertently missing anyone. Your contributions are sincerely appreciated.

In conclusion, this dissertation would not have been possible without the support and guidance of the abovementioned individuals. Their collective efforts have profoundly impacted my academic and personal growth, and I am truly grateful for their contributions.

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CHAPTER 1: INTRODUCTION

In this dissertation, I present findings from a case study of teachers' sustained culturally responsive practices (CRP) three years after participating in a yearlong professional development (PD) initiative. I conducted classroom observations and semi-structured teacher interviews to investigate what enabled teachers to sustain CRP. Through this research, I explored PD features and components that supported teachers in their implementation and sustained use of CRP. Additionally, I learned from the teachers' perspective what supports and challenges they experienced in sustaining CRP after participating in the PD.

In this chapter, I present demographic data on students in U.S. schools that shows increasing diversity and supports the needs for teachers to be educated about how to teach diverse student populations effectively. In addition, I discuss in-service teachers' limited preparation for teaching in diverse classrooms and illustrate how PD on CRP has been a tool used to train teachers. This chapter includes descriptions of effective PD structures and features for teachers, research and literature on CRP PD, teacher beliefs and the affective and cognitive dimensions of PD, and the supports and challenges teachers experience when implementing PD practices. The limited research on the sustainability of CRP after participation in a PD provides a rationale for conducting this study. In this chapter, I present the research problem, the purpose of this study, and the research questions which guided the study, and I discuss the significance of this research and potential applications.

Background

According to the National Center for Education Statistics (2023), there has been an increasing trend in the racial and ethnic diversity of students in US schools. From 2010 to 2020, the percentage of White students decreased from 54% to 46%, while the percentage of Hispanic students increased from 24% to 27%. Additionally, the proportion of Asian students rose from 5% to 7% during the same period. The number of English Learners (ELs) in U.S. schools continues to rise, and there is no indication that this trend will change soon (Molle, 2013).

According to the National Center for Education Statistics (2023), there has been an increasing trend in the number of ELs in US schools. From 2000 to 2018, the percentage of ELs among public school students rose from 8.1% to 9.6%. This trend highlights the growing linguistic diversity and the need for effective language support and instructional programs in schools to accommodate the needs of ELs. EL students enter classrooms with a range of English proficiency but are expected to learn academic content in English, which has led to a well-known achievement gap between ELs and their peers (Griner & Stewart, 2013). Furthermore, classroom teachers are not sufficiently prepared to support ELs' need to succeed and achieve at high academic levels (Short et al., 2012). When reporting on how to prepare classroom teachers to teach ELs effectively, Lucas et al. (2008) explained that

> the majority of teachers have had little or no professional development for teaching ELs (National Center for Education Statistics, 2002); few have taken a course focused on issues related to ELs (Menken & Antunez, 2001); and most do not have the experiential knowledge that comes from being proficient in a second language (Zehler et al., 2003). It is not surprising, then, that the majority of

> teachers report that they do not feel prepared to teach ELs (National Center for Education Statistics, 1999). (p. 361)

In recent years, U.S. schools have experienced significant shifts in student demographics, marked by increasing diversity and the rise of ELs. This is further complicated by the fact that 80% of the teachers in the U.S. are White and monolingual (NCES, 2023). Sleeter (2008) discussed the issues that can arise when White teachers teach students of African American or Latino backgrounds such as lowering academic expectations and they are less likely to build relationships with these students. Considering the increasing demographic changes, lack of teacher preparation, low diversity of teachers, and low achievement scores attained by ELs, there is a sense of urgency among schools in the U.S. to support ELs' academic success (Molle, 2013). Therefore, various PD opportunities on CRP for teachers have increased.

PD programs on CRP are prevalent in the literature, but research on these programs is limited (Sleeter, 2012). Sleeter claimed two issues with research on linking teacher PD on CRP with student learning: The description and meaning of culturally responsive pedagogy looks different among studies, and the students' cultural context and the given conceptions of culturally responsive pedagogy need to be identified in studies. In a synthesis performed by Morrison et al. (2008), 45 classroom-based studies were analyzed to operationalize culturally responsive pedagogy. To better understand the variations in CRP across these studies, Morrison et al. analyzed the studies' definitions of CRP based on three broad categories following Ladson-Billings (1995) theoretical framework:

> High academic expectations with appropriate support such as scaffolding; cultural competence reflected in work with curriculum and students' funds of knowledge and establishing relationships with students and families; and cultivating students' critical consciousness regarding power relations. (p. 434)

Notably, none of the 45 classroom-based studies depicted this entire definition (Sleeter, 2012). Additionally, researchers need to be clear about using culturally responsive pedagogy when discussing the specific context of their studies (Sleeter, 2012). However, while context specificity is essential, it is equally necessary to "show what principles of culturally responsive pedagogy apply across groups and across national boundaries" (Sleeter, 2012, p. 576). When planning future PD on CRP, teacher educators should address these concerns when creating their PD sessions' structure and content.

Effective Professional Development

According to the present literature, the quality and specific PD features provided to teachers affect student achievement outcomes in varying ways. Guskey and Yoon (2009) have identified several characteristics of effective PD in their research, including the use of workshops, outside experts, considerable time, follow-up, consideration of content, process and context for PD activities, and specific subject-related content or educational practices. In a longitudinal study conducted by Desimone et al. (2013), six key features of PD were identified: reform type, duration of PD, collective participation, opportunities for active learning, coherence, and content focus. Desimone et al. concluded that PD should include these essential elements that positively impact student achievement.

Darling-Hammond et al. (2017) supported Desimone et al.'s (2013) claims in their research on effective teacher PD. Darling-Hammond et al.'s research emphasized that PD experiences must address how teachers learn, as well as what teachers learn. Additionally, Darling-Hammond et al. (2017) suggested that when content- and context-specific PD models are used, incorporating multicultural theories into teacher PD experiences is effective in supporting student achievement. Short (2013) further explained that an element of rigorous PD explains the theories that undergird the intervention. In the case of teacher PD of CRP, this knowledge of the theory of culturally relevant pedagogy would assist teachers in moving beyond "surface features of a new idea and develop a complete understanding of its purposes, critical attributes, meaning, and connection to other approaches" (Short, 2013, p. 124). Ladson-Billings' (1995) theory of culturally relevant pedagogy provides a framework for effective pedagogical practices for diverse student populations. Knowledge of this theory can guide teachers to implement CRP in their classrooms.

Several studies have cautioned against raising awareness of cultural inequalities without effectively connecting them to cultural assets and teachers' curricula (Brown & Crippen, 2016; Lee et al., 2007). This pedagogical transformation in teachers' practice occurs when the PD facilitators create an environment of trust (Parkhouse et al., 2019). A supportive learning atmosphere will encourage self-reflection, vulnerability, and openness from the teacher participants. To develop a deeper understanding of diversity and inequality, the school context and culture are essential to keep in mind when planning PD on CRP. Parkhouse et al. recommend that more research is needed to "identify the types of school contexts and professional cultures that may help teachers

develop and act on deeper understandings of diversity and inequality" (p. 448). This is an essential consideration because, depending on the school culture or teacher beliefs, PD facilitators could be met with resistance or disengagement, leading to future challenges.

Supports and Challenges

Supports provided to teacher participants within a CRP PD can significantly impact a transformation in pedagogy and student achievement (Darling-Hammond et al., 2017). Timperley et al. (2007) found that PD outcomes were more effective when school leaders actively supported teachers in PD opportunities. School leaders can provide this support by attending the PD or creating professional learning communities (PLC) within their school building. PLCs provide teachers with direct support in implementing PD practices (Brown & Crippen, 2016). To further offer in-school support, some PD programs have teachers attend in "teams" to work together and share ideas on implementing CRP practices (Powell et al., 2016; Timmons-Brown & Warner, 2016).

Also, as previously mentioned, the learning environment that teachers and PD facilitators create can influence PD effectiveness (Kennedy, 2016). Kennedy reported that more effective PD programs were facilitated by people who worked extensively with teachers, understood the barriers they experienced, and based the PD programs on their experience and expertise. In some PD programs, the PD facilitators could provide ongoing or follow-up support to the teacher participants in individualized coaching (Powell et al., 2016; Savage et al., 2011; Trifiro, 2017). Teachers receive instructional planning support during these coaching sessions to implement PD practices. The most common form of facilitator support was during classroom observations when they could assess PD practices' implementation and identify challenges teachers experience in

implementation. While this research shows the importance of providing support to teachers during their participation in PD, little research has been conducted on what and how supports can impact teachers sustained implementation of PD practices.

Research suggests teachers can experience barriers to implementing practices they learned in PD. For example, a barrier to teachers' implementation of new practices occurs when the school or district has mandated a specific curriculum program. Studies that collected data on teachers' experiences or perceptions of PD on CRP consistently reflected challenges in implementing CRP into their already prescribed curriculum (Parkhouse et al., 2019; Powell et al., 2017). Furthermore, Parkhouse et al. stated that the PD offered by program facilitators must "compete against other initiatives faced by teachers and have to be compelling enough that teachers are willing to change their current practices" (p. 447). PD on CRP should foster a commitment among the teacher participants to address the inequalities that limit ELs' educational opportunities (Allwright, 2005). Again, limited research has been conducted on teachers' experiences with sustaining CRP. This study sought to fill this gap in research in order to mitigate challenges teachers experience in sustaining CRP after participation in PD.

Sustainability of Professional Development Practices

The research on how teachers sustain the changes they make after participating in a PD is minimal. Two studies examined teachers' practices the year after teachers participated in a yearlong PD (Allen et al., 2011; Wolf & Peele, 2019). In a randomized controlled trial of an online coaching program, Allen et al. "focused on improving teacher-student interactions in secondary classrooms with students aged 11 to 18 so as to enhance student motivation and achievement" (p. 1034). The intervention integrated

workshop-based online training, an annotated video library, and a year of personalized coaching followed by a brief booster workshop (Allen et al., 2011). To test the generalizability and sustainability of changes in teaching, Allen et al. focused their evaluation on the second year of the study when the teachers would have a new class of students and were not receiving individuated coaching. Allen et al. found sustained results in the second year of the study, suggesting that "effects were driven by enduring change to the teacher and to the classroom as a behavior setting, not by student effects limited to the intervention year and class" (p. 1036).

Wolf and Peele (2019) conducted a cluster randomized trial examining the second-year impacts of a one-year pre-primary teacher training and coaching program in Ghana. The intervention teachers received included training workshops and in-classroom coaching (Wolf & Peele, 2019). Teachers' lessons were recorded and evaluated based on a "checklist of 15 activities that were explicitly covered in the teacher training related to behavior management and instructional practice to assess the extent to which teachers were using activities from the training in their classrooms" (Wolf & Peele, 2019, p. 5). Findings showed that teachers maintained some pedagogical changes, and Wolf and Peele credit this to the ongoing training teachers were receiving. However, findings also indicated that teachers struggled to maintain those changes once the training concluded. Furthermore, teachers experienced challenges inside and outside the school, making it even more difficult to maintain pedagogical changes (Wolf & Peele, 2019).

The limited research on teachers' sustained implementation of practices learned in PD is concerning when teacher PD is rising to mitigate achievement gaps between white, middle-class students and students from culturally and linguistically diverse backgrounds.

Wolf and Peele (2019) called for future research on this topic to investigate if training teachers leads to sustained improvements in teaching practices and student learning outcomes across multiple years. If such improvements cannot be demonstrated, Wolf and Peele suggest that PD resources may be better spent in other ways. Additionally, Wolf and Peele recommend more research and input from teachers themselves on how daily work conditions and training structures affect their teaching practice. This study sought to fill that gap in research and investigate PD structures, supports, and challenges that enabled teachers to sustain CRP PD practices.

Statement of the Research Problem

The education landscape in the U.S. is becoming increasingly diverse, necessitating teacher PD programs that equip educators with the necessary skills and strategies to effectively educate students from diverse backgrounds. However, despite efforts to promote equitable education through PD in CRP, there is limited research on the sustainability of teachers' CRP post-training. Understanding the extent to which teachers sustain CRP and the factors that enable them to do so is crucial for ensuring long-term impact and meaningful educational outcomes for students from marginalized communities.

Researchers have begun to study the impact of PD in CRP to make U.S. education more equitable. Parkhouse et al. (2019) reported that when "teachers are well equipped to foster inclusive and equitable classrooms, students from marginalized communities show higher rates of academic achievement, motivation, self-confidence, and self-efficacy" (p. 416). These positive impacts of effective PD on teachers' change in pedagogy and student achievement raise questions about how teachers sustain practices they have learned at

PDs. This study thoroughly investigated the extent to which teachers sustained CRP and the factors that enabled teachers to sustain CRP after participating in a PD on CRP.

Purpose of the Study

This case study aimed to investigate teachers' sustained implementation of CRP three years after their participation in PD. The PD components and features essential in increasing teachers' sustained implementation of CRP were explored. Supports and challenges teachers experienced in sustaining CRP are additional components of this study.

Research Questions

The research questions that guide this study are as follows: (a) What CRP did teachers sustain three years after completing a CRP professional development program? (b) What factors and supports were related to teachers' sustained implementation? (c) What ongoing challenges did teachers experience related to sustaining implementation?

Significance of the Study

Several researchers have examined and identified effective teacher PD models and features (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007), however there is minimal evidence of PD components that support teachers in sustaining practices learned in PD. Furthermore, there is limited evidence on which PD features and activities support teachers in sustaining CRP over time. Knowledge about PD's specific impacts on CRP would benefit educators and researchers seeking to improve teachers' pedagogical practices and ultimately increase achievement for students in increasingly diverse classrooms.

Additionally, obtaining evidence on how teachers sustain what they learn in PD would be beneficial because teachers need to effectively educate diverse student populations on their own over time after participating in CRP PD programs. According to Spanierman et al. (2011), teachers often do not have the appropriate knowledge to teach students from culturally and linguistically diverse backgrounds. New knowledge about what enables teachers to sustain CRP PD practices requires in-depth investigation involving teachers and school leaders to determine specific PD practices that support teachers in sustaining CRP. In addition, school and district-level factors affecting sustained CRP need to be discussed in the research.

Other factors to consider in answering questions about supports that facilitate teachers' sustained implementation of CRP are teacher perceptions about students from culturally and linguistically diverse backgrounds (Lee et al., 2007), the PD program features and development (Guskey & Yoon, 2009), their involvement in the PD (Desimone, 2009), and their belief about transforming their pedagogical practices. While these characteristics of teacher perceptions may have been previously studied, a limited amount of research was conducted on how these features enable teachers to sustain CRP PD practices. Teachers' perceptions about their experiences must be investigated to determine how they allow teachers to sustain CRP PD practices.

Additionally, the challenges teachers experience in sustaining CRP need to be addressed. The challenges teachers face as they implement (or do not implement) CRP affect teachers in sustaining practices that are effective for teaching in culturally and linguistically diverse classrooms. For teachers to continue using CRP PD practices independently, these challenges must be mitigated. Likewise, understanding teachers'

challenges is essential for PD facilitators, school leadership. The findings from each of the research questions above are valuable information for multiple stakeholders, including CRP PD facilitators, CRP PD researchers, school administrators, teachers, students and families.

This study is unique in several ways. First, most studies that examine the sustained implementation of CRP are longitudinal studies (Akiba & Liang, 2016; Desimone et al., 2013; Johnson, 2011; Teemant, 2014). In these studies, teachers participated in a PD program for multiple years, and the researchers determined their sustained practices by observing classroom teaching or through interviews with teachers during the participation period. While this approach evaluates teachers' implementation during PD participation, it does not address how teachers sustain PD practices after participating in PD. The current study sought to investigate how and why teachers sustain CRP independently three years after completing a CRP PD program.

Second, this study was conducted from a unique perspective. My past involvement as a PD facilitator, an instructional coach, and a teacher participant informs my research perspective. I have taken on each of these roles for the PD initiative under study in this dissertation. This well-rounded perspective provides a thorough description of this study. My multiple perspectives on this grant initiative could provide valuable information missing in CRP PD literature. My positionality in this research is discussed in more depth in Chapter three.

Lastly, combining these specific research questions and my multiple perspective stances makes this study distinctive. While the longitudinal studies identified how teachers were continuing their implementation of PD practices while still participating in

PD, this study sought teachers that had previously participated in a CRP PD. The findings gathered from this study provide essential information on how and why teachers sustain CRP PD practices independently. Research has shown that teachers' implementation of PD practices decreases after completing a PD program (Guskey, 2002a). Therefore, knowing how and why teachers sustain CRP PD practices after they complete a PD program would be beneficial.

CHAPTER 2: REVIEW OF LITERATURE

For this dissertation study, I investigated teachers' sustained culturally responsive practices (CRP) three years after they participated in PD. The research questions that guided this study were: (a) What CRP did teachers sustain three years after completing a CRP professional development program? (b) What factors and supports were related to teachers' sustained implementation? (c) What ongoing challenges did teachers experience related to sustaining implementation?

This research explores teachers' experiences and perceptions of factors that contributed to their sustained implementation of CRP after their participation. In this chapter, I provide a theoretical framework and review of research on culturally responsive pedagogy as a framework for classroom teaching, effective PD for teachers, and teachers' sustained practices after PD.

A Framework for Culturally Responsive Classroom Teaching

The theoretical perspectives that frame this study include theories related to culturally responsive classroom teaching. The theories that frame culturally responsive classroom practices are sociocultural theory, culturally relevant pedagogy, culturally responsive teaching, and culturally sustaining pedagogy. Connections are drawn between sociocultural theory and supporting ELs in acquiring language and knowledge through mediation and interaction. All the theories discussed in this section are associated with the meaning made through social experiences and making instructional practices relevant to student's lives and experiences.

Sociocultural Theory

Sociocultural theory asserts that learning occurs through mediation in a social context (Vygotsky, 1978). Within these social contexts, whether situated in classrooms,

institutions, or cultural contexts, learners can interact with peers to make meaning (Vygotsky, 1978). Vygotsky explained that this is particularly true for children because they learn from the social and cultural contexts they experience. Sociocultural theory provides a framework for teachers of diverse learners by recognizing how "social, cultural, and historical conditions impact students' opportunities to learn" (Teemant & Hausman, 2013, p. 4). Not only do these factors influence thinking, but they mediate learning and development (Iddings et al., 2009).

According to Vygotsky (1978), learning is mediated by an expert for a learner through tools and scaffolding during these social interactions. Vygotsky claimed this negotiation of learning takes place in a zone of proximal development (ZPD), defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86). During this mediation process, novice learners are challenged with more complex concepts, in which they are provided support to negotiate the ZPD throughout their learning. This interaction assists in developing language skills, which according to Vygotsky, is the basis of learning.

Language is the primary means by which more knowledgeable others transmit information to novice learners (Vygotsky, 1987). Vygotsky explained that language, known as private speech, could be used as an accelerator of knowledge and thinking. Private speech is a form of communication that helps the learner plan future activities and strategies in their development (Vygotsky, 1987). This language development occurs during social interactions with other learners. As learners become older and mature, this

knowledge becomes internalized as thought. This internalized thought becomes what Vygotsky called inner speech. The thought development that takes place through social interactions results from language. All this development in language and cognition within individuals allows them to have the ability to think for themselves and develop independent skills for future development (Vygotsky, 1987). While independent skill development is essential, Vygotsky asserted that this happens through social interaction. Furthermore, Perry (2012) stated, "language, thus, is never independent of social world, as it always occurs within and is shaped by cultural context" (p. 52). Knowledge and language development through social interactions with consideration of the cultural context is especially true for educating diverse learners.

Although Vygotsky did not discuss specifically how sociocultural theory related to diverse populations of learners, his theory is relevant in educating ELs and other historically marginalized populations. According to Lantolf (2000), social interaction is essential as it mediates second language learning. Corresponding with sociocultural theory, second language learning occurs between a more knowledgeable other and a novice through mediation, either by language or semiotic resources (Hall, 2019). Through social interactions, learners can develop independence and use semiotic resources to aid their future language development. Vygotsky's (1987) theory of social interaction and the use of mediation is related to teaching for diversity.

In diverse classrooms, teachers should integrate language learning activities into their lessons. These interactive activities include more experienced partners that provide scaffolding for novice learners within students' ZPD (Piazza et al., 2015). Examples of classroom activities where language can be acquired by allowing students to socialize and

interact include collaborative partnership activities between two or more students working toward a completed task (Gargiulo & Metcalf, 2013). Using the cultural context of language during these social activities can help students acquire a second language and content knowledge (Lantolf, 2000). Culturally responsive teachers will incorporate students' cultural context into instruction to support language development and content knowledge (Gay, 2018; Ladson-Billings, 1994).

Culturally Responsive Teaching

Within this section, theories related to culturally responsive teaching are discussed. First, Ladson-Billings' theory of culturally relevant pedagogy is examined, along with other culturally relevant theories, such as Gay's (2018) theory of culturally responsive teaching. A concept known as Funds of Knowledge is described in its role in culturally responsive teaching (Gonzalez et al., 2005). Lastly, the evolution of culturally sustaining pedagogy is explained in connection to culturally relevant pedagogy and culturally responsive teaching (Paris, 2012; Paris & Alim, 2014).

Culturally Relevant Pedagogy. Culturally responsive refers to a pluralistic approach where students' culture is viewed as an asset rather than a liability. In part, ideas related to cultural responsiveness emerged from the work of Ladson-Billings (1994), who presented a theoretical model, culturally relevant pedagogy. The focus of culturally relevant pedagogy is to improve student achievement but also support students in "accepting and affirming their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate" (p. 469). Ladson-Billings' (1994) support for these concepts came from her thorough dissertation research on effective pedagogy for African American students. The teachers for this

study were found using a community nomination approach, where parents nominated teachers they felt were most effective in educating their children (Ladson-Billings, 1994). Out of almost 200 district teachers, 17 teachers fit the characteristics described by parents. Ladson-Billings also cross-checked the nominations with principals of the schools and asked what teachers they would nominate as effective teachers of African American students; 22 teachers were identified.

The findings from this study presented characteristics of effective teachers of African American children. Ladson-Billings (1994) found that these teachers believed all their students could succeed and fought against teachers' typical deficit perspectives of underserved students. These teachers helped students develop collaborative partnerships both within and outside the classroom. Students in these classrooms were held accountable for each other's learning and were encouraged to volunteer in their communities.

Ladson-Billings (1994) asserted that to teach in a culturally relevant way effectively, teachers should create social opportunities for students to achieve academic success, cultural competence, and sociopolitical consciousness. For students to achieve academic success, Ladson-Billings (1994) referred to students' intellectual growth as a results of classroom instruction and learning experiences. Cultural competence helps students appreciate their own culture while gaining knowledge in other cultures. Lastly, sociopolitical consciousness, which Ladson-Billings (2021) also refers to as critical consciousness, is students' ability to apply, analyze, synthesize, and critique their environment and the problems they encounter. Ladson-Billings (2021) described that this is often the most ignored component of culturally relevant pedagogy because teachers do

not want to get “too political” (p.6). However, Ladson-Billings (2021) argued that if students are simply asked to memorize facts in school instead of being prepared to address new and complex problems and circumstances, their education is doing them a disservice. While Ladson-Billings (2021) acknowledged the challenges around teaching in a critically conscious way, her work includes examples of how teachers can address issues within their school in a critically conscious way that would prepare them to do the same outside of school.

Culturally relevant pedagogy is about collective empowerment and helping students build conceptual bridges between school and home. Culturally relevant pedagogy can be accomplished by using cultural and historical references to convey knowledge, impart skills, and change attitudes that empower students intellectually, socially, emotionally, and politically (Ladson-Billings, 1994). Ladson-Billings’ theory of culturally relevant pedagogy is considered simple and accessible for teachers to implement at all levels of competency. Therefore, teachers should appreciate and incorporate students’ cultural experiences and values into teaching practices (Morrison et al., 2008).

Culturally Responsive Teaching. Consistent with Ladson-Billings’ groundbreaking research on culturally relevant pedagogy, Gay (2000, 2018) defined culturally responsive teaching as "the use of cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (p. 29). Similar to Ladson-Billings, Gay emphasized that culturally responsive teaching teaches to and through the student's strengths while validating and affirming their culture. Gay suggested culturally

responsive teaching is validating, comprehensive, multidimensional, empowering, transformative, and emancipatory.

Culturally responsive teachers validate students' cultural heritage by incorporating it into instruction to help students connect their lived experiences with school and strengthen their cultural pride (Gay, 2018). Gay described that culturally responsive teaching is comprehensive and teaches to the whole child intellectually, emotionally, socially, and politically. This approach to teaching helps students maintain their cultural identities and connect to their values while supporting high academic achievement. Gay explained that culturally responsive teaching is multidimensional, encompassing "curriculum content, learning context, classroom climate, student-teacher relationships, instructional techniques, and performance assessments" in all content areas (p. 31). The teacher's support empowers learners to succeed academically and build confidence. Gay emphasized that through culturally responsive teaching, students confront and challenge cultural inequities in their curriculum and become advocates for equality and social justice. Lastly, culturally responsive teaching exposes students to different versions of truth through multiple perspectives. Effective culturally responsive pedagogy characteristics describe a way of "viewing teaching and learning that considers the social, emotional, cognitive, political, and cultural dimensions of every student" (Powell et al., 2016, p. 6).

Funds of Knowledge. Being a culturally responsive teacher begins with believing that all students can succeed and supporting them in building a conceptual understanding between their home and school (Gay, 2018). Teachers can do this by affirming and using students' cultural knowledge and lived experiences in the classroom. Teachers can learn

and discover students' funds of knowledge to facilitate better teaching and learning for all students by creating a caring learning environment (González et al., 2005).

González et al. (2005) "use the term funds of knowledge to refer to these historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being" (p. 72). González and colleagues provided examples of these household funds of knowledge, such as agriculture and mining, economics, household management, material and scientific knowledge, medicine, and religion. González and colleagues emphasized that "by drawing on household knowledge, student experience is legitimated as valid, and classroom practice can build on the familiar knowledge bases that students can manipulate to enhance learning in mathematics, social students, language arts, and other content areas" (p. 43).

Culturally Sustaining Pedagogy. Paris (2012) took these culturally responsive concepts a step further and presented the idea of culturally sustaining pedagogy (CSP). Paris questioned whether relevant and responsive pedagogy guarantees multicultural individuals' maintained heritage in a pluralistic society. CSP aims to support multilingualism and multiculturalism through pedagogical practices designed to sustain linguistic, literate, and cultural pluralism as part of a democratic society. A pluralistic, democratic society appreciates the diverse cultural and linguistic practices of those within it and needs those differences to thrive (Paris, 2012). Cultures are fluid and evolving. Paris informed educators that their pedagogical practices must progressively adapt and sustain contemporary cultures. Therefore, Paris offered the concept of CSP as a necessity to adapt to the "assimilationist and antidemocratic monolingual/monocultural educational policies emerging across the nation" (Paris & Alim, 2014, p. 88). Paris believed CSP was

the most fitting term for these educational practices because they appreciate and sustain underserved students' cultures in our country's classrooms.

Culturally Responsive Instruction Observation Protocol (CRIOP)

Culturally responsive pedagogy is complex and difficult to operationalize (Aronson & Laughter, 2016). According to Sleeter (2012), this difficulty causes marginalization among diverse students and their peers. Instead, culturally responsive pedagogy should empower students. Thus, it is important that teachers can see how to enact practices that are culturally relevant, responsive, and sustaining.

One framework for operationalizing culturally responsive pedagogy is the Culturally Responsive Instructional Observation Protocol (CRIOP; Powell & Cantrell, 2021). The CRIOP was developed by a research team that conducted a comprehensive literature review on CRP and categorized their findings into six components: (1) Classroom Relationships, (2) Family Collaboration, (3) Assessment, (4) Instruction, (5) Discourse, and (6) Critical Consciousness.

The first two elements, Classroom Relationships and Family Collaboration, are essential in implementing CRP and relate to building relationships with students and their families. Classroom Relationships examine interactions within the classroom among students and their peers and teachers (Walker-Dalhouse, 2021). A culturally responsive teacher shows and expects respect for all students in the classroom. The teacher models this ethic of care for students by holding students to high expectations and communicating effectively with students that become disengaged (Walker-Dalhouse, 2021). This welcoming and high-achieving classroom environment is consistent with Ladson-Billings' (1994) findings from effective teachers of African American students

and is grounded in Gay's (2018) concern for the whole child. The Family Collaboration CRIOP element focuses on establishing partnerships with families where they are seen as knowledge resources and encouraged to participate in their child's education (Perry, 2021). The families' funds of knowledge are valued and utilized within the classroom to connect student learning and the curriculum (Gonzalez et al., 2005). Using families' funds of knowledge empowers parents and families to see themselves as true partners in their children's education (Gonzalez et al., 2005).

The last four CRIOP elements, Assessment, Instruction, Discourse, and Critical Consciousness, directly relate to classroom-based curriculum and instruction. Culturally responsive teachers frequently use informal assessment practices to determine students' needs in future learning (Sampson & Oldham, 2021). This understanding of a student's ZPD can assist teachers in comprehending students' potential development that can be achieved with a mediator, which the teachers need for scaffolding future learning (Lantolf, 2000; Vygotsky, 1978). Teachers use modeling, questioning, and feedback to provide assistance in student learning (Teemant & Hausman, 2013). Ladson-Billings (1994) explained that when teachers provide instructional scaffolding, "students can move from what they know to what they need to know" (p. 134). The Instruction CRIOP element emphasizes connecting students' lived experiences to learning activities and developing students' academic language (Cantrell & Wheeler, 2021). Culturally responsive teachers will build upon students' experiences and use their knowledge and skills as the foundation for learning (Gay, 2018). Connecting students' cultural contexts and lived experiences in classroom instruction is grounded in culturally responsive pedagogy (Gay, 2018; Ladson-Billings, 1994; Paris, 2012). Social interaction during

culturally responsive instructional activities supports diverse learners' language development (Vygotsky, 1978). Lantolf (2000) explains that this social interaction among students is essential for second language acquisition.

The Discourse element focuses on providing appropriate scaffolds and opportunities for social interaction in a culturally responsive classroom. Correll (2021) explains that the teacher provides questions and prompts to elicit extended conversations, and those conversations are often scaffolded with appropriate measures. Students' use of their native language is valued and encouraged within classroom activities (Gay, 2018; Paris, 2012). Using dialogic forms of talk in classrooms can benefit students, specifically diverse learners (Mercer & Howe, 2012). Culturally responsive classroom practices that enable students to interact include various language and group activities, opportunities for students to use their cultural knowledge to construct new knowledge, and task-based learning (Dongyu et al., 2013). By incorporating the Discourse CRIOP element into classrooms, teachers can provide students with opportunities to use dialogic forms of talk.

Lastly, the Critical Consciousness CRIOP element encourages students to examine inequities within education and their communities, study real-world issues, and act (Powell & Malo-Juvera, 2021). This element relates to Ladson-Billings' (1994) culturally relevant pedagogy in that teachers help students develop the ability to identify, analyze, and solve real-world problems related to societal inequalities. Critically conscious classroom practices can also integrate and help sustain students' multilingualism by teaching students how to use language to articulate their opinions and evidence (Paris, 2012).

Review of Research

The review of research conducted here is presented in two sections. The first section explores studies related to investigating characteristics of effective PD for teachers. These characteristics will be described in depth throughout the studies, providing evidence of effective PD program designs, features, and theories that should be included in teacher PD. Finally, the first section is concluded with research on the sustainability of teachers' practices from PD. The second section of this review of research describes studies and evidence of teacher PD in culturally responsive teaching. Lastly, the limited research conducted on teachers' sustained PD practices on culturally responsive teaching is presented.

Teacher Professional Development

The following section investigates the characteristics of effective teacher PD based on numerous studies and systemic reviews conducted by researchers in the field. Next, studies are presented on different approaches and models to teacher PD and their impacts on teacher practice and student achievement. Finally, the sustainability of teachers' practice after the conclusion of PD is explored.

Characteristics of Effective Professional Development. Teacher PD is an effective strategy in providing teachers with the tools to support deep and complex student learning in their classrooms (Guskey, 2003). Darling-Hammond et al. (2017) defined effective PD "as structured professional learning that results in changes in teacher practices and improvements in student learning outcomes" (p. 2). Examining and comparing PD programs' effectiveness can be complex due to the various components enacted in each (Koellner & Jacobs, 2015; Wei et al., 2010). However, a consensus among general recommendations is to apply and leverage adult learning theory (Knowles,

1980) and include characteristics considered adequate for teacher learning. Knowles suggested that adult learning should incorporate active learning and be problem centered. Adult learning theories also emphasize that teachers' prior knowledge and experiences should be recognized and leveraged to enhance teacher learning (Loucks-Horsley et al., 1996). Adult learning principles are considered within effective PD design features.

According to Guskey and Yoon (2009), several characteristics of effective teacher PD have been identified in the research. For a PD to be of high quality, Yoon et al. (2007) explained that it should be intensive, sustained, content focused, coherent, well-defined, and strongly implemented. PD should be based on a carefully constructed and empirically validated theory of teacher learning and change. It should "promote and extend effective curricula and instructional models—or materials based on a well-defined and valid theory of action" (p. 4). Furthermore, Yoon et al. explained that teachers should be motivated and have the skills to apply PD practices to classroom teaching after completing a PD program. This change can be supported by follow-up support provided by PD facilitators or school-level collaborative support.

Indeed, PD facilitators should consider an effective PD's characteristics according to Yoon et al. (2007). However, based on a consensus among recent research, Desimone (2009) urged using her core conceptual framework for effective PD. Desimone argued that studies of PD effectiveness should focus on the features of PD (e.g., content focus, active learning, coherence, sustained duration, and collective participation) rather than the form, type, or structure of PD (e.g., workshop, action research, mentoring). Desimone explained that the five features of the core conceptual framework for studying PD are "critical to increasing teacher knowledge and skills and improving their practice, and

which hold promise for increasing student achievement: content focus, active learning, coherence, duration, and collective participation" (p. 183). Desimone suggested that through the empirical consensus among the PD research community, this conceptual framework should be used in future studies to elevate the quality of PD studies and how to implement PD practices for students and teachers effectively.

To provide additional clarity on how Desimone's (2009) core conceptual framework translated to effective PD, Desimone and Garet (2015) conducted a rigorous review of research on PD and found insights that could be used to refine the conceptual model:

> (a) Changing procedural classroom behavior is easier than improving content knowledge or inquiry-oriented instruction techniques; (b) teachers vary in response to the same PD; (c) PD is more successful when it is explicitly linked to classroom lessons; (d) PD research and implementation must allow for urban contexts (e.g., student and teacher mobility); and (e) leadership plays a key role in supporting and encouraging teachers to implement in the classroom the ideas and strategies they learned in the PD (p. 254).

Other notable meta-synthesis studies have been conducted using frameworks similar to Desimone's to determine the effectiveness of teacher PD.

Kennedy (1998) systematically reviewed math and science teacher PD's effects on student achievement. Kennedy examined the PD's subject, content focus, skill level, form, intensity, and concentration. She concluded that PD programs significantly influenced student achievement when the content centered on teachers' knowledge of the

content subject, curriculum, or how students learn the content subject (Kennedy, 1998). Kennedy's findings emphasized the importance of content focus for effective PD.

A study performed by Garet et al. (2001) investigated the relationship between the best practices of PD and teachers' self-reports on changes to their teaching practices. Garet et al. sampled over 1,000 math and science teachers and found that content focus, active learning, coherence, and collective participation positively influenced teachers' learning. These studies' PD components included effective PD features for teachers, resulting in teacher change and higher student achievement (Darling-Hammond et al., 2017; Desimone, 2009; Guskey & Yoon, 2009).

Yoon et al. (2007) conducted a new systematic review, expanding on a previous one. Yoon et al. argued that since the time of Kennedy's thorough examination, literature related to PD had increased. Most of the research reviewed then had a limited scope, and the urgent need for evidence-based effective PD had grown. Therefore, Yoon et al. systematically reviewed more than 1,300 studies to identify the impact PD had on teacher practice and student achievement.

Yoon et al. (2007) found only nine studies that met the What Works Clearinghouse evidence standards, stating a "frequent problem was study design, particularly for quasi-experimental designs with problems in baseline equivalence between treatment and comparison groups" (p. 6). The nine studies reviewed focused on elementary school teachers and their students, six were published in peer-reviewed journals, and three were unpublished doctoral dissertations (Carpenter et al., 1989; Cole, 1992; Duffy et al., 1986; Marek & Methven, 1991; McCutchen et al., 2002; McGill-Franzen et al., 1999; Saxe et al., 2001; Sloan, 1993; Tienken, 2003). From this systematic

review, Yoon et al. made several conclusions on effective PD features and practices to increase student achievement.

All the PD programs in these nine studies included workshops or summer institutes, and all but one study provided follow-up support after the first PD session (Yoon et al., 2007). The PD was delivered using a collaborative approach rather than the traditional sit-and-get PD approach (Yoon et al., 2007). Regarding the effect of PD duration, Yoon et al. found that significant student achievement gains were present when PD programs were more than 14 hours in duration. Whereas "the three studies that involved the least amount of PD (5 - 14 hours) showed no statistically significant effects on student achievement" (p. 3). Yoon et al. concluded by saying that this review of PD research emphasized the need for rigorous studies that address PD's direct impact on teachers and indirect effect on students.

Subsequent research conducted by Darling-Hammond et al. (2017) built on Desimone's and Yoon et al.'s characteristics of effective PD in a systematic review of current studies, seeking to define effective PD. Darling-Hammond et al. found seven widely shared aspects that contributed to effective PD: "content-focused, incorporates active learning, supports collaboration, uses models of effective practices, provides coaching and expert support, offers feedback and reflection, and is of sustained duration" (p. 4). Darling-Hammond et al. emphasized that effective PD should include these features.

Kennedy (2016) approached a comprehensive review of teacher PD differently than prior researchers. Instead of narrowing her search by specific PD design features, Kennedy sorted programs based on their purpose or action, which included (a) a main

idea that teachers should learn and (b) a strategy for helping teachers enact that idea within their own ongoing systems of practice. The search resulted in 28 studies. Some of this review's findings contradicted popular beliefs about effective PD components. For example, a widely referenced component of teacher PD is that it should focus on content knowledge (Desimone, 2009; Yoon et al., 2007); however, Kennedy presented findings in which the programs that were more effective in her review when the focus was on a typical classroom challenge (e.g., student behavior, student participation) and integrated content knowledge throughout instead of exclusively focusing on content knowledge. Another contradictory finding is that program intensity, referring to the total amount of contact hours with teachers, does not always warrant more effective results, especially when a more intense program utilizes prescriptive messages. Kennedy recommended that future PD be designed based on a "more nuanced understanding of what teachers do, what motivates them, and how they learn and grow", rather than the current conception of best PD components (p. 974).

As PD facilitators plan their programs for teachers, effective PD concepts, research, and theories are essential in determining teacher change and improved student achievement. Varying approaches to PD programs can be utilized when implementing features of effective PD programs. PD programs should vary depending on the resources and needs of the participants they are serving. However, most researchers have concluded that effective PD occurs when there are gains in teacher knowledge, changes in teachers' beliefs and attitudes, and changes to teachers' practices, which should lead to improved student achievement (Wei et al., 2010). These characteristics of effective PD are implemented into most PD programs but can vary in how they are sequenced. For

example, Desimone's (2009) model of effective PD specifies that PD can increase teacher knowledge, change teacher beliefs, and improve teachers' practices, which should result in increased student achievement. Therefore, a change in teachers' beliefs can lead to a change in teachers' practices. From a different perspective, Guskey (2003) suggested that a change in teachers' practices can lead to higher student achievement, leading to a change in teachers' beliefs. While the impact of changed teachers' beliefs and practices on improved student achievement may be brought about differently, the relationship between the impact of effective PD on teachers' practices is clear.

Impact of Professional Development on Teachers' Practices. A primary purpose of PD is to change teachers' practices, thereby positively impacting student achievement. The syntheses reviewed in the previous section (Darling-Hammond et al., 2017; Garet et al., 2001; Guskey & Yoon, 2009; Kennedy, 1998, 2016; Yoon et al., 2007) described the characteristics of effective PD and the impact PD had on teachers' practices. Since the time of these syntheses, new studies of the impact of PD on teachers' practices have been conducted.

In a quasi-experimental study, Osborne et al. (2019) investigated the impacts of a practice-based PD program on elementary teachers' facilitation of and student engagement with scientific argumentation. The PD model in this study incorporated Desimone's (2009) five essential elements of effective PD with additional "time dedicated for teachers to enact and refine new instructional practices in low-stakes settings" (Osborne et al., 2019, p. 1082). The researchers compared three versions of the PRACTISE PD program to determine if an additional two-week summer practicum experience impacted the overall implementation of PD practices. All teacher participants

taught third, fourth, or fifth-grade science classes. There were nine teachers in cohort A, 10 in cohort B, and 16 in cohort C. Teachers' classroom instruction was observed and evaluated three times throughout the school year to capture students' discourse. Additionally, science assessments were created to determine the impact on students' science knowledge. Findings showed that a one-week summer institute and four follow-up days (Cohort B) could significantly change teacher practice. There was no evidence that the additional two-week summer practicum experience (Cohort A) significantly affected the Cohort B outcomes. There was also no evidence of any impact on students' science knowledge determined by assessment scores.

A single-group pretest-posttest design was utilized in Wilkinson et al.'s (2017) study assessing the impact of a PD program on teachers' epistemological beliefs and their enactment of inquiry dialogue during text-based discussions. The PD program consisted of 13 fifth-grade teachers participating in two workshop days, seven study group meetings, and four to six individual coaching sessions per teacher. Data was collected through focus group interviews and videotaped classroom observations. Epistemological beliefs were assessed using the *Reflective Judgment Interview* (King & Kitchener, 1994). The findings from this study showed meaningful shifts in discourse practices towards a more dialogic pedagogy. Specifically, teachers improved in their ability to facilitate inquiry dialogue. Although Wilkinson et al. initially hypothesized that teachers' beliefs would shift towards a more evaluatist epistemology, there was no meaningful change in teachers' beliefs about knowledge and knowledge justification.

In a randomized design study, Andersson and Palm (2018) examined teachers' development of formative assessment practices through PD. This PD program was

designed using research on the characteristics of effective PD (Desimone, 2009). Teachers met for approximately six hours a week throughout the school year and were assigned additional reading, planning, and reflecting on new formative assessment practices. Data were collected from 22 fourth-grade mathematics teachers through questionnaires and teacher interviews. The first questionnaire focused on teachers' experiences with the PD and the teachers' plans and expectations for implementing formative assessments in their classrooms. The second questionnaire included questions about changes in teaching practices, reasons for these changes, and plans and expectations for future practice. The teacher interviews were focused on the changes to teachers' practices, the reasons behind these changes, and the reasons for not implementing other specific practices included in the PD. Andersson and Palm reported that teachers were highly motivated to make meaningful changes to teaching practices following the PD. The most evident change to teachers' practices was to implement new ways of formative assessment to determine student learning, then use that information to adjust instruction to respond to students' learning needs. For example, teachers provided more small-group instructional activities, modified the time spent on a math lesson, and differentiated students' tasks based on their current mathematical understanding.

In addition to experimental and quasi-experimental research examining the impacts of PD, several qualitative studies have been conducted. One example is Baker's (2018) case study, in which she examined process-related questions with the launch of a new curriculum. Baker investigated the professional learning experiences of two kindergarten teachers with a new district-level curriculum. Baker triangulated results using classroom observations, teacher interviews, and curriculum fidelity data. This data

collection approach provided a rich understanding of how the PD had influenced teachers' practices. This study's findings documented teachers' accounts of adapting a new curriculum to their classroom context. Teachers responded positively about the PD program approach, the presentation of the new curriculum through workshop-based PD, and the follow-up support provided through in-classroom visits (Baker, 2018). The studies synthesized in this section present implications for future PD on impacts to teachers' practices. These studies revealed how assessment data and practices can be positively impacted by PD as well as increasing dialogue talk within instruction.

Teacher PD has been studied and designed in various ways and contexts in recent literature. However, all teacher PD seeks to increase teachers' knowledge, change teachers' practices, and ultimately positively impact student achievement. To support teachers in their transformation of knowledge, teachers' beliefs and values, educational interests, attitudes toward change, and their cognitive and emotional well-being must be considered when creating and implementing a PD program (Avalos, 2011). Furthermore, Martin et al. 2019 states that school culture towards change and educational policies in place may play a role in implementing PD programs. Martin et al. provided teachers' perceptions on aspects that contributed to the transformation of instruction in their schools based on PD. The researchers assert that successful PD programs, consider a school's context and schools leaders organize PD based on the needs of the school, teachers, and students (Martin et al., 2019).

Based on these considerations, PD programs and features should fit the needs of teachers and their students. Avalos (2011) advised that PD programs with "formal structures such as courses and workshops may serve some purpose, while involvement in

the production of curricula, the discussion of assessment data, or the sharing of strategies may serve other purposes" (p. 10). Furthermore, Avalos explained that even specific PD programs that have been found to impact teachers and students positively might only be appropriate for some teachers. Consequently, due to the changing aspects surrounding education, student demographic changes, educational policies, and teacher collaboration, teacher PD needs to be continuously studied, experimented with, discussed, and reflected upon.

Successful PD should result in sustained changes in teachers' instructional practices, continuous use of PD methods, and long-term achievements in student learning and understanding. PD evaluations would look at post-PD and long-term results to determine an intervention's initial success and long-term sustainability. Kennedy (2016) explained that while pre-post measures within a PD are essential to determine the effectiveness of the PD program, teachers should be evaluated following the projects to determine lasting changes to teachers' practices. However, this rarely occurs.

Sustainability of Teacher Professional Development. In Kennedy's (2016) review of teacher PD research, she emphasized that a relatively unanswered question related to this topic is whether a PD produces enduring changes in teacher practice rather than temporary changes during participation in the PD program. A common practice is using comparison groups and outcome measures while following teachers and students for a few weeks or months after the program. However, this can be seen as a continuation of the program and not an accurate measure of sustained changes (e.g., Siegle & McCoach, 2007). In other cases, the PD program is extended throughout a school year, where pre-post measures were still a part of the original PD and did not result in data

regarding enduring changes. Kennedy recommended that "PD research should follow teachers for at least a full year after the completion of the PD itself, to discover the extent to which teachers can sustain the new practice after the PD support is gone" (p. 951). However, accounting for this recommendation limits the amount of research conducted considerably.

While the number of empirical studies that investigated the long-term effects of PD is limited, the topic is growing in interest. PD facilitators would value interventions that have enduring effects on teacher practice beyond the program. Studies that have determined the long-term effectiveness of PD utilized data collection methods such as self-report surveys (Havice et al., 2018), interviews (Deglau & O'Sullivan, 2006; Gaikhorst et al., 2017), classroom observations (Penner-Williams et al., 2019), and quantitative assessments (Allen et al., 2011; Goldschmidt & Phelps, 2010; Liu & Phelps, 2020). The most paired forms of data methods were classroom observations with one of the other data sources (Antoniou & Kyriakides, 2013; Franke et al., 2001; Gore et al., 2017; Wolf & Peele, 2019).

Many of the studies referenced above found positive effects on teachers' self-efficacy and teaching quality or resulted in increased teacher knowledge due to the PD programs interventions (Allen et al., 2011; Antoniou & Kyriakides, 2013; Deglau & O'Sullivan, 2006; Goldschmidt & Phelps, 2010; Gore et al., 2017; Havice et al., 2018). Two studies found that student achievement increased as teachers improved their teaching skills based on PD interventions (Allen et al., 2011; Antoniou & Kyriakides, 2013). Furthermore, several of these studies found that a positive impact on teachers' self-efficacy led to sustained implementation of PD practices (Deglau & O'Sullivan, 2006;

Gore et al., 2017; Havice et al., 2018). For example, Havice et al. found that when teachers reported increased self-efficacy regarding the PD's learning objectives, as alumni, they built sustainable STEM education programs incorporating the PD's practices. Similarly, Deglau and O'Sullivan found that teachers felt a sense of efficacy towards tactical approaches to teaching learned from a PD. Therefore, they continued to implement PD approaches after the completion of the program. Another finding from this study showed how follow-up collaboration with peers in the program positively influenced their sustained use of PD approaches. Likewise, Gaikhorst et al. found positive long-term effects that contributed to teachers' involvement in professional learning communities with other PD participants.

Several other studies reported sustained use of PD practices after completion of the program (Franke et al., 2001; Penner-Williams et al., 2019; Wolf & Peele, 2019). For example, Franke et al. reported that all the teachers who participated in a PD program about students' mathematical thinking had continued using some PD practices four years after the program ended. Penner-Williams et al. concluded that the inclusion of theories of action and change into PD strategies contributed to teachers' sustained use of culturally and linguistically responsive instructional practices two years after the conclusion of the PD. While these studies showed positive results regarding sustained PD practices, several studies discovered that teachers did not sustain PD practices (Goldschmidt & Phelps, 2010; Liu & Phelps, 2020; Wolf & Peele, 2019). For example, Liu and Phelps examined the sustainability of teachers' mathematical content knowledge six months after the completion of a PD. They found a negative rate of change in teachers' content knowledge. Similarly, Goldschmidt and Phelps found that when PD knowledge retention

was measured six months following the PD, teachers experienced challenges in sustaining PD knowledge. Lastly, Wolf and Peele discovered that teachers struggled to maintain changes implemented during their participation in a PD program after one year of PD completion.

Research suggests that change must be established at the school level for a PD to sustain teachers' practices truly (Gay, 2018; Rueda, 1998). Research shows that to obtain sustainable growth and change at the school level, the type and duration of PD provided to teachers is essential (Capraro et al., 2016). School leadership should provide a platform for teachers to participate in communities of practice that support improved instructional practices. These professional communities can be influential in improving teacher practice (Darling-Hammond & McLaughlin, 2011; Rueda, 1998). Professional learning communities (PLC) can be an effective PD model where teachers collaborate on theories and practices together, increasing self-efficacy and confidence for teachers, resulting in improvement in teaching and learning. According to the National Staff Development Council (2007), high-quality PD involves teams of teachers that work collaboratively throughout the program, which has led to positive outcomes. For example, Gaikhorst et al. (2017) conducted a study to determine what school characteristics and activities in the school contributed to the long-term effects of PD. Findings showed that positive long-term effects could be attributed to the involvement of principals in the PD, effective communication among team members through PLCs, and the involvement of teachers and their acquired expertise in school organization developments (Gaikhorst et al., 2017).

Summary. Research shows that teachers' continuing development and learning are essential in improving U.S. schools' quality (Desimone, 2009). Therefore, there is a

great urgency to determine effective PD programs and features, school-level supports, and policies that improve and sustain teachers' practice and student learning. Darling-Hammond and McLaughlin (2011) stated that effective PD programs should include teachers' interests and classroom concerns, require a long-term commitment from all involved, and contain a system for evaluating goals and teaching targets. Outside of the PD, teachers should receive school-level support in implementing PD practices. School leadership must create a community of practice and collaboration among teachers to empower and support one another (Rueda, 1998). Schools should provide continuous professional learning opportunities for their teachers that create a positive and optimistic environment for teachers and students (Rueda, 1998). Teacher PD programs can create a collaborative and supportive learning environment with positive outcomes for student achievement when effective PD practices and features are established (Desimone, 2009). PD programs are planned to help teachers gain knowledge and change their instructional practices, yet there is little knowledge of the long-term effects of PD. Results from this study will contribute to this gap in teacher PD research.

Teacher PD on Culturally Responsive Teaching

PD on culturally responsive teaching has been a continuous need in education because U.S. classrooms are becoming increasingly diverse (Lee et al., 2007). For example, most teachers have not received proper training on effective instructional techniques for ELs, emphasizing the need for PD in culturally responsive teaching (Lucas et al., 2008). To make U.S. education more equitable, researchers have taken on a role to support the transformation of teachers' practices by providing them with effective PD on culturally responsive teaching. Parkhouse et al. (2019) reported that when "teachers are

well equipped to foster inclusive and equitable classrooms, students from marginalized communities show higher rates of academic achievement, motivation, self-confidence, and self-efficacy" (p. 416). Calderon (2006) called for more PD where teachers could explore their beliefs about their students and increase their knowledge of linguistic and culturally relevant pedagogy. Calderon insisted that ELs' culture, language, literacy, and socialization patterns within their school populations need priority when planning and designing PD programs. However, Calderon claimed that there is insufficient research on rigorous CRP PD. Future programs should use the evidence gathered thus far on "what defines a high-quality teacher and what practices represent effective teaching for ELs" (p. 141). This review of research will present studies related to PD on culturally responsive teaching and limited research conducted on post-intervention sustainability of PD culturally responsive teaching practices.

Research on PD for Culturally Responsive Teaching. According to Bottiani et al. (2018), frameworks of PD on culturally responsive teaching have primarily focused on incorporating students' cultural ways of knowing and learning, increasing teachers' understanding of students' funds of knowledge, and the use of other CRP. Bottiani et al. conducted a systematic review of in-service CRP interventions to examine strategies to promote CRP, thereby supporting investments in effective CRP intervention models and bridging the gap between research and practice. Based on the criteria of this systematic review, 10 studies were examined, six of which had been published in the last 10 years, showing that this topic of study is still developing. The 10 studies did not meet WWC criteria for review or met criteria for review but failed to meet standards of evidence for efficacy (Bottiani et al., 2018).

Bottiani et al. (2018) presented this caveat with conclusions from the systematic review. "All 10 studies concluded that the studied interventions were associated with at least some gains in schools' and teachers' knowledge, skills, or use of CRP or improvement in equity with regard to student outcomes" (p. 379). Some studies showed that the intervention alone did not work with students and families of diverse learners. The findings suggested that the research base is inadequate to conclude PD on CRP and calls for more rigorous CRP in-service intervention research.

Shelton and colleagues (2022) found similar results in their review of research on PD on literacy instruction and intervention for ELs. The researchers examined 19 studies that met the criteria and reported on PD components impacting teachers' literacy instruction and student literacy achievement. Similar to Bottiani and colleagues' (2018) findings, PD programs that lacked follow-up support for the intervention were less effective. The PD components that were reported to impact teacher knowledge and practice were group workshops and individual coaching to help teachers implement PD practices in their teaching contexts.

Findings from the following studies demonstrate the importance of PD in culturally responsive teaching for teachers and their students. Babinski et al. (2018) conducted a randomized controlled trial to test a new teacher PD program for increasing young Latino ELs' language and literacy skills in an elementary context. Babinski et al. found that when teachers participated in the PD program on English language and literacy skills, their students showed significant growth in these skills compared to the control group. Many of the studies reviewed in this section showed evidence of increased student achievement based on their teachers' change of practices and inclusion of CRP in

classroom instruction (Babinski et al., 2018; Cantrell et al., 2022; Grimberg & Gummer, 2013; Johnson & Fargo, 2014; Powell et al., 2016; Short et al., 2012). For example, Johnson and Fargo (2014) focused on a connection between student achievement on a state-mandated science assessment and CRP. Johnson and Fargo reported a significant increase in student achievement in the intervention group compared to the control group due to teachers' participation in a PD on science teaching and CRP.

Other studies show evidence of increased student achievement based on teachers' change of practices and inclusion of CRP in classroom instruction (Cantrell et al., 2022; Grimberg & Gummer, 2013; Powell et al., 2016; Short et al., 2012). For example, Powell et al. (2016) provided their 27 elementary teacher participants with individual coaching after three training sessions in the summer and continuing on-site PD throughout the school year about the Culturally Responsive Instruction Observation Protocol (CRIOP). Preliminary findings from Powell et al. show that teachers significantly increased CRP use throughout the year-long PD. Furthermore, when teachers were designated as high implementers of CRP, data on student achievement showed higher reading and mathematics scores (Powell et al., 2016). Similarly, Cantrell et al. (2022) conducted a mixed methods study that examined the impact of a PD in CRP on in-service K-8 teachers' practices and student achievement in reading. Findings show that students whose teachers participated in the PD had higher reading achievement gains than those in the control classes. Short et al. (2012) used a quasi-experimental approach to allow for comparisons among teachers receiving the PD intervention and those that did not use a larger sample of participants in their research to determine the impact of the Sheltered Instruction Observation Protocol (SIOP) PD on student achievement and teacher

implementation. Short et al. found statistically significant differences in the average mean scores in the intervention group on Writing, Oral Language, and Total English scores of the IDEA Language Proficiency Tests.

Several studies on PD in CRP incorporated a follow-up component in the form of an instructional coach as support in teachers' implementation (Babinski et al., 2018; Cantrell et al., 2022; Malo-Juvera et al., 2018; Powell et al., 2016; Teemant, 2014). For example, Teemant (2014) conducted a longitudinal mixed-methods study in an urban elementary school to determine the efficacy and sustainability of instructional coaching that accompanied a 30-hr workshop on the Standards for Effective Pedagogy. Findings showed that instructional coaching led to statistically significant (a) pedagogical transformation and (b) patterns of sustainability and attrition (Teemant, 2014). In a similar method, Malo-Juvera et al. (2018) conducted a mixed-methods study that examined teachers' self-efficacy toward CRP using surveys and interview data. The PD incorporated a workshop approach with support from an instructional coach, and findings show that teachers displayed low self-efficacy in working with ELL students and parents, infusing culture into curricula, and finding cultural bias in curricula (Malo-Juvera et al., 2018). These findings guide teacher education focused on reducing impediments to implementing CRP.

A majority of the studies incorporated a workshop approach to PD sessions (Cantrell et al., 2022; Grimberg & Gummer, 2013; Johnson & Fargo, 2014; Lee et al., 2007; Malo-Juvera et al., 2018; Powell et al., 2016; Timmons-Brown & Warner, 2016; Teemant, 2014). Timmons-Brown and Warner (2016) undertook a mixed-methods study with middle and high school math teachers where teachers attended a two-day conference

about culturally relevant mathematics instruction. Within this conference, teachers attended workshops as school teams and were provided tools and instructional practices for classroom use. Timmons-Brown and Warner conducted a follow-up interview one year after attendance to assess their conference structure and CRP effectiveness. Timmons-Brown and Warner reported success with a conference workshop-setting approach with mathematics teachers and CRP. Teachers benefited from this conference by gaining confidence in their knowledge of CRP and implementation while communicating with other mathematics teachers on CRP implementation efforts.

Another study with a workshop-based approach was by Grimberg and Gummer (2013), who examined a five-year-long PD program for 25 K-8 schools near or on an American Indian reservation in Montana. Grimberg and Gummer performed a large-scale quasi-experimental study to "examine the program's impact on teachers' practices, beliefs, and to determine the relationship between student-centered equity-focused instruction and students' science test score gains" (p. 12). This study was also unique in that tribal leaders led the workshops and online interactions to increase the teachers' knowledge of tribal cultures. In addition, the other PD facilitators supported teachers in their development of connecting students' culture to science instructional practices. Grimberg and Gummer reported that after two years of participating in a PD on teaching science using CRP, positive impacts on students' performance were observed. One example is that teachers implemented teaching strategies that prompted students to make connections between science and their real-life issues and experiences.

In contrast to the other studies reviewed, several studies utilized a case-study methodology (Brown & Crippen, 2016; Hulan, 2015; Johnson, 2011; Marshall et al.,

2013; Molle, 2013). Small-scale studies are case studies that were used to examine teachers' perceptions of CRP PD. Johnson (2011) performed a case study on two middle school science teachers who participated in a PD program that utilized the transformative PD model. Johnson (2011) reported that the PD "enabled the teachers to transform their practice to focus on culturally relevant science pedagogy resulting in a more effective instructional environment for their Hispanic students" (p. 170). In another case study, Brown and Crippen (2016) examined teachers' change in practices when implementing activities from the Science Teachers are Responsive to Students PD program. Brown and Crippen reported that when teachers examined their practices while learning about students' needs and experiences, teachers could identify culturally responsive teaching practices related to their science content. While the studies reviewed here show promising results for PD programs on CRP, a gap in this research is the examination of teachers' sustained CRP after participating in a PD.

Teacher Supports and Challenges Implementing CRP. This section details research on the supports and challenges teachers experience with implementing CRP during their participation in a PD. While the supports research is limited, most researchers agree that teachers increase their use of CRP implementation when effective PD strategies are utilized. However, there is limited research on what supports teachers in sustaining the implementation of CRP after their participation. More in-depth research has been conducted on the challenges teachers experience in implementing CRP, however, this research was only conducted during teachers' participation in the CRP PD and does not address challenges teachers face after the PD ends.

Supports. Most research on teachers' implementation of CRP has been conducted during their participation in PD, as explained above. When effective PD practices have been enacted during a CRP PD, teachers' implementation of PD practices increases (Bottiani et al., 2018; Calderon, 2009; Cantrell et al., 2022; Desimone, 2009; Desimone & Garet, 2015; Malo-Juerva et al., 2018). These effective PD practices align with Calderon's (2009) review of research on effective PD for teachers: (a) ongoing meetings between teachers and those providing the PD; (b) opportunities for classroom practice coupled with mentoring and coaching; (c) teacher learning communities.

Cantrell and colleagues (2022) provided an example of teachers' CRP implementation during PD participation. The researchers examined the impact of the CLDC project PD during the year teachers participated. They found that teachers who participated in this PD implemented CRP at higher levels after participating than teachers who did not participate in the PD. This PD included effective PD practices such as coaching, extended PD with follow-up sessions, and active engagement with models and hands-on activities (Darling-Hammond et al., 2017; Guskey & Yoon, 2009). This study exemplifies how teachers can be supported when participating in a CRP PD that leads to teacher change. However, a minimal amount of research has been conducted about what supports teachers in sustaining those PD practices after their participation. This study sought to fill that gap in the literature by examining teachers' in-depth perspectives on their experiences in sustaining CRP.

Challenges. The positive results from studies like Cantrell et al. (2022) are promising; however, implementing CRP is complex (Malo-Juerva et al., 2018; Powell et al., 2016). Teachers experience challenges in CRP implementation if they are not well

prepared and effectively supported during the implementation process (Powell et al., 2016). Powell et al. (2016) investigated teachers' challenges in implementing CRP during the PD. They found that teachers did not increase their use of Discourse practices during the project. Powell et al. (2016) point out that this is problematic because "peer collaboration, instructional conversations, and using academic language in communicating ideas are essential components to CRP" (p. 26). Teachers in this study also had the most difficulty implementing Critical Consciousness in their classrooms. Other notable challenges teachers mentioned in their interviews were language barriers among students and families. In addition, teachers perceived difficulty in implementing the Family Collaboration element. Powell et al. (2016) hypothesized that teachers reported this element as challenging to implement due to a deeper understanding of what "constitutes quality teacher-parent collaboration" (p. 26). Lastly, teachers noted barriers to implementing CRP due to curriculum and administrative constraints, such as mandated curriculum programs and state testing requirements.

In similar findings, two other studies noted teachers' challenges in implementing CRP from PD due to instructional autonomy constraints (Malo-Juerva et al., 2018; Powell et al., 2017). A mixed-methods investigation of teachers' self-efficacy for culturally responsive instruction reported teacher challenges with curricular constraints and other systemic limitations that can make CRP challenging for teachers (Malo-Juerva et al., 2018). Teachers noted that they had difficulty planning culturally responsive instruction that aligned with their mandated standards. Other challenges mentioned by teachers in Malo-Juerva et al.'s. (2018) study was "understanding students' cultural

differences and backgrounds, language barriers with parents, limited resources, and a lack of knowledge or confidence with CRP" (p. 152).

Similarly, Powell et al. (2017) conducted a phenomenological investigation on teachers' experiences with a scripted reading program while trying to implement culturally responsive literacy instructional activities. Findings portrayed teachers' frustrations and barriers when mandated to use a scripted reading program. Teachers experienced challenges with instructional autonomy and were left with minimal instructional time to teach "authentic and meaningful literacy instruction" (p. 97). Ultimately, teachers experienced a negative impact to their psychological well-being and when they did implement culturally responsive literacy instructional activities, they had to deviate from the mandated reading program (Powell et al., 2017).

A study conducted by Pasternak et al.'s (2023) on teachers' experiences as they participate in a PD on CRP highlights a different challenge in implementing CRP. The findings from the four US urban schools in this study suggest that "culture and climate in the different schools influenced teachers' engagement in the CRP work" (p. 10). For example, in one school, staff meetings focused on behavior management instead of curriculum and instruction content, where teachers were supposed to collaborate on the CRP PD practices. Pasternak et al. (2023) also point out that teachers' professional judgment and autonomy were questioned within three of the four schools, limiting their professional growth opportunities. For CRP to succeed, teachers need autonomy within classroom instruction and support within their school system.

As teachers experience challenges with implementing CRP, they begin to feel disempowered and lose confidence in their abilities to implement CRP (Powell et al.,

2016). These barriers and their relationship to teachers' change in practices must be addressed in teacher learning and PD on CRP. This study sought to provide teachers' first-hand perspectives of what challenges they experienced in sustaining CRP implementation while highlighting the factors that supported teachers in continuing to use CRP.

Sustainability of Culturally Responsive Practices From PD

Recently, PD research on the sustainability of educational change has gained momentum. Hargraves and Fink (2003) defined sustainability as an improvement that sustains learning, endures over time, and can be supported by available resources. Regarding teacher PD, sustainable improvement refers to the long-term development of teachers' skills through effective pedagogy and the continual use of practices learned through PD. While lasting changes to teachers' practices, knowledge, and skills seem to be the goal for PD, minimal research has been conducted from a sustainability perspective, especially regarding PD on CRP (Avalos, 2011; Kennedy, 2016).

Some longitudinal research on culturally responsive teaching PD has shown a positive impact on teachers' instructional practices (Choi & Morrison, 2014; Lee et al., 2016) while other studies have found no significant changes to teachers' practice in sustained PD initiatives (Lee et al., 2007; Lee & Maeten-Rivera, 2012). Choi and Morrison conducted a five-year hybrid (online and face-to-face) program that supported teachers in adapting their practice to meet the needs of minority and immigrant students. Findings indicated positive changes to teacher perceptions and classroom practices. Similarly, Lee et al. (2016) conducted an examination one year after the implementation of an intervention's effects on teachers' science knowledge and effective practices for

ELL instruction as part of a three-year teacher PD. The study utilized a cluster randomized controlled trial design with fifth-grade teachers. Teachers completed questionnaires and a test of their science knowledge at the beginning and end of the school year. Results showed positive effects on teachers' knowledge and practices in teaching science to ELLs. However, in a study by Master et al. (2016) on identifying differentially effective teachers of ELs, teachers' effectiveness with ELs seemed limited to their year of participation in PD.

In a study with more positive results around sustainability, Penner-Williams et al. (2019) performed a two-year follow-up inquiry study as part of a more extensive two-year study investigating the multi-level impact of a PD program on teachers' use of culturally responsive teaching practices. Penner-Williams et al. sought to determine if teachers had increased their use of cultural and linguistic instructional practices and contributing factors to this process and found that their professional learning communities were perceived as the most significant factor in this process (p. 4-5). Results showed sustainable teacher change in most indicators of effective pedagogy for culturally and linguistically diverse students as measured at the end of the PD and two years after. Teachers indicated that the reflective dialogue with their peers during their weekly collaboration in professional learning communities was most critical to their learning and instructional change. Also, teachers credited professional learning communities as a significant factor in implementing cultural and linguistic instructional practices. Penner-Williams et al. recommended strategically implementing sustainability mechanisms into teacher PD, such as theories of action and change, to support teachers' sustained use of PD practices.

Summary

During the last 20 years, the U.S. student population has become more diverse, and evidence of academic inequities has become more prevalent. This has led to expanding research on effective pedagogical practices for diverse learners and PD program efforts to increase teachers' knowledge of culturally responsive teaching. Research on the effectiveness of these PD programs mainly has been limited to changes in instructional practices during or after the program. Therefore, there is limited research and evidence on the sustainable change in teachers' culturally responsive teaching practices after a PD program. This dissertation study sought to fill this need in research. This research provides evidence on what teachers sustain three years after completing a PD on CRP, what factors and supports are related to teachers' sustained implementation, and what challenges teachers experience in sustaining implementation.

CHAPTER 3: METHODS

Qualitative research seeks to "understand and explain the meaning of social phenomena" (Merriam, 1998, p. 139) and presents the participants' perspective of the phenomena, not the researchers' (Merriam, 1998). By conducting this qualitative study, I sought to investigate teachers' sustained CRP after participating in a PD, what enabled teachers to sustain CRP, and challenges teachers experienced in sustaining implementation. Classroom observations and teacher interviews were the main sources of data for answering these research questions. Classroom observations were used to determine what CRP teachers sustained. By conducting a semi-structured interview with the focal teachers, I examined factors that enabled teachers' sustained implementation and identified ongoing supports and challenges. These forms of data allowed for direct quotes from the participants about their experiences and detailed descriptions of their actions in the classroom (Merriam & Tisdell, 2009).

Chapter three includes a description of the methodology used in this intrinsic case study. This chapter includes the research questions followed be a description of the research design. The researcher positionality is explained in detail and as well as the site and participants selection. I thoroughly explain the data collection process that includes the observations and interviews. Chapter three concludes with the data analysis process, the trustworthiness of findings, and a final summary of the methodology for this case study. For the purpose of this study, all names, including participants, schools, and the project, are pseudonyms.

Research Questions

To answer the research questions related to teachers' sustained CRP after their participation in a PD, I conducted a qualitative study. The questions that guided this

dissertation research are as follows: (a) What CRP did teachers sustain three years after completing a CRP professional development program? (b) What factors and supports were related to teachers' sustained implementation? (c) What ongoing challenges did teachers experience related to sustaining implementation?

Research Design

To conduct this investigation of teachers' sustained CRP after participating in a PD, I implemented a case study methodology. According to Merriam (1998), "a case study design is employed to gain an in-depth understanding of the situation and meaning for those involved" (p. 299). The research questions that I examined through this research are applicable for a case study design, as I gained a detailed description of the teacher perspectives of what has supported or challenged them in sustaining CRP on their own. This exploratory case study undertook an intrinsic case study approach. Johnson and Christensen (2017) explained that an intrinsic case study is used when the "researcher attempts to learn about a little-known phenomenon by studying a single case in depth" (p. 435). This intrinsic case study design approach provided descriptive information that is lacking in the field of teacher PD on CRP. In addition, intrinsic case studies are popular among program evaluators because they "describe a program and evaluate how effectively it is operating" (Johnson & Christensen, 2017, pg. 435). Therefore, the selection of teacher participants from one PD on CRP was appropriate to determine the effectiveness of this program in supporting teachers' sustained CRP.

Merriam and Tisdell (2009) advocated that case study research can provide understanding that can improve practices in "educational innovation, evaluating programs, and informing policy" in applied fields (p. 51). This research offered insights

and a rich account of teachers experiences in sustaining CRP after participation in a PD. The opportunities to explore what CRP teachers sustain, factors and supports related to sustained implementation, and ongoing challenges teachers are experiencing in sustained implementation are appropriate for this intrinsic case study research.

Researcher Position

I am a White, American, English-speaking, female who grew up an only child in a middle-class home with a single mother. My hometown is in a small, rural part of central Ohio where my mother was also raised. My parents divorced when I was young, and I grew up with a stepbrother and a half sister at my father's house.

Spending most of the time in my mother's community and attending K-12 school there, that is the community I identified with the most growing up. In this community, nearly everyone looked like me, and most of the adults worked for a community business or were farmers. I attended public schools and was very involved in extracurricular activities. After high school, I attended a major research university outside the state of Ohio, where I did not know one fellow student. This decision surprised some people, even myself at times, but when I visited the campus, I could tell this was where I was meant to be. I appreciated the comradery and diversity of the students. There were so many aspects of the student body that were different from me, that it fascinated me. I received my bachelor's degree and am now receiving my Doctoral degree from this same university. This university presented me many opportunities to explore other cultures, learn content I never would have thought about growing up, and challenged the ideologies I grew up with. Following my bachelor's degree, I taught middle school science for five years. In those five years, I had the ability to build relationships with all

different kinds of students and this allowed us to have an inclusive classroom community where learning could take place. It was during my time as a middle school teacher when I taught my first EL students.

In my eighth-grade science classroom, I had EL students from diverse backgrounds that I had no prior cultural knowledge of but built relationships with each of them by being truly interested in their culture and family. All my teaching experience allowed me to easily build those relationships with most of my students, but my curiosity of other cultures and ways of life is what drew me to EL students. Growing up in a primarily White, rural community, I had no knowledge of African culture and education, or the Arabic language, or Hispanic traditions, and I was determined to learn all about them. This desire drove my advocacy for these students because even with my lack of knowledge of diverse students, I could tell these students were being marginalized in our school and community.

My advocacy and support of ELs in our school lead me to take on many different roles. Within our school and with the support of our administration, I created an intervention class where ELs could enroll to receive homework and content knowledge support. During this class, we created a project to present at the eighth-grade community service night that educated our school and community members on African culture and education. My eighth-grade students that were immigrants of Africa provided knowledge of their home countries, taught phrases in their home languages, compared their education experiences to American education, and shared cultural traditions with the audience. The students received astounding feedback from our school community after that project. Throughout the next few years, I spearheaded fundraising opportunities for

our EL students to attend their eighth-grade class trips. I also continued to advocate for all EL students within our school building and through that advocacy work, I was recognized by our school staff with an award.

Outside of school, I supported our EL students and their families in any way I could. I learned about their cultures and values and built relationships with these students in meaningful ways. However, I still lacked the proper knowledge of how to effectively teach ELs and I was determined to become a better educator for them. I could advocate and be supportive, but I did not have the knowledge of how to effectively educate ELs. I enrolled in an EL certificate program and took one course online before finding the Culturally and Linguistically Diverse Classroom Project (CLDC Project). The CLDC Project is a pseudonym that will be used throughout this dissertation. This grant trained teachers in a year-long PD on effective practices for their EL students through a research university. I also participated in the advanced leadership component as to receive a graduate certificate in Teaching in Culturally and Linguistically Diverse Classrooms. I then fell in love with the impact of the project and saw the long-term effects I could have on ELs if I went back to school for my Ph.D. and taught their teachers how to educate them. The number of EL students I can foresee myself indirectly helping, is the motivation for this degree and dissertation.

For this study, I sampled from the CLDC Project Year 2 participants. I was a teacher participant during Year 2 of the CLDC Project, which was my last year of teaching middle school. Following my passion for this project, its mission, and my personal goals, I left teaching to pursue my PhD and become a research assistant for the project. During the six years of this project, I have been a teacher participant and a

research assistant for the project. I started as a research assistant in Year 3 of the project and still hold that position in Year 6. Starting Year 4, I became an instructional coach for the project where I supported teachers in their implementation on the CRP they were learning about through the project. My other roles in the CLDC Project have consisted of interviewer, PD facilitator, created of a seasonal newsletter, transcriptionist, data analyst, and I have assisted in writing annual evaluation reports. Additionally, I was asked to write a vignette about my teaching experience in the CLDC Project for a book written by investigators of the project. I was also involved in research presentations surrounding this work.

The teachers in the current study were participants in the CLDC Project while I was also a participant. I was one of 25 teachers that participated in Year 2 of the CLDC Project along with two colleagues from my school. Therefore, the participants of the current study and myself attended PD sessions together to learn about CRP and collaborate on instructional activities we could implement in our classrooms. Some of the group work sessions were randomized, so that we had experience collaborating with teachers from other schools and grade levels. So, I got to know most of the teachers within this cohort on a professional level. All the teachers were eager and engaged during these PD sessions and we all spoke highly of the collaboration aspect of the CLDC Project. Additionally, the three teachers for the current study and myself were four of the six teachers to participate in a graduate certificate program provided by the CLDC Project. We were enrolled in four graduate courses together, and therefore, developed friendships. While we have been friends on social media since our participation in the

project, I have not seen them outside of the CLDC Project PD sessions since our participation in the project together.

Past teacher participants from the CLDC Project often reported during their post interviews in the project, that the CLDC Project was the most successful, engaging, and meaningful PD they had ever participated in. Also, most teachers reported that they would continue to use the strategies they learned during their participation in later years. For these reasons, I believed that the participants for my study would be interested in my research topic of how and why teachers sustained the practices they learned in the CLDC Project.

When I reached out to the sample of teachers that fit the criteria for this study, three of the teachers were interested and volunteered. I approached them in the same way and explained my participant-observer role before collecting data. However, while I was in each of their classrooms collecting observation and interview data, I realized the participant-observer role was on a spectrum. In Ava's classroom, the first-grade students were more interested in my presence in their classroom and therefore, I tended to interact with them more than the other two teachers' students. In Cindy's fifth-grade class, she had many students which left little room in the classroom to move around and interact with students. Therefore, I tended to only evaluate and observe during her observations. In Sophia's fifth-grade class, students worked in small-groups often which allowed for more interactions with students where they could describe their group work or assignment.

As I constructed this study, it was important for me to acknowledge my personal beliefs and past experiences as I collected and analyzed data. To account for my

background with the project and my current investment, I kept a researcher journal during data collection and analysis. I provide more details about my researcher journal, in the trustworthiness of findings section.

My background and experiences have led me to relate to a constructivist perspective regarding theory, research questions, methodology, and methods I used for this study. Tracy (2013) explained constructivism from an interpretive point of view. Constructivist researchers mediate knowledge about reality because "both reality and knowledge are constructed and reproduced through communication, interaction, and practice" (Tracy, 2013, p. 40). By taking a constructive, sociocultural perspective with this study, I created connections between the research questions, theory, methodology, and methods using a sociocultural lens.

Another lens to consider in my position, was my scientific background. As a past science teacher, I have taken many science classes during my schooling years. In high school, I took seven science courses in four years, and I began my bachelor's degree with a high school science education major then switched to middle school math and science education two years into my degree. This part of my life was significant to the way I was trained to view and approach a research study. Science typically takes on a positivist perspective in that there is one reality to be understood and it is objective. There is a goal to accomplish and there is a right way to understand the approach and method towards reaching that goal. However, as I have progressed in my graduate studies, I took on a more interpretive lens towards research and knowledge. I believed that knowledge and research is constructed and produced and should focus on the meanings of the research

participants. This lens of understanding the participants' experiences guided my research in this dissertation, but my past scientific training may have played a role as well.

It was essential for me to clearly explain my position with each aspect of this study. As a past teacher participant and a present instructional coach for this Project, I was able to gather rich insider knowledge of the research topic. However, since I am deeply invested in this project, that might blind me to certain data results. My position as a past teacher participant of Year 2 of this Project has allowed me to be familiar with the participants before this study. Therefore, teachers may have been more willing to volunteer for this study and feel more comfortable during data collection procedures. Though, I do acknowledge that since I participated with these teachers during Year 2, that may have caused some teachers to not see me as a researcher and therefore, not want to participate in this study. From a constructivist perspective, data gathering and analysis for this study will attempt to see the research topic from the participants' perspectives (Tracy, 2013). My prior and current research assistant duties have made me very familiar with the CRIOP framework, classroom observation procedures, and teacher interviewing techniques. I was able to draw upon these prior experiences to support the gathering of deep and rich data. However, I also acknowledge that these prior experiences might shape and color my analysis of data. For example, since I have invested myself in multiple ways towards the success of this project, I might have tended to privilege certain viewpoints from teachers over others. For each aspect of this study, my position had benefits and limitations. But I acknowledge my involvement with the project and how this may have influenced my perspective and the lens that I took while conducting this research.

Context

In September 2017, faculty from a large, research-extensive, land-grant university in a southeastern state were awarded funding from the U.S. Department of Education through the National Development Program (NPD) to implement the CLDC Project. The year-long intensive PD was implemented annually for five years and served new cohorts of teachers each year: approximately 25 teachers per year, 125 teachers through the life of the project.

Professional Development Model

For this PD model, each cohort of teachers was recruited from participating districts. Teams of at least three teachers were preferred, but individual volunteers were accepted. During the summer, teachers participated in a four-day summer institute. At the institute, teachers received training in the CRIOP elements, second-language acquisition, implementing WIDA standards for lesson planning and assessment, and building partnerships with parents and families of their ELs. Additionally, teachers participated in six day-length PD sessions throughout the school year. The focus of the PD sessions included review of the CRIOP elements, Classroom Relationships, Family Collaboration, Instruction, Assessment, Discourse, and Critical Consciousness. PD sessions were conducted using effective PD strategies such as hands-on learning, allotted time for the practice of instructional strategies, and provided reflective activities. Additionally, former teacher participants presented on a CRIOP element or CRP strategy and shared their implementation experiences. Another facet of this project was the opportunity for advanced leadership in which a subset of approximately five participants earned 12 hours

of graduate course work resulting in a Graduate Certificate in Teaching in Culturally and Linguistically Diverse Classrooms.

Following the summer institute, teachers were assigned an instructional coach from the project to support them in the implementation of the CRIOP elements into their classrooms. Coaching supports were provided in the form of classroom observations, curriculum planning, sharing of ideas and resources related to the CRIOP elements, modeling, and the leading of PD sessions for teachers' school teams. Additional supports that were provided to teachers included a CLDC Project Facebook page and newsletters. The Facebook page allowed teachers to share their experiences with CRP and facilitate discussion. The seasonal newsletters contained additional CRIOP resources and information about the CLDC Project.

Classroom Model for Culturally Responsive Practices

The classroom model for CLDC Project was framed around the Culturally Responsive Instruction Observation Protocol (CRIOP), an instructional framework and measurement tool designed to assess and support instruction in six elements: Classroom Relationships, Family Collaboration, Assessment, Instruction, Discourse, and Critical Consciousness (Powell et al., 2016; Powell & Cantrell, 2021). The CRIOP instrument consists of six holistic areas of CRP, mentioned previously, and 24 specific indicators of CRP with examples and non-examples used for observers' evaluation and to assist teachers in conceptualizing CRP. Each CRIOP element is described in detail in chapter two.

Site and Participant Selection

To answer the research questions stated above, I sought out teachers who had previously participated in the CLDC Project and were classroom teachers during the year of this study. Participants were selected from among the 23 teachers who participated in Year 2 of the CLDC Project during the 2018-2019 school year. This specific cohort of teachers was selected because of the availability of pre- and post- observation data that indicates teachers' level of implementation. Year 1 of the project was on a half-year timeline; Year 2 was a full year of implementation with pre- and post- observation data gathered. Year 3 was also a full year of implementation, but post- observation data was not gathered due to the COVID-19 pandemic. Year 4 of the CLDC Project consisted of an alumni cohort of teachers who participated in a modified PD during the COVID-19 pandemic. These alumni teachers volunteered to participate in an online option of the CLDC Project during the 2020-2021 school year. For this dissertation, participants were selected from the Year 2 teachers only and did not include Year 4 participants. This was to ensure that the participants had not received training or coaching since the 2018-2019 school year to determine sustained use of CRP.

Participants

Using a purposive sampling approach (Johnson & Christensen, 2017), I used the criteria described above as well as the CLDC Project classroom observation CRIOP scores from the time they were participants. Teachers' pre- and post- observation CRIOP scores were used to select teachers who grew the most during their participation. For this dissertation, it was important to use teachers who had the most growth with implementing CRP to determine teachers' sustained practices. Once the pre- and post- post CRIOP scores were compared and evaluated for most growth on the CRIOP, I contacted the

teachers who had grown by eight points or more during their participation. There was a natural cutoff at eight points of growth for seven teachers.

The seven teachers that met the criteria were contacted via email and asked about their willingness to participate in this study. Within this contact, I included the research methods information, details about conducting three classroom observations and their duration, and information on the three interviews. Three of the seven teachers contacted volunteered to participate in this study and fit the above criteria. This sample size of participants ensured a point of saturation was reached, according to Merriam and Tisdell (2009). This small sample size of participants provided rich, in-depth data are gathered on the sustained use of CRP.

In order to protect the rights of all participants in this research study, the University's Institutional Review Board (IRB) reviewed all the information and requests. The IRB granted permission, and the teacher participants and the school district signed the agreement acknowledging their participation and that no risks were involved. IRB was put in place to protect the confidentiality, anonymity, and privacy of the participants involved in this qualitative case study research (Johnson & Christensen, 2017). Each teachers' detailed demographics, teaching experiences, education, and school contexts are below.

Ava

Ava has taught at two schools during her seven years of teaching. She is currently in her second year at Cedar Hills School, a local private kindergarten through eighth grade school, where she teaches first grade. Cedar Hills School enrolls approximately 500 students. The student body is predominantly White, making up around 75% of the student

population. Asian students account for approximately 10% of the students, while Black and Hispanic students each comprise about 5% of the student population. Ava's previous school, Sunflower Elementary, is a local public school where she taught third grade for five years. Sunflower Elementary is a school that enrolls approximately 670 students. The student body consists of around 70% White students, 10% Black students, 5% Hispanic students, and 5% Asian students. About 10% of the students are ELs, and approximately 30% qualify for free or reduced-price meals. Ava participated in the CLDC Project during the 2018-2019 school year when she taught third grade in her third year of teaching. She came to participate in the CLDC Project because two other teachers in her school had participated in the Year 1 cohort and spoke highly of the PD and practices, they were able to implement. Along with the project requirements, Ava volunteered to participate as an advanced leader, the graduate certificate opportunity through the project.

Sophia

Sophia currently teaches third grade and has for four years. She previously taught fifth grade and has nine years of teaching experience. Sophia has taught at Willow Crest Elementary, a local public school for all nine years of her experience. Willow Crest Elementary is a school that receives Title 1 funding, which supports schools with a high percentage of students from low-income families. The school educates approximately 230 students. The student body is diverse, with a significant proportion of Hispanic students, followed by Black and White students. Roughly 70% of the students are ELs, and the majority, around 90%, qualify for free or reduced-price meals. Sophia holds a master's degree in Educational Leadership, and her bachelor's degree is in Elementary Education. As a Willow Crest Elementary fifth-grade teacher, Sophia participated in the

CLDC Project during the 2018-2019 school year. She reported joining the CLDC Project because the project offered the advanced leader component where a select few teachers qualified for free enrollment in graduate courses. Sophia was also an advanced leader and participated in the graduate certificate component, during her time in the project.

Cindy

Cindy has taught at two elementary schools in her seven years of teaching experience. Cindy has taught fifth grade for five of her seven years in public schools. She is certified to teacher kindergarten through fifth grade with a bachelor's and master's from Washington College. Her master's degree is in Teacher Leadership and Literacy Specialist. Cindy is in her first year at Meadowbrook Elementary, a Title 1 school with a moderate enrollment of around 180 students. The student population at Meadowbrook Elementary is diverse, with a mix of Black, White, and Hispanic students, the highest percentage of students are Black. Approximately one-third of the students are ELs, and a significant majority of students qualify for free or reduced-price meals. Cindy's previous school, Stone Elementary, is also a Title 1 school with an enrollment of approximately 600 students. The student population at Stone Elementary is predominantly White, making up around 80% of the student body. Hispanic students account for roughly 15% of the students, while Black students comprise about 5%. Around 10% of the student population consists of ELs, and approximately 40% of students qualify for free or reduced-price meals. Cindy participated in the CLDC project when she taught fifth grade at Stone Elementary in her third year of teaching. She reported signing onto the CLDC Project when her principal asked for volunteers to create a team to participate in the

project. Cindy was also an advanced leader and participated in the graduate certificate component during her participation in the project.

Data Sources and Collection

The data collected from each participant in this study included three classroom observations and three teacher interviews in which teachers sometimes provided documents and artifacts. According to Merriam and Tisdell (2009), when these data sources are combined, a holistic interpretation of the phenomenon can be investigated. Classroom observations were utilized to answer the research question related to teachers' implementation of CRP and the extent to which CRP have been sustained. Classroom observations were conducted three times throughout the semester to increase the validity of findings. I took a role of participant-as-observer for this study because I spent a great deal of time in the field participating and observing (Johnson & Christensen, 2017). Assuming this role during classroom observations allowed the teachers provided more details about the observed lessons during their interview if needed. According to Johnson and Christensen (2017), a weakness of participant-as-observer is that the participants might not behave naturally because they are aware that they are being observed. To help the teacher adjust to being observed, multiple classroom observations were recommended.

Data collected from the three teacher interviews were used to answer the research questions related to what enables teachers to sustain CRP, and what supports and challenges they experience in sustained implementation of CRP. Additionally, questions were asked about each of the classroom observations, the teachers' experiences in implementing CRP, and reflections on the CLDC Project. Qualitative interviews were

appropriate for this case study because they can be used to obtain "in-depth information about a participant's thoughts, beliefs, knowledge, reasoning, motivations, and feelings about a topic" (Johnson & Christensen, 2017, p. 235). An interview guide approach was used for each teacher interview, which included a list of questions and topics to be covered. An interview guide approach allowed for flexibility in the phrasing and ordering of the questions. Furthermore, using an interview guide approach allowed the participants' viewpoints to be heard without strict constraints of scripted questions (Tracy, 2013). The set of questions and issues that were addressed in these interviews included what PD components and features were essential in increasing their use of CRP, what CRP they feel they have sustained from the PD, what enabled them to sustain those practices after completion of the CLDC Project, and what support and challenges they experience in doing so. Documents, artifacts, and field note data provided a more thorough understanding of the findings from the classroom observations and teacher interviews. These artifacts included culturally responsive artifacts from the classroom and lesson plans that support the teachers' claim of implementation of CRP.

Data Sources

Culturally Responsive Instruction Observation Protocol (CRIOP). The CRIOP instrument consists of six holistic areas of CRP mentioned above, and 24 specific indicators of CRP with examples and non-examples used for observers' evaluation and to assist teachers in conceptualizing CRP (See Appendix A for holistic areas and indicators comprising the CRIOP instrument). Each holistic area is rated for observed CRI practices on a 4-point Likert style scale: 0 = Never, 1 = Rarely, 2 = Occasionally, 3 = Often, 4 = Consistently with the highest total CRIOP score being 24. The CRIOP has been

previously found to have Cronbach's alpha values of .88 and .94 (Malo-Juvera, Powell & Cantrell, 2013). Teachers' classroom instruction was observed once prior to receiving the intervention and once after their participation in the project. The pre- and post-observation CRIOP scores were used to determine growth for each teacher.

The CRIOP instrument was also used for the three classroom observations with focal teachers to capture their implementation of CRP. Observations occurred during literacy or content area instructional times and included whole group and/or small group instruction. It is recommended by Powell et al. (2016) for observers to spend 2.5 hours observing classroom instruction and taking detailed field notes at five-minute intervals. During the observation, I looked for evidence of each CRIOP element by using the examples and non-examples provided by the framework. When this evidence occurred, I recorded the time of occurrence for each example and non-example. The detailed field notes and the examples and non-examples of classroom practices guided the scoring for each indicator and each CRIOP element was given a holistic score. The Family Collaboration element was scored using the results and analysis of the family collaboration interview.

To determine the score for each CRIOP indicator and element, field notes and indicator ratings were used, except for the Family Collaboration element. After each classroom observation, I reviewed the fields notes noting when instances of the examples and non-examples occurred, and the time noted for each individual indicator. When scoring the CRIOP, I reviewed the CRIOP field notes, the noted times of evidence, frequency of occurrences, and the qualitative data of what happened over the course of the observation. Interview details were used in coordination with the CRIOP indicators

and examples and non-examples of CRP to score the Family Collaboration element. During interviews, the teacher detailed their use of the Family Collaboration element, which was noted and reviewed for CRIOP scoring. Documents the teacher provided during the interviews or artifacts observed in the classroom were also used in the CRIOP scoring process, as they provided evidence of teachers' implementation of the elements.

Teacher Interviews. Each of the focal teachers participated in three interviews that lasted approximately 90 minutes each. The interview protocols were semi-structured, with open-ended questions that allowed me to probe for clarification and additional information. The interviews were collected within one week following each of the classroom observations. Each of the three interviews included a core list of questions that were asked each time including their definition of CRP and what it means to be a culturally responsive teacher, successes and challenges they were experiencing in sustaining CRP, factors that enabled them to sustain implementation, and the Family Collaboration questions from the CLDC Project teacher interviews (See Appendix B for the core questions interview protocol).

The first interview consisted of the core questions and questions that built rapport with the teachers to make them feel comfortable and knowledgeable (Tracy, 2013). These questions consisted of asking the participant to put their experience into context about teaching ELs and their participation in the CLDC Project. The phrasing of questions used the word "how" instead of "why" in hopes that the participant would describe their past experiences that brought them into teaching and the CLDC Project (Seidman, 2006). These open-ended experience questions prompted the teacher to share stories that I later referred to for follow up (Tracy, 2013). During the first interview, Tracy (2013)

suggested that the interviewer share their own story, "as mutual self-disclosure can help bring you closer to, and create affinity with, your participant and mitigate real and perceived power differences" (p. 147). Additionally, questions were asked about the classroom observation. In the first interview, I generally asked the teacher to describe what I observed that day and if there was anything they did that was impacted by their participation in the CLDC Project (See Appendix C for the first interview protocol questions).

The second interview consisted of the core set of questions as well as questions that asked about details of the teachers' current experiences with implementing and sustaining CRP (Seidman, 2006). I asked teachers about their experiences in the CLDC Project and CRIOP elements they were continuing to implement or had not continued to implement. These questions were approached in several different ways to provide teachers the opportunity to put their experiences within the context of this study (Seidman, 2006). Tracy (2013) described how probes can be used to elicit examples of specific experiencing the teacher might reference in this interview. My most often used probe was, "can you provide an example?" Teachers were also asked to describe what they have been doing in their classrooms since my last visit as well as what I observed that day in their classroom (See Appendix C for the second interview protocol questions).

The third interview again, included the core set of questions which provided many opportunities to answer the research questions about successes and challenges teachers are experiencing in sustaining CRP, factors that enable them to sustain CRP, and score the family collaboration element for each classroom observation. Questions in the third interview pertaining to their sustained practices of CRP were deeper in meaning and

asked the participant to reflect on the meaning of their experience with CRP (Seidman, 2006). I asked the teachers to reflect on their participation in the CLDC Project and what had helped them to continue to use the practices they learned about in the project or what challenges they experienced in doing so. Classroom observation questions were about the practices they had used since my last observation as well as what I observed that day. I asked them if any of the practices they implemented that day or since my last observation were impacted by the CLDC Project. By asking about the practices teachers implemented in between my observations, I was able to gauge what their practices were like across the school year (See Appendix C for the third interview protocol questions).

Documents and Artifacts. Documents and artifacts were used as a third source of data for this study. According to Merriam and Tisdell (2009), the term documents is used for a "wide range of written, visual, digital, and physical material relevant to the study at hand" (p. 139). Artifacts can represent different forms of communication in the environment than documents. Merriam and Tisdell (2009) explained the strengths of using documents and artifacts as data sources are that they are not impacted by an observer's presence like in a classroom observation and documents are not dependent on the cooperation of the interviewee for information. During classroom observations or interviews, teachers presented culturally responsive student work samples, lesson plans, and online material they utilized in instruction as a demonstration of their culturally responsive teaching practices. These documents provided a description of classroom activities that occurred during everyday events in instruction that might not have been observed during the observations (Merriam & Tisdell, 2009). Additionally, physical artifacts from the classroom were used to demonstrate a culturally responsive classroom

community including multilingual literature, cultural representations on the walls of the classroom, or the classroom arrangement. Documents and artifacts that teachers provided were not systemically analyzed but were used as evidence during the CRIOP scoring process.

Data Collection

Classroom Observations. I began classroom observations in each focal teacher's classroom during the fall of the 2022-2023 school year. Three observations with the focal teachers took place over a three-month period. Each observation was scheduled at the convenience of the teacher and me. I asked each teacher what days would be most convenient for me to come observe for two and one-half hours straight. I did not ask the teachers to modify their already planned lessons. When I observed in classrooms, I saw whole group instruction, small group instruction, and multiple content areas taught. Each observation was conducted for at least two and one-half hours and I recorded field notes at five-minute intervals throughout each observation. Field notes included descriptions, direct quotations, and observer comments (Merriam & Tisdell, 2009). During each classroom observation, I observed for implementation of the CRIOP elements in classroom instruction including relational and classroom learning aspects. According to Johnson and Christensen (2017), qualitative observation is used for exploratory purposes to understand a phenomenon. Additionally, when combined with interviewing and document analysis, Merriam and Tisdell (2009) explained that a holistic interpretation of the phenomenon can be investigated.

Teacher Interviews. The three semi-structured interviews for each focal teacher took place within one week following each classroom observation. The interviews were

conducted in person and students were not present in the classroom during the interview. The interviews lasted approximately 90 minutes each and were scheduled around the teachers' schedule. With permission from the teacher, the interviews were audio-recorded for transcription and data analysis purposes. After the interviews, I contacted each teacher to ask questions if needed related to the interview data collected. This follow-up discussion was a form of member checking that increases the validity of the findings (Miles & Huberman, 2014).

Documents and Artifacts. Documents and artifacts were gathered during classroom observations and teacher interviews. As I observed in the classroom and took field notes during the evaluation, I made notes of artifacts found in the classroom and inquired about them during the interview. Similarly, the teachers presented documents related to their CRP as examples during their interviews. During each observation and interview, I made a note to ask for any relevant documents or artifacts for this research study.

Data Analysis

Multiple forms of data were analyzed for this dissertation study. Teacher interview responses and field notes from classroom observations were transcribed and coded. The CRIOP observation scores were also interpreted to determine the extent of sustained implementation. Miles and Huberman (2014) suggested beginning data analysis during data collection. This ongoing analysis prevented the data from being "unfocused, repetitious, and overwhelming" in volume (Merriam & Tisdell, 2009, p. 171). This approach guided my data analysis and interpretation of findings.

Classroom Observations

Once the observation was complete, interpretations of practices observed were added and ratings were assigned related to the degree of implementation of each of the six holistic areas of the CRIOP. The indicators and examples and non-examples of each CRIOP element were used to assess the teachers' implementation accurately. Each of the holistic scores were added together to determine the overall CRIOP rating for each classroom observation. Additionally, teachers' scores for each element at each observation point were plotted to see whether their implementation is consistent or less consistent. Furthermore, overall CRIOP ratings and holistic element scores for each observation were plotted and compared to teachers' pre- and post-observation score from their participation in the PD to determine the extent to which implementation was sustained. Data analysis of classroom observations provided information on which elements were sustained and to what extent. The field notes were coded using a thematic analysis technique and were used as evidence in the CRIOP element scoring.

The CRIOP pre- and post- observation scores were collected by seven observers who were trained on how to conduct observations using the CRIOP. These observes participated in practice observations until each observer achieved at least 80% agreement with the CRIOP developers (Cantrell et al., 2022).

Teacher Interviews

All teacher interviews were transcribed using the audio recording, and data analysis began immediately following. In phase one of the analysis for each interview, several first-cycle codes were utilized. Miles and Huberman (2014) asserted that there are "three elemental methods that serve as foundation approaches to coding: (1) Descriptive, (2) In Vivo, and (3) Process coding" (p. 80). Descriptive codes were assigned to label and

summarize a word or short phrase (Miles & Huberman, 2014). In Vivo codes were used in the participants' own language to honor their perspectives (Tracy, 2013). Process codes were used to imply actions that are observable (Miles & Huberman, 2014). Also, during the first phase of coding, protocol codes were used to represent the CRIOP elements. Definition of codes and memos were recorded so that codes were applied consistently throughout analysis. According to Miles and Huberman (2014), the first cycle of coding is used to summarize segments of data. The second cycle of coding, or pattern coding, is "a way of grouping those summaries into smaller number of categories, themes, or constructs" (Miles & Huberman, 2014, p. 90). Patterns and themes were developed by pulling together leads of segmented codes. Miles and Huberman (2014) suggested going back to the research questions and reviewing chunks of codes if overarching patterns and themes do not arise. Once pattern codes were developed, a map was created that connected segments of codes and details from field notes and documents, as well as the chunks of data that led to the pattern discovered (Miles & Huberman, 2014).

Documents and Artifacts

Once documents and artifacts were collected during the classroom observations or teacher interviews, Merriam and Tisdell (2009) encouraged the researcher to first determine the authenticity and accuracy of the documents. The analysis started with where the document or artifact originated from, the reasons for it being written or created, and the context of which it comes from. First, questions were asked during the interviews. Next, I determined if the document was considered a primary or secondary source of data. Primary sources would be teacher lesson plans or instructional strategies

the teacher is describing because they are coming from the creator of the document firsthand (Merriam & Tisdell, 2009). A secondary source of data example would be student work samples. The teacher used these to provide examples of students CRP but since it was not created by the teacher, these documents were considered secondary sources (Merriam & Tisdell, 2009). The analysis process for the documents and artifacts occurred concurrently with the teachers' interviews. The findings from the document and artifacts analysis played a role in scoring the CRIOP elements during each classroom observation.

Organizing the Data

I collected classroom observation data, interviews, and teachers sometimes provided documents and artifacts. Since observations occurred approximately every two to three weeks, this allowed me time to transcribe and analyze before collecting data through the following classroom observation and interview. I began organizing the data after the first observation and interview. Classroom observation data was stored and saved on my password-protected laptop, then transferred to my personal Google Drive account. Interviews were recorded using the Voice Memos app on my password-protected iPhone, then transferred to my personal Google Drive account. Once all data was transferred, I evaluated and assigned ratings for each CRIOP element. Each rating was evaluated using culturally responsive examples and non-examples for each element measured by the CRIOP. Each element was given a holistic score except for the Family Collaboration element. The ratings for this element were evaluated after each interview was transcribed and analyzed. Once each CRIOP element was given a holistic score, they were added together to provide an overall score for each observation.

Once each audio recording of teacher interviews was transferred to my personal Google Drive account, I began transcribing. I used Microsoft ® Word to document and store all transcriptions from the audio-recorded interviews. On my desktop, I created folders for each teacher to organize these documents and labeled each folder with Ava, Sophia, and Cindy. Within these folders, I created files to organize the classroom observation and interview data, which was categorized into the corresponding visit (i.e., Visit 1, Visit 2, Visit 3). For example, within the Visit 1 folder, the first observation and interview were labeled as Classroom Observation Visit 1 and Interview Visit 1. Following each observation and interview, I used Microsoft ® Word to create a researcher journal to document my thoughts and note how my positionality emerged (Johnson & Christensen, 2017). All journal entries were kept on my password-protected laptop and personal Google Drive account.

I followed a similar protocol for documents and artifacts collected during observations and interviews. Documents and artifacts were collected as hard copies, like copies of reading passages or math worksheets, or I took a picture of the document or artifact with my password-protected iPhone. Following each observation and interview, I would take pictures of the hard copies teachers provided me to organize them with the other photos I may have taken. Immediately after this process, I transferred all photos to my laptop and Google Drive account. On my laptop, I saved all photos under each corresponding teacher's folder and each corresponding visit.

Merriam (2009) emphasized the importance of keeping an organized system with data within case studies. Following the collection and organization of data, I began a further organization system of coding, which is a significant part of case study analysis

(Miles & Huberman, 2014). Within this study, I used several levels of coding to organize the data collected, which brought about the beginning stages of coding.

Transcribing and Coding

I played audio recordings of each interview to transcribe within a Microsoft ® Word document. I slowed the speech to 0.75 speed to ensure each word was transcribed and recorded the speech verbatim including "um"s, adding punctuation when necessary. I only used abbreviations in the transcripts if teachers said the abbreviation (e.g., GVM or PWIM). Otherwise, I wrote out exactly what the teacher said. I used brackets and italic font to indicate gestures and verbal language that seemed meaningful (e.g., [*laughs*] or [*long pause*]. Following the interview transcription, I took notes on each teacher's interviews about my thoughts and how my positionality emerged (Johnson & Christensen, 2017). Merriam (2009) emphasized transcribing interviews completely to provide the best analysis. The interview data collected provided information on teachers' perceptions of their sustained CRP implementation, factors and supports related to their sustained implementation, and challenges they experienced in sustaining implementation. Once the interviews were transcribed in their entirety, the process of coding the data began. It is important to note that when quotations are included in this study, transcripts were cleaned up for readability.

Codes are labels assigned to chunks of data used to retrieve and categorize similar chunks (Miles & Huberman, 2014). For this study, I used ATLAS.ti (2023) to code all transcribed data. The coding analysis began by first reading through each interview in its entirety then I proceeded with the first cycle of coding. This first cycle of coding ranged from single words within the transcript to entire paragraphs. As Miles and Huberman

(2014) asserted, three types of elemental coding methods were utilized in the first cycle of coding (1) Descriptive, (2) In Vivo, and (3) Process coding. Descriptive codes were created to assign labels and summarize a word or short phrase (e.g., Supports, Instruction). In Vivo codes were created in the participants own language to honor their perspectives (e.g., Challenge: "Getting other teachers on board"). Lastly, process codes were used to imply observable actions (e.g., Collaborating).

In the first cycle of coding, I had a start list of protocol codes used to represent the CRIOP elements. When a data segment identified a CRIOP element, it was coded with the appropriate protocol code. As I worked through the interview data, I created initial codes with keywords related to the research questions: supports, challenges, CRIOP elements continued use. See Appendix D for the list of protocol and initial codes. Then I proceeded with an open-coding process to create codes that identified data segments that might be useful. Merriam (2009) described being open to anything at this point in the coding process. The codes added during the open coding process included: Attribute changes, Changes, CRIOP continued to use explanation, COVID, PD, School context, Success, and Teacher. A complete list of open codes, along with their definition and examples, is provided in Appendix E. Using open coding in this research allowed me to be open to all possibilities within the data. Once I completed the open coding process, I then proceeded with another round of open coding to add more specific details to the protocol and first-round open codes that were created. This second round of open coding provided specific details from the data such as Challenge: Time, Classroom Relationships: Multicultural literature, Family Collaboration: Building trust/relationships with families, PD: Coach, and Supports: Sharing CRP knowledge with other teachers.

For a complete list of open codes, definitions, and examples created during the third round of coding, see Appendix E. Adding more specific codes to the initial codes allowed me to explore patterns that emerged during the second cycle of coding, or pattern coding (Miles & Huberman, 2014).

The second cycle of coding provided me with a way to group codes together to determine themes related to the research questions. To begin the second cycle of coding, Miles and Huberman (2014) suggested going back to the research questions and reviewing chunks of codes to develop pattern codes. First, I recalled the first research question related to teachers' sustained CRP. Many of these codes were already created during the third round of coding because the codes related to specific CRP teachers were implementing regarding the CRIOP elements. Examples of some of these codes were: Assessment: Formative, Critical Consciousness: Literature. All the codes related to teachers' perceptions of their sustained CRP implementation were transferred to a Microsoft ® Word document to aid in the development of a themes map for the first research question. Once these codes were transferred, I created overarching themes related to teachers' sustained CRP implementation. For a complete list of themes and their corresponding codes, definitions, and examples created during the second cycle of coding, see Appendix F.

Second, I reviewed the second research question regarding factors and supports related to teachers' sustained implementation. Using the second cycle of coding, I categorized codes into themes related to the second research question. These codes were categorized on the same Microsoft ® Word document as the first research question. A theme map for the second research question was created by combining codes of similar

findings. For example, PD: Coach, PD: Teacher presentations, and PD: Teacher collaboration combined to create the theme of PD components related to factors and supports in teachers' sustained implementation. See Appendix F for a complete list of themes and corresponding codes.

Third, I went back and reviewed the third research question pertaining to challenges teachers experienced sustaining implementation. Using second-cycle coding (Miles & Huberman, 2014), I analyzed themes related to teachers' perceived challenges in their sustained implementation. I created a theme map with codes on the same Microsoft ® Word document as the first and second research questions. This analysis brought about four major themes related to teachers' perceived challenges: implementation of the Critical Consciousness element, constraints related to teachers' school contexts, perceptions of student and family populations, and the COVID-19 pandemic. It is important to note that most quotations within the teacher interviews were coded with multiple codes. For example, a quote could be coded with the Classroom Relationships code and Family Collaboration code. A complete list of themes for all three research questions and corresponding codes can be seen in Appendix F. The theory and research explained in chapter two of this dissertation helped inform the process of analyzing the data collected.

Trustworthiness of Findings

According to Merriam (2009), "To have any effect on either the practice or the theory of a field, research studies must be rigorously conducted; they need to present insights and conclusions that ring true to readers, practitioners, and other researchers" (p. 210). I utilized several methods and procedures to increase the investigation's validity. I

employed triangulation by using multiple data sources methods, consisting of classroom observations, teacher interviews, and documents and artifacts (Merriam, 2009). As I analyzed classroom observation data, teacher interview responses, and document and artifact samples, these forms of data assisted in the in-depth analysis of the sustained implementation of CRP. For instance, during teacher interviews, I asked teachers about their daily classroom instruction that I may not have observed on that day. Likewise, teachers provided documents of student work samples that supported student choice in the literature that may not have been observed. During the teacher interview, teachers discussed challenges they experienced in sustaining CRP in their classroom due to a mandated program by their district supported by document data. Triangulation of data sources allowed for cross-checking information and conclusions (Johnson & Christensen, 2017).

Moreover, during the data collection and analysis procedures, I kept a researcher journal to document my thoughts and note how my positionality emerged. Johnson and Christensen (2017) recommended that qualitative researchers participate in reflexivity throughout their study. This process allowed me to "actively engage in critical self-reflection about his or her potential biases and predispositions" (Johnson & Christensen, 2017, p. 300). By documenting this critical reflection in a researcher journal, I became more self-aware and could monitor and attempt to control and address my positionality throughout the study. Furthermore, to increase the validity of the findings, I transcribed all interviews and observations. Once these transcripts were complete, teachers could participate in member checking for the opportunity to discuss, review, and approve interview transcriptions (Johnson & Christensen, 2017).

Summary

Understanding teachers' experiences with CRP implementation after participating in a PD helps in knowing how to support teachers during their participation. Chapter three outlined the methodology of this qualitative case study. It reviewed the research questions, followed by the design of this study, and I thoroughly discussed my positionality and the study context. Next, I explained the site and participant selection and the rationale for choosing this specific group of teachers to participate in this study. Following this, I explained the data sources and collection process of how I gathered data through classroom observations, teacher interviews, and documents and artifacts. Lastly, I provided detailed information on the procedures of this investigation and the results to increase the validity and ensure the trustworthiness of the findings. The information gathered was essential to the comprehensive research study in helping me, and others understand teachers' experiences with sustained CRP implementation after participating in PD.

Chapter 4: FINDINGS

This case study aims to investigate teachers' sustained implementation of CRP three years after their participation in PD. I have organized this chapter by research questions based on the data collected. This chapter includes several main sections, including (a) observation results showing teachers' level of CRP implementation, (b) teachers' perceptions of their levels of sustained implementation, (c) factors and supports related to teachers' sustained implementation, (d) challenges teachers experienced in sustaining implementation, and (e) the chapter summary. A summary of all the findings along with each teachers' teaching context can be found in Table 1.

Table 1

Findings Summary

	Ava	Sophia	Cindy
Teaching Context	Current 1st grade private school	Current 5th grade public school	Current 5th grade public school
Autonomy Context	High	High	Low
Overall Sustained	Yes	Yes	No
Sustained CRP	Instructional Strategies, Multicultural Text/Multiple Perspective Literature, Formative Assessment, Change in Mindset in Approach to Families	Instructional Strategies, Multicultural Text/Multiple Perspective Literature, Formative Assessment, Change in Mindset in Approach to Families	Instructional Strategies, Multicultural Text/Multiple Perspective Literature, Formative Assessment, Change in Mindset in Approach to Families

Supports	PD, Share CRP, Supportive School Context, Impacts on Students	PD, Share CRP, Supportive School Context, Impacts on Students	PD, Share CRP, Impacts on Students
Challenges	Critical Consciousness, Constraints related to context (previous school)	Critical Consciousness, Constraints related to context, Perceptions of Students and Families, COVID-19	Critical Consciousness, Constraints related to context, Perceptions of Students and Families

Observations of Teachers' Sustained CRP

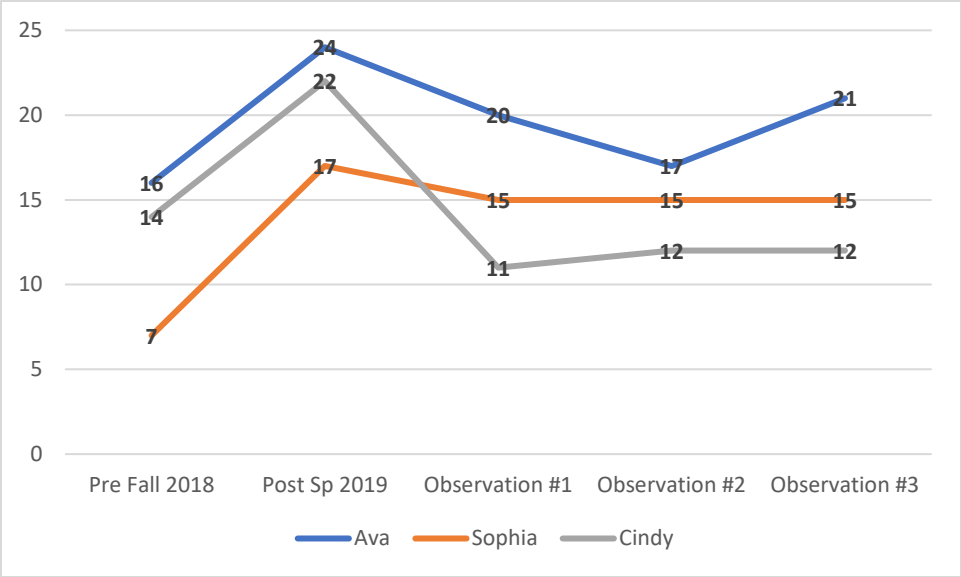
The first research question focuses on the extent to which teachers sustained CRP three years after completing an intensive PD. Teachers were observed before and at the end of their PD experience and were observed for the current study at three different time points during Fall 2022. The CRIOP instrument and field notes were used to generate CRIOP scores for all elements except Family Collaboration, and evidence for this element was collected primarily during the Family Collaboration interviews. This section reviews the findings that emerged from teacher observations. First, teachers' overall implementation will be presented, as measured by the CRIOP across observations. Then, each teacher's implementation of individual CRIOP elements across observations will be discussed. This section will include specific examples and non-examples of CRP for evidence of implementation from field notes.

Teachers' CRP Implementation Over Time

Figure 1 shows the CRIOP scores across observations for each teacher. While all three teachers decreased in their overall level of implementation from post-PD participation to the current study, two of the three teachers sustained much of what they learned over the PD project. As the figure shows, two of the three teachers' current observation scores were higher than their pre-score in 2018, providing evidence for sustained implementation. However, one teacher scored consistently lower than her pre-score in 2018; therefore, she did not sustain implementation of the project practices. A closer examination of each case is presented below, including an analysis of teachers' implementation of the individual CRIOP elements and examples from observation field notes.

Figure 1

Total CRIOP Scores Across Time



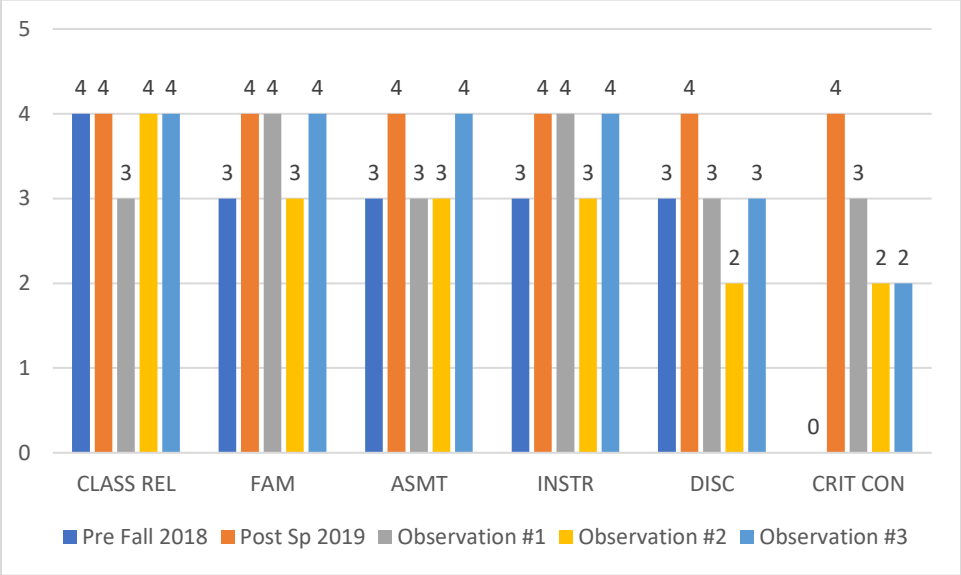
Ava's CRP Implementation. As seen in Figure 1, Ava started the grant project with a total CRIOP score of 16 in Fall 2018 and had a post score in Spring 2019 of 24, showing she made substantial growth during her project participation year. For the

current study, she scored 20, 17, and 21. While Ava's overall scores may have decreased from her post-observation score in the spring of 2019, her overall CRIOP scores remained relatively high and were consistently higher than her pre-participation scores.

Figure 2 shows a closer examination of Ava's individual CRIOP element scores across time. Interestingly, in Classroom Relationships, Ava was implementing CRP at high levels even before she began the project, as evidenced by her rating of 4 at the pre-observation. She sustained classroom relationship practices that were culturally responsive, as shown by the fact that she maintained the highest possible score in her project post-observation and three of her four subsequent observations for the current study. Additionally, Ava sustained the elements of Family Collaboration and Instruction as shown by a project post score of 4 and continuing to have the highest possible rating in two of this study's three observations. As seen in Figure 2, Ava's Assessment scores also show sustained implementation because she ended the project with a four and scored at least a three or a four on each of this study's observations. Notably, while Ava achieved the highest possible score in Discourse and Critical Consciousness at the end of the project with a 4, she decreased by at least a point or two on each of this study's observations. Therefore, while Ava was strong at the end of the project in these two elements, she had more difficulty sustaining CRP related to Discourse and Critical Consciousness.

Figure 2

Ava's Individual CRIOP Element Scores Across Time



Field Notes from Ava's Observations. During my three visits to Ava's classroom, I observed many examples of CRP specific to Classroom Relationships. In Ava's classroom, everyone was respectful to one another, and students were encouraged to work together productively. Ava demonstrated an ethic of care by calling students by name and creating a family-like environment in the classroom. In each of my visits to her classroom, I observed Ava greet students kindly and ask students personal questions to settle them into the classroom. For example, in my first observation, a student had horse riding lessons the night before, and when this student arrived in class the next day, Ava asked her how her practice went. Ava continued to ask students personal questions and make them feel comfortable upon arriving at class. Throughout class activities, students were engaged and wanted to participate. I observed this throughout my observations when each time Ava asked a question or participation was needed, almost every student

raised their hand to participate every single time. It was apparent that Ava's students enjoyed participating in classroom activities. During morning meetings, students and the teacher interacted respectfully and were encouraged to share about their lives outside of school. During my third observation, one student shared a scrapbook page she made about her life and family. Students were encouraged to ask questions and make connections with each other. Another strategy I observed over time during my observations was that students continuously viewed each other as a resource in their learning. In my first observation, during the students' writing center, a group discussed the culturally relevant text, *Wangari's Trees of Peace* (Winter, 2008), which the class had just read aloud. One student was assisting another student on one of the vocabulary terms the class had discussed and how to incorporate it into their writing. The vocabulary term was "baron," and students were assigned to write about the story's setting. One student reminded the other of how the class described the word baron, "remember, it was like a dry and empty place, like the place with the trees." This help from the student supported the other student in completing the writing task.

Positive relationships extended to the element of Family Collaboration in Ava's classroom. During our interviews, Ava shared many examples of establishing genuine partnerships with families by learning about their cultural knowledge and including them in classroom activities. One of the many examples of CRP that Ava shared is that she gives students an invitation card to fill out and return to her every year, inviting her to an event in their life. Students have invited her to birthday parties, Christmas Eve celebrations, sporting events, music recitals, and to share in families' meals in their homes. Ava shared that "it has been very well received in the sense of like the fact that

you are caring about my kid enough to want to come and see them and make them feel like they are the, you know, this is their show." Another example of Ava implementing Family Collaboration is how often families have joined her classroom to share their experiences. Families have read books and had conversations about their family's connection to Australia, Iceland, and Greenland. Ava pointed out that these conversations encouraged the students to be more engaged with the texts they were reading and made the families feel special. Lastly, Ava also conducts family visits regularly. One example she shared was about a student she had from Venezuela who invited her to eat arepas with them. This family visit led this student's mother to come into Ava's classroom and teach students how to make arepas. The mother brought a poster she had made that had the recipe in Spanish and English.

While most of the data for the Family Collaboration element comes from interviews, I did observe several examples of Ava implementing this element. In my third observation, I noticed scrapbooks in the back of the classroom. After looking through the pages, it was evident that Ava established genuine partnerships with her students' families. These scrapbook pages were filled with pictures and descriptions of students' lives. There were examples of cultural traditions and funds of knowledge that students shared with their classmates. During this observation, one of the students shared her scrapbook page with the other students, and they could ask questions and make connections. As figure 2 indicates, Ava scored at the highest level for Family Collaboration on two of three of my observations. In the second observation, she gave fewer examples of inviting parents from diverse linguistic and cultural backgrounds to share their unique experiences and knowledge.

As Figure 2 shows, Ava mostly sustained the highest level of culturally responsive Assessment measured by the CRIOP. Ava's implementation of the Assessment element included formative assessments of academic language and content and student self-assessment. Throughout my observations in Ava's classroom, numerous formative assessments were used to determine individual student learning outcomes. Students were continuously engaged in authentic assessments that assessed academic language and content. Mainly during students' writing centers, students practiced dictation and phonics in various ways. A strategy Ava used throughout my observations that allowed students to self-assess was to evaluate their work based on a set of criteria. Specifically, during writing centers, students were taught and recalled steps to check their work before turning in their writing. In my second observation, students were at a summarizing writing center after reading the book, *How to Catch a Monster* (Wallace, 2017), aloud whole class. During this summarizing center, students continued to reference an acronym they had memorized to complete the steps of summarizing a story, SWBST (Somebody, Wanted, But/However, So, Then). Students wrote this at the top of their paper and crossed off each letter once they completed the step. This is one example of how students used self-assessment in Ava's classroom. However, as figure 2 shows, Ava scored a point lower than her post-PD score. During the first two observations, there was little evidence of students being involved in goal setting and developing the criteria for their finished products.

In terms of Instruction, many examples from Ava's class illustrate the highest level of this element of CRP. Ava demonstrated implementation of the Instruction element by developing students' academic language by providing appropriate scaffolding

and student choice. Ava used several strategies that were emphasized during the PD within her instructional practices. Specifically, she taught vocabulary before having students read a text and incorporated visuals to give students more context. In my third observation, before reading *Oskar and the Eight Blessings* (Simon, 2015) together, Ava reviewed vocabulary from reading the story for the first time the day before. She had an image of each word, "stale and morsel," and the term on a sign to help the students review before reading the story a second time. Ava also used the practice of rereading books to help students develop phonics skills. Ava incorporated sentence stems in all subjects of her instruction. In the third observation, Ava convened the class's regular morning meeting to practice math and questioning techniques by comparing their data on the weather. One of the students created the question, "how many more does sunny have than cloudy" using a stem Ava provided. Following the whole group read-aloud of *Oskar and the Eight Blessings"* students were reminded to use the sentence stem "I know this because…" to use in their writing center to describe a trait about a character. An additional project practice I observed used consistently was student choice for their reading texts. Students were always given options to practice the reading skill for the day on a chosen text. In the third observation, students used iPads to pick a text from Epic, a reading platform, that expressed their personal interest. A project strategy that Ava continues to use is the Picture Word Inductive Method (PWIM). In my first observation, students used the PWIM strategy on pictures of schools worldwide. Students were studying a unit about schools around the world. Students then compared their school experiences with other children around the world. As figure 2 indicates, Ava scored at the highest level of implementation on two of the three observations. During Ava's second

observation, there were non-examples of CRP, such as the teacher being the authority and most knowledge and ideas being generated by the teacher or curriculum programs.

Although there were Discourse and Critical Consciousness examples during the observations, Ava implemented these elements at lower levels than at the end of her PD participation. As Figure 2 indicates, Ava scored a point or two lower on each of the three observations for this study in these elements compared to her post-PD ratings. For several Discourse indicators, Ava was given a lower rating for demonstrating non-examples of CRP. For example, most of the time, the teacher controlled the classroom discourse, and the main form of questioning was Initiate-Respond-Evaluate. This practice of questioning does not elicit extended responses from students. Furthermore, when Discourse was implemented, it was typically in a whole group setting, while the CRIOP would also encourage discourse in smaller settings. While Ava did demonstrate some non-examples of CRP, she did receive a 3 rating on two of the three observations.

When Ava implemented Discourse practices, they were consistent with those taught in the project. In each of the three observations, during students' phonics practice, they were engaged in partner work, call and response, repeating after the teacher, and musical shares. The students were highly engaged when various discourse practices were being used. Following their daily phonics practice, students would use the phonics and sight words of the day in their reading and writing centers in meaningful ways. In the first observation, students highlighted the day's sight words and phonics blends during reading centers. They used flashcards of the words and blends at a different center to quiz each other. The next center used playdoh to create their sight words. Lastly, Ava used gestures to break up words while working individually with each student. These would all be

examples of CRP as indicated in the CRIOP; therefore, Ava scored a 3 for two of the three observations.

Although her implementation of Critical Consciousness was inconsistent during the observations, Ava regularly integrated multiple and diverse perspectives into her instruction. I observed Ava implement this practice and integrate it into classroom literature. In my first observation, Ava read *Wangari's Trees of Peace*, about a young girl growing up in Kenya whose village was surrounded by trees. However, when she returns home years later, she is shocked to see whole forests were cut down. Wangari inspires the people in her village to plant seedlings and motivates other villages to plant forests.

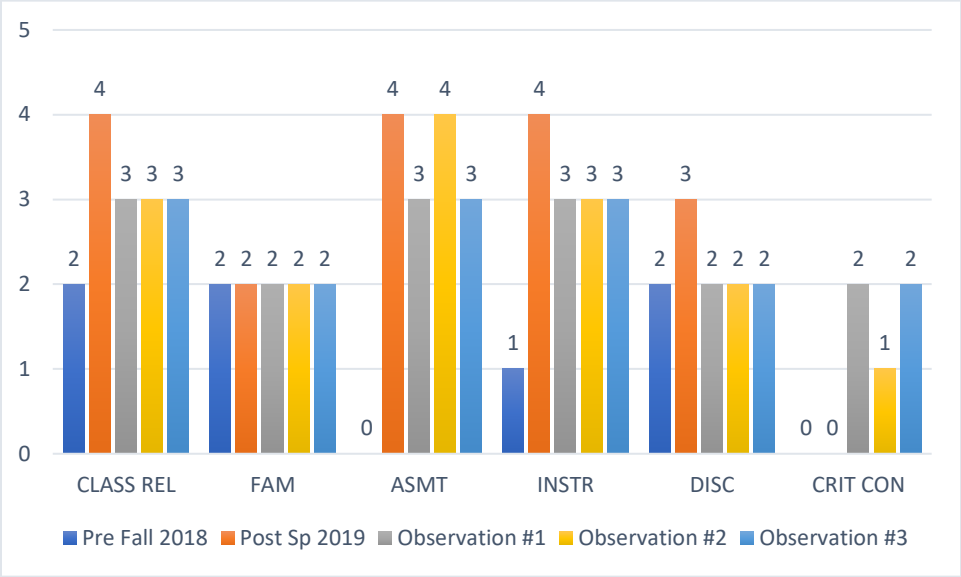
Similarly, in Ava's third observation, she read the book *Oskar and the Eight Blessings* from the perspective of a young Jewish boy who immigrated to New York City from Nazi Germany. He receives small acts of kindness from strangers. During this lesson, Ava stops and asks students questions about perspectives and character traits, and this would be an example of CRP from the CRIOP. Although Ava did utilize classroom literature to include diverse perspectives, there were several Critical Consciousness indicators she did not implement. Therefore, as seen in Figure 2, she received lower ratings in this element. For example, students did not explore contemporary issues important to the classroom, school, and community. In addition, there was limited implementation of the second Critical Consciousness indicator, incorporating opportunities for students to confront negative stereotypes and biases.

Sophia's CRP Implementation. As seen in Figure 1, Sophia showed substantial growth in implementing CRP as measured by the CRIOP during her participation in the project. She started the project with a pre-score of 7 and ended with a post-score of 17.

These 10 points in growth are the highest of any participant in this study. During the three observations for the current study, she had a total CRIOP score of 15 for each observation. Sophia sustained implementation of the CRIOP based on her current study's scores which were 8 points higher than her pre-score of 7. Figure 3 illustrates Sophia's individual CRIOP element scores, which provide additional evidence for sustained practices.

Figure 3

Sophia's Individual CRIOP Element Scores Across Time



As Figure 3 shows, Sophia ended the project with post scores of 4 in the elements of Classroom Relationships, Assessment, and Instruction. For the current study, she either continued to have the highest rating of a four or scored a 3 in the three observations for all three of those elements. Interestingly, the elements of Classroom Relationships, Assessment, and Instruction were also the elements Sophia grew the most in during her participation in the project.

For the Family Collaboration element, Figure 3 shows that Sophia began the project with a pre-score of 2 and ended with a post-score of 2. The subsequent observations also had a rating of 2. While Sophia did not grow in this element during her participation in the project, she has sustained her level of implementation following the project. Similarly, with the Discourse element, Sophia grew by 1 point during the project but following the project but has gone back to her pre-project score of 2. An intriguing piece of data from Sophia's CRIOP scores comes from the element of Critical Consciousness. During her participation in the project, Sophia was rated a 0 during her pre- and post-observation scores. However, during the current study, Figure 3 indicates that Sophia scored at least a point or two higher than her post-project observation score. Therefore, Sophia was able to implement the Critical Consciousness element in her class more easily in the years following the project than during her participation. The following section will present examples and evidence supporting Sophia's implementation of the Critical Consciousness element.

Field Notes from Sophia's Observations. Sophia has consistently implemented the Classroom Relationships indicators since participating in the project. As indicated in Figure 3, Sophia was rated one point higher in this study than when she began the project. Implementation of the Classroom Relationships element was observed through respectful classroom interactions and respect towards diverse populations. In Sophia's culturally diverse classroom, she had many opportunities to integrate students' language and cultural knowledge into the classroom. In my first observation, I observed a group of students who worked together on a social studies activity. This small group of students spoke Spanish and assisted each other with translating the assignment into English. In

this instance, students viewed one another as resources and used their first language on assignments with the support and respect of the teacher. The students were comfortable speaking Spanish and had been encouraged by the teacher. Sophia's positive rapport with her students was evident in every observation during this study. She continuously used positive reinforcement with students while holding them to high expectations. For example, during my second observation, students completed a graphic organizer about the American Revolution. Before the students began, the goals for this activity were shared, and each student was expected to achieve them.

As seen in Figure 3, Sophia has consistently earned a rating of 2 since she began the project in the Family Collaboration element. While she has implemented some CRP examples of Family Collaboration, such as creating partnerships with families and reaching out to them positively, there are some areas of growth for this element as well. Throughout the interviews for this study, Sophia emphasized that she learned from the project to ask more questions to families about their cultural knowledge and funds of knowledge. She does this during parent-teacher conferences and questionnaires she sends out at the beginning of the school year. However, there is little evidence of Sophia using this knowledge gained from families in her classroom instruction. While Sophia admits that she needs to grow in the Family Collaboration element, she has had a few parents participate in classroom activities. In our first interview, Sophia described a family that came and did landscaping in the school garden and taught students about their career skills. Although families have had few opportunities to be involved in Sophia's classroom, multiple school-wide events have engaged many families in literacy skills and movie nights.

As seen in Figure 3, Sophia continued implementing culturally responsive Assessment practices at high levels compared to her pre-PD score of 0. Through the Assessment element, Sophia was able to use formative assessments to assess student learning frequently and allow students to demonstrate their learning in various ways. Sophia utilized many formative assessment measures throughout the three observations for this study. Students were often asked to discuss a concept with a partner or completed formative assessments that allowed Sophia to understand each student's learning during a lesson. In the second observation, students completed a formative assessment on the Boston Massacre that was discussed during class that day. Students were writing and providing details from the text to support their understanding of the Boston Massacre. Once students completed this task individually, they turned their paper into Sophia, who asked each student to "tell me about the Boston Massacre." This allowed students to voice their learning about this concept and provided Sophia an insight into students' understanding of this concept. She could then judge if the instruction needed to be modified or retaught if students' understanding was unclear. An example of students demonstrating their learning in various ways was observed during the first observation. The students were instructed to complete their imagined narratives they had drafted the previous day. The learning outcome for students was to create an imagined narrative that demonstrated their understanding of literary concepts. Students were given choices of how they wanted to create their narratives. I observed some students handwriting narratives, typing their narratives, and voice recording narratives. Most of the students that chose to voice record their narratives were ELs. This choice allowed students to

demonstrate their understanding of literacy concepts depending on their English proficiency.

Similarly, to Classroom Relationships and Assessment, Sophia sustained using culturally responsive Instructional practices, as seen in Figure 3. During my observations in Sophia's class, I saw countless examples of instructional techniques that scaffolded student learning and focused on developing students' academic language. Something that stood out immediately during my first observation was using visuals on every anchor chart within the classroom. Some of these visuals were used for dissecting complex definitions. For example, the definition for the central idea was referenced in every observation, and the definition on the chart had a drawing for almost half of the words in the sentence. This was a technique Sophia used to explicitly teach academic language and support students in understanding a complex definition. Another example of visuals used to support students learning of academic language was during my second observation when students were working in reading centers. Sophia used a graphic that had the terms who, what, when, where, why, and how with a definition and visual for each term. This graphic was used in a small group of students with lower-level English proficiency. The students used this graphic to understand what a question was asking and also to support them in answering the question. Sophia referenced sentence stems found on the walls like "I know this because _____" and a connector word anchor chart. Throughout her instruction and classroom were examples of scaffolds and supports that modeled and explained academic language and content knowledge.

As figure 3 indicates, Sophia returned to her pre-PD score of a 2 in Discourse for each of this study's observations. Whenever opportunities were presented for Discourse,

students were encouraged to use their home languages, and some structures were used to promote academic conversation. In my three observations, students used their home languages in small groups. For example, in the first observation, a group of students spoke Spanish to understand and complete a social studies task. Later, the class had a whole group discussion about Jamestown, where Sophia used prompts that elicited extended conversations and dialogue. However, this was the only observation where Sophia used robust questioning techniques to elicit extended conversations amongst students while providing structures to promote student engagement. Culturally responsive Discourse practices were observed to be occasionally implemented during this study.

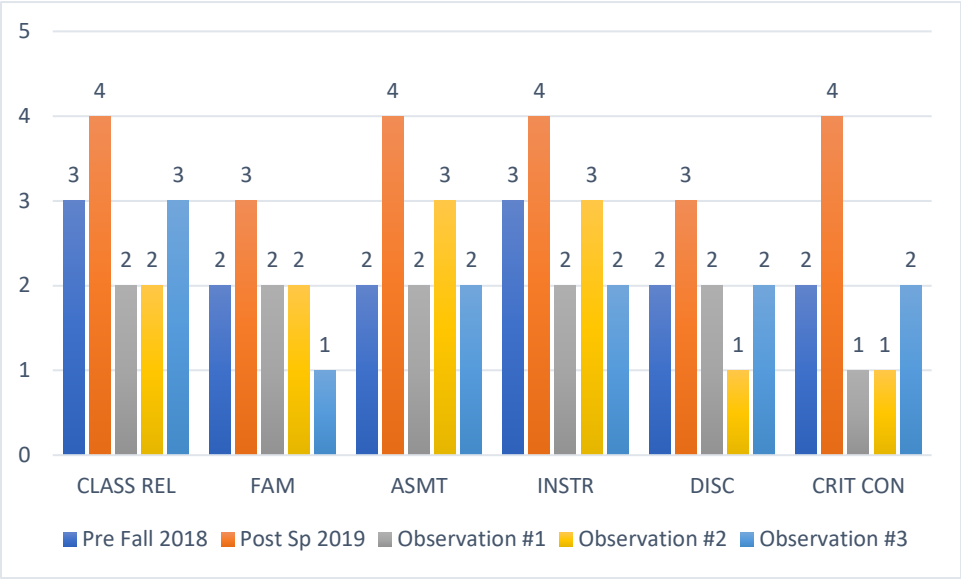
As mentioned, Figure 3 indicates that Sophia implemented Critically Conscious practices at a higher level than during her pre- and post-PD rating. Although these practices were only observed occasionally or rarely during this study, she has increased her implementation of the Critical Consciousness element since participating in the project. Sophia's social studies class presented opportunities for students to examine diverse perspectives, which is an indicator of Critical Consciousness. During my first and third observations in Sophia's classroom, she presented students' social studies content in a way that allowed the students to explore alternative viewpoints. In the first observation, students discussed the perspectives of John Smith and the settlers versus the Native Americans. Students practiced literacy concepts of central idea, keywords, and key details to describe each perspective. In my third observation, students read an article that explored the points of view of the loyalists versus the patriots. Students were given opportunities to describe each perspective and provide evidence supporting their views. While the expression of diverse perspectives is an indicator of Critical Consciousness,

there was little to no evidence of students' learning about issues important to the classroom, school, and community or learning experiences that confront negative stereotypes and biases are also indicators of Critical Consciousness.

Cindy's CRP Implementation. Cindy's case is unique as compared to Ava and Sophia. As seen in Figure 1, she began the project in Fall 2018 with an overall CRIOP score of 14 and grew eight points throughout her time in the project. With a project post score of 22, she was only two points away from the highest possible total CRIOP rating. However, during this study's three observations, Cindy had total CRIOP scores lower than her pre-project score. Therefore, Cindy experienced difficulty in sustaining CRP. Based on her individual CRIOP scores in Figure 4, Cindy grew in every CRIOP element during her time in the project. In some elements, like Assessment and Critical Consciousness, she doubled her pre-project score by the post-observation. However, for this study's three observations, she decreased in every CRIOP element from her post-project observation scores, as seen in Figure 4. A small outlier can be seen in Cindy's Assessment scores which began at a two during her pre-project observation and remained the same or increased in the post-project observation and this study's observations.

Figure 4

Cindy's Individual CRIOP Element Scores Across Time



Field Notes from Cindy's Observations. As figure 4 indicates, Cindy decreased in implementing culturally responsive Classroom Relationships since her post-PD score. In each of the three observations in Cindy's classroom, I observed her use different interaction and management techniques with students. For example, in the second observation, she would use a more direct style with students and, at other times, would be indirect. Cindy seemed to understand that each student needed a unique approach to interactions and management. However, sometimes, the interactions with students were inconsistent with positive Classroom Relationship indicators. While Cindy may have scored lower in these three observations for this element than her post-project score, a strong Classroom Relationships example consistent with the project's practices was her classroom library. In my first observation, I explored her classroom library and saw multicultural literature that would reflect diverse groups and perspectives. I observed Cindy using one of these texts with the whole class during my first observation.

Cindy's Family Collaboration scores for this study show that she has returned to her pre-PD score or decreased, as seen in Figure 4. As mentioned in Cindy's case demographic, Cindy has had different experiences in the two schools where she has taught since participating in the project. During this study, Cindy was in her first year at a new school and appeared to be making a solid effort to establish relationships with her students' families. While Cindy said she has not succeeded in including families in classroom-related activities in this new school, she attempted to keep communication lines open between her and the families. She reported using communication tools that translate into family's home languages, made positive contacts home, and was regularly involved in school-wide family events. For example, in our first interview, Cindy described a back-to-school night her current school hosted and that families were positively engaged in the event.

During Cindy's participation in the project, she grew to the highest level of implementation in Assessment, as Figure 4 indicates. For the current study, she was either at or above her pre-PD score for this element. Assessment practices in Cindy's classroom came primarily from a prescribed curriculum; however, she presented students with formative assessment opportunities and self-assessment activities. At Cindy's school during the study, she was required to use specific curriculum programs and assessments to track student learning. Therefore, she perceived a narrow range of options for students to demonstrate their learning. Even though Cindy had lower Assessment ratings in this study than her post-project rating, Cindy took advantage of many opportunities during math centers to formatively assess students. In each of the three observations, when students were at the teacher's table during math centers, Cindy worked one-on-one with

each student to assess their understanding of math expressions. She used this information to determine if the lesson needed to be retaught to students or if they were ready to move forward with new content. During my second observation, students used a self-assessment tool in their math whole group time. Students independently completed a few new math problems, then assessed their work with others in a small group setting. This allowed students to evaluate their learning while assisting other students with new content.

Similar to Assessment, Cindy was rated at or below her pre-PD score for Instruction, as shown in Figure 4. Cindy's focus when implementing the Instruction element was on scaffolding student learning while supporting them in developing academic language. Cindy scaffolded students' academic language development throughout the three observations. She accomplished this by providing sentence stems in math and reading activities, modeling a math problem while verbally sharing her thinking in solving the problem, and building on students' prior knowledge. In the third observation, students were learning about decimals, and Cindy compared this to money to help students relate the content to their real lives. Cindy also used appropriate structures in learning content, like providing visuals with vocabulary and graphic organizers. Although these practices are examples of culturally responsive instructional practices as measured by the CRIOP, there was a lack of evidence for several of the Instruction indicators. Specifically, there was no evidence in any observation where instruction was contextualized in students' lives, experiences, and individual abilities.

Cindy's Discourse scores for this study decreased by a one to two points since her post-PD score, as Figure 4 indicates. During Cindy's observations for this study,

culturally responsive Discourse practices were observed occasionally or rarely. One practice Cindy utilized to support Discourse was related to her classroom setup. Students sat in groups and had graphics in the middle of their tables that labeled each student with a letter so that all the A's can discuss, and the B's can be grouped. During my third observation, students were encouraged to discuss with their shoulder partners a specific math question. Another discourse example occurred during the first observation when students did a mixed pair share activity where they walked around the classroom and spoke with a different student each turn. During each turn, Cindy had them answer a different question, such as "explain to your partner what the theme of a story is" and "tell your partner what the central idea means." While these short Discourse activities were an example of implementation, I observed several non-examples for the Discourse element. Most of the instruction was teacher controlled, and not all students had the opportunity to participate. Furthermore, even though there were a few bilingual students in Cindy's classrooms, there was no evidence of attempts to promote the use of students' home language in Discourse activities.

As indicated in Figure 4, Critical Consciousness was one of two elements in which Cindy grew the most during her participation in the project. However, Cindy decreased in her implementation of Critical Consciousness to her pre-PD score or lower. Cindy's primary source of evidence for implementing the Critical Consciousness element was her choice of literature. In each of the three observations, Cindy read a four-book series by Jason Reynolds aloud to students. The young adult novels started with *Ghost* (Reynolds, 2017), and during one observation, Cindy was reading the second in the series, *Patina* (Reynolds, 2018). Each novel follows the perspective of a different

teenager on a track team. The kids in the book are from different backgrounds and must push through their experiences to accomplish personal growth. Later in this chapter, Cindy explains her reasoning for choosing this book series and other critically conscious texts she has used since participating in the project.

Summary. In summary, two of the three teachers sustained the implementation of CRP three years after participating in the PD project. Ava and Sophia were observed consistently implementing examples of CRP for most of the CRIOP elements. One teacher, Cindy, has not sustained implementation as measured by her lower CRIOP ratings for this study compared to her time in the project.

However, several aspects of the CRIOP were being implemented across teachers. All three teachers implemented instructional strategies taught in the project, like the Picture Word Inductive Method, sentence stem supports in writing and discourse, and attention to building background knowledge of academic vocabulary. All three teachers also chose to use either multicultural texts or literature that examined multiple perspectives. Lastly, all three teachers frequently used formative assessment to evaluate students' learning throughout lessons. The following section will provide more insight into teachers' perceptions of their sustained CRP since participating in the project.

Teachers' Perceptions of Sustained CRP

The prior section described teachers' implementation of CRP based primarily on observations of classroom practices. However, teachers also shared their perspectives on the ways in which they had sustained CRP since their participation in the PD. Drawn primarily from teacher interviews, this section presents teachers' perspectives about their implementation of CRP. Findings can be characterized under three key themes related to

sustained implementation of CRP: (a) Change in mindset about families, (b) Multicultural literature, and (c) Instructional strategies. While the evidence showed some disparity across the three teachers, there were similarities regarding CRP they were able to sustain, creating these three themes.

Change in Mindset About Families

All three teachers shared their experiences about changing their mindset regarding how they approach or include families in their classrooms. During the analysis, a change in mindset about families was coded 15 times. Teachers approached conversations with families with a new intent to learn about their cultural knowledge. Also, two of the three teachers included parents/caregivers in classroom instruction where families could share their funds of knowledge.

When Sophia was asked about anything she has done differently around parent conversations since she had participated in the project, she said:

> I think asking more. Like asking more information of the parents, not just keeping it totally focused on the kid. Like what do you like? What do you do? Or asking them what do you like to do at home or things like that? So, try to make like an actual, authentic connection with them that's not just kid focused.

Likewise, Cindy mentioned twice that "[the project] just reinforces that those family connections are very important." When I asked Cindy in her first interview what parent conversations have been like since she participated in the project, she said:

> I feel like when you have an open conversation with parents, and you keep that door open, and you even just send a message, 'hey, so and so did this today, and it

> was wonderful.' And you keep that communication going, I've learned that parents are much more receptive to you.

By creating a positive relationship with families, Cindy has learned that families are supportive and more inclined to participate in classroom activities. Cindy provided several pieces of evidence where she engaged families more after she participated in the project, including creating a community outreach program where teachers went into neighborhoods and gave out free books to families, invited families into the classroom to share their expertise, like a mom cooking tamales with the whole class, and making positive contacts home to learn more about families' funds of knowledge.

Previously, I discussed several examples of how Ava has sustained implementation of Family Collaboration. However, an interesting part of her second interview stuck out to me. When asked what CRIOP elements she felt she continued to use since participating in the project, she said:

> Family collaboration is a huge one. I feel like I still, I feel like it's probably one of the more important ones in my opinion, to keep all the rest of it kind of flowing.

I then asked her to talk more about what she meant by Family Collaboration kept all the rest of it flowing. She said:

> So, I think that you know your critical consciousness, your assessment, I feel like a lot of pieces of the CRIOP, you know when you think about critical consciousness and you think about having those hard conversations and you think well, what, where did the families come from? What topics may might we need to cover in our classroom? What topics might be controversial for, you know, coming from different families? And I feel like being aware of all those pieces

> allows for you to have those conversations realizing that the parents, if the parents realize that you are on their side and you have their kids best interest at heart and you're trying to make their kids be just a good human beings in general outside of academics, I think help make all of the success and the assessments and the instruction, all of that kind of like flows together.

This growth in mindset by all three teachers by seeing families as assets rather than hindrances are critical to the success they have had with sustained CRP.

Multicultural Classroom Literature

All three teachers talked about the importance of multicultural literature in enabling them to create classrooms that value diversity. Teachers were more intentional in including multicultural literature in their classroom libraries, but also how they were more conscious of their read-aloud book choices. During analysis, multicultural and bilingual content in teachers' classroom libraries and implemented in instruction was coded 12 times.

Ava reported using diverse texts in her class the most out of the three teachers. In Ava's first interview, she emphasized this point:

> I feel like just through CLDC Project, you know, you were more aware of the fact that you need to be including not just those [culturally diverse books] in your library, but like reading them as books that your whole group class is reading.

She gave an example of a book she read to her first-grade class the prior school year with a little African American girl character. Ava had two girls who were African American that year in her class. Once the students read the book, they would say, "Oh my gosh, her

hair looks like Malia's! So cool!" Ava reported that the students liked to "be seen, and it felt good to feel like you are special and a part of the world."

Similarly, Sophia reported twice that she chooses multicultural texts reflecting the large population of Hispanic students in her class. She says the stories she chooses are “not always like the generic White kid who's having the tough time. There's a lot of different you know, ethnicities, cultures that they can we [the class] can connect to". These are a few examples of teachers using multicultural literature to engender respect and appreciation for diverse groups.

Cindy talked about multicultural literature differently from Ava and Sophia. There were six times that Cindy reported using classroom texts to have students reflect on diverse perspectives and seek an appreciation for diverse groups. Cindy says she continued implementing multicultural texts in her classroom because of what she learned in the project:

> I think for me it [the project] made culturally responsive teaching okay. And I say that because there are a lot of people who like kind of step back from that. Like “oh, this might step on toes if I read this book or if I teach social studies in this way, this might make some kids uncomfortable”, and I don't want to do that. But [the project] was kind of eye opening in that you kind of grow from discomfort and that these kids [diverse groups] need to be represented just like the other kids are. And so, if you bring in that culturally responsive book, that's okay.

Cindy continued to report that her sustained implementation of multicultural books was to represent the diverse students in her class and to teach students about respecting diverse populations. One example of this was mentioned in the prior section about

Cindy's classroom observations. Another example Cindy provided in her third interview was when her class read *The Day the Crayons Quit* (Daywalt, 2103) aloud. Students completed an activity on examining multiple perspectives within the text:

> We dissected each crayon in their perspective and their feelings, and by the end they [students] were really doing good, and they could even, they even knew the sentence starter. 'The perspective of the gray crayon is blank, and my text evidence for that is…'

Cindy reported that this activity allowed students to further examine their perspectives and others within the classroom, which helped them strengthen their classroom relationships.

Instructional Strategies

The indicators of the Instruction element most frequently mentioned by teachers in interviews or observed in practice were teachers focusing on academic language and using techniques to scaffold student learning. During my observations and teacher interviews, four instructional activities were mentioned several times, the Picture Word Inductive Method (PWIM), Generative Vocabulary Matrix (GVM), providing sentence stem support during discourse and writing activities, and using visuals when building background knowledge with vocabulary.

Picture Word Inductive Method (PWIM). The PWIM uses pictures to introduce new concepts and engages students in identifying essential vocabulary from the picture to build background knowledge (Calhoun, 1999). Students then classify the words based on common characteristics. Following a group discussion, students generate sentences using the vocabulary identified in the picture. All three teachers mentioned

using the PWIM strategy since their participation in the project, and it was coded 34 times in my analysis.

Sophia used the PWIM strategy to develop students' academic language. She mentions how this strategy has benefited all her students, not just her ELs:

> So, like vocabulary or using like the picture word inductive method to generate more vocabulary and having you know them being able to write and use those words. It's not just beneficial for EL kids, which it does help them greatly, but it's also helping my kids who just have low language period. It's not like a one size fits just them, it is really fitting them all.

Similarly, Ava used PWIM to build students' vocabulary and background knowledge during a critical consciousness science unit. Ava's third-grade students were examining how plastic in the ocean is impacting the ecosystems. The PWIM was used to scaffold students writing an opinion piece on plastics in the ocean and provide evidence that students could use in their writing:

> They kind of wrote sentences about what they saw in all these pictures and then we kind of grouped those sentences together to come up with like our three reasons as to why we should use less plastic.

All three teachers have used this activity in various subjects and grade levels to scaffold students learning and develop academic language.

Generative Vocabulary Matrix (GVM). The GVM strategy displays vocabulary, concepts, and questions that students sort and manipulate throughout a unit (Larson, 2014). Students can build language and learn concepts through discourse by

adding and manipulating vocabulary to the GVM throughout a unit. Two of the three teachers mentioned implementing a GVM since participating in the project.

Cindy reflected on her time in the project and how she remembers intentionally, including vocabulary, building background knowledge, and engaging your ELs in lessons. When Cindy was asked what instructional strategies she has continued to use from the project, she said she uses the GVM to be more intentional with vocabulary and credits that to the project:

> I think that it [the project] like really instills that the more you empower them [ELs], the better they're going to learn and respond to you.

Likewise, Sophia mentioned how she uses GVMs to increase the amount of discourse in her classroom:

> I think those [GVMs] are beneficial just to increase the way that my kids talk about content in my classroom. So, I tend to gravitate towards those [GVMs] with my instruction.

Interestingly, Sophia also mentioned that GVMs were a simple strategy to implement during virtual learning.

> So, like in digital world that [GVM] worked better because I could already kind of pre teach the vocabulary, like I could already have the words picked and they just had to make the connections. So, we did a lot of GVM stuff digitally.

While two of the three teachers said they have been implementing GVMs since they participated in the project, there is no observational evidence to support this perception. However, all three teachers reported that the PWIM and GVMs were the two instructional strategies they had implemented most since participating in the project.

These instructional strategies focused on developing academic language while scaffolding students' learning.

Sentence Stems. Another instructional support teachers mentioned using since their participation in the project was providing sentence stems in a variety of contexts as well as using visuals to assist students in learning content. All three teachers were either observed using sentence stems or provided evidence in their interview of using them in their instruction. In my analysis, there were eight codes related to sentence stem implementation. The project provided sentence frames, sentence starters, and paragraph frames to support students' academic language. This scaffolds students' language development and is a simple strategy to adapt to any subject or grade level. These three teachers taught from first through fifth grade since their participation in the project and have all implemented this strategy.

During my observations in Ava's first-grade classroom, she used sentence stems in various contexts. Students' first activity of the day consisted of morning meetings where they talked about the calendar and weather together while incorporating math skills. For example, in my first observation, students graphed the weather of the day, which was sunny. Students had been filling in a bar graph for each day and the type of weather so far that month. Ava asked students, "who can create a question about our weather graph?" A student asks, "how many more cloudy days are there than sunny days?" another student answers. Later in our interview, Ava mentions that they have been working on using math stems to ask questions like "how many more _____ than ____." Also, during this observation, I noticed posters with sample questions and stems to ask questions posted on the walls like "In my head I saw___, I can use ____ to help me solve

the problem because ____." Later in this observation, the class read *Wangari's Trees of Peace* (Winter, 2008) and later were to write about a character trait of Wangari at their writing center. Ava provided the sentence stem, "Wangari is _____. I think this because _____". Ava provided further evidence of using sentence stems in instruction during her interviews.

As mentioned, sentence stems can support students' academic language in various contexts. Sophia and Cindy used sentence stems to scaffold discourse in their fifth-grade classrooms. Sophia specifically mentioned using a strategy provided by the project called accountable talk stems. This a strategy that provides students an opportunity to discuss content knowledge on a higher level. Some examples of accountable talk stems are "I think ____ because _____," "I agree with _____ because _____," "I respectfully disagree with _____ because _____," "I understood that you said _____," and "On page, ____ it says _____, so I think _____." These stems allow students to agree and disagree respectfully while providing evidence for their opinions. Sophia recalled using these stems often when "teaching them [students] how to discuss or, we're getting ready to talk about two sides of something." Sophia used these stems in her social studies content and reading classes. Likewise, Cindy discussed how her students used sentence stems during Socratic Circles to learn how to debate with one another. She attributed this implementation to the project:

> As an open minded individual, you want your students to be able to have conversations without argument... Like, you want them to be able to make those connections and have those conversations. But as a new teacher or as a teacher it

> kind of makes you uncomfortable, you don't know how to do that. And project place makes that okay for you.

The findings discussed in this section provide evidence for continued implementation of the Instruction element. Teachers used sentence stems to scaffold and support student's academic language development. This strategy was used in a variety of contexts and subject areas by all three teachers.

Visuals. Another instructional strategy taught in the project is to provide visual support to learners when building vocabulary knowledge. This was observed in all three teachers' classrooms, and evidence was also provided through interviews. My analysis showed that teachers mentioned using visuals with vocabulary seven times. Cindy emphasized the importance of using visuals when building vocabulary knowledge with students because students' prior knowledge varies:

> I think that with these guys, just because of where they're [students] at academically and socially, CLDC Project always talked about how you had to do vocabulary and that you had to be very intentional with what they were seeing and how they were getting it and that they needed pictures behind that.

Cindy also recalled several times when she would stop a lesson when students did not understand vocabulary to find an image and help them make that connection to the term.

As I discussed previously, Sophia served the most ELs of this study's three teachers. During my observations in Sophia's classroom, it was evident that she used visuals as much as possible with vocabulary terms in her social studies and writing classes. For example, there was an anchor chart that the class was using to write their imagined narrative. At the top of the chart, under imagined, it says fiction with the

drawing of a person and a thought bubble above their head to make it seem as if the person came up with the story. Also on this chart were literacy concepts like characters and setting listed with a drawing next to them to provide visual support to her ELs. Whenever Sophia's social studies classes talked about colonization, there was a drawing of a boat next to it. These are only a few examples of the visual supports Sophia used in her class to support students' language development.

Similarly, I observed Ava using vocabulary cards with images before reading a book and some vocabulary terms she pulled out beforehand. In Ava's third observation, her first-grade class was reading the book *Oskar and the Eight Blessings* (Simon, 2015), and some of the vocabulary cards they discussed together were "stale and morsel." This allowed students to build background knowledge on these terms before they were read in the story. Students would often point out the vocabulary during the story they had discussed previously, which allowed students to have knowledge of the vocabulary to comprehend the story.

Summary

This section reviewed teachers' perceptions of their sustained implementation of CRP. This data was collected during teacher interviews, subsequently following each classroom observation. The analysis of this data resulted in three key themes related to teachers' perceptions of their sustained implementation: Change of mindset about families, multicultural literature, and instructional strategies. This section presented teachers' descriptions and examples of how they have continued using these three CRIOP elements since participating in the project.

Teachers' perceptions of their sustained implementation of the CRIOP elements included strategies and practices taught during the project. All three teachers reported continued use of the PWIM and GVMs and shared implementation examples. The teachers also identified implementing forms of scaffolding taught to them during the project, such as providing sentence stems and visuals with vocabulary.

Factors and Supports Related to Sustained Implementation

The second research question focuses on factors and supports related to teachers' sustained implementation. Data for this research question was collected through teacher interviews, which included questions that specifically asked participants what supports they have experienced since or during their participation that they believe was related to their sustained implementation. This section is divided into four major themes related to factors and supports teachers experienced: specific PD components, opportunities to share their own CRP expertise, supportive school context, and impacts on students.

PD Components

Throughout teachers' interviews, several aspects of the PD project were credited to teachers continuing to implement the CRIOP: (1) coaching, (2) teacher presentations, and (3) collaboration with colleagues. During analysis, PD components as a factor related to teachers sustained implementation was coded 60 times. All three teachers identified these components of the PD as essential supports for their implementation. This section is divided into three subsections in which data are presented for each of these themes.

Coaching. All three teachers attributed their implementation during the project and in the years since to the support they received from their coach. Teachers reported on the positive partnership established with their coach, modeling CRP lessons, and

planning CRP units together. When the teachers were asked what aspects of the project supported them in continuing to use CRIOP practices, they all spoke of their coach. Within the project, each teacher was assigned an instructional coach to support them in implementing the project's practices into their classroom context. Coaches met with teachers approximately eight times throughout their participation in the project and provided support in many ways. Coaches could observe teachers' instruction for implementing the CRIOP elements, model/co-teach lessons and strategies, and provide resources and planning for implementing the CRIOP. The coach assumed a non-judgmental, non-evaluative role and endeavored to build a partnership with the teacher. Teachers reported that their coach motivated and helped them in their implementation. Specifically, in Ava's first interview, she compared a visit from her coach to how she felt when one of her administrators observed her classroom. Ava was more comfortable with her coach and never felt "like, 'oh, he's going to tell me I'm a bad teacher or he's going to be like that was wrong. I don't know why you did it this way'. He was truly always just trying to find ways to encourage and support." All three teachers positively talked about their coaches. Throughout my coding analysis, all three teachers mentioned their coach as a factor in their sustained implementation 12 times in their interviews.

All three teachers gave examples of lessons that their coach modeled during their time in the project. For example, in Sophia's first interview, she mentioned that her coach modeled the Picture Word Inductive Method (PWIM) and said that since then, that strategy has been:

> Very successful for me in a lot of different situations. Because she [coach] modeled one. And so being able to see it, it was like, wait a second, I'm not just

> hearing about it and feeling overwhelmed, I'm seeing it and seeing what the kids can do with it. So, I think that was very beneficial.

Sophia credited her coach and the modeling of this lesson as one of the reasons she is still implementing PWIMs in her classroom instruction. Sophia went on further when I asked if this type of support from her coach was essential to her continuing to implement CRP and she said “absolutely, 100%”.

Cindy had a similar experience with her coach, who modeled a lesson she continues implementing in her fifth-grade classroom. During Cindy's first interview, when asked how she still implements Critical Consciousness, she mentioned a social studies lesson in which her coach modeled an activity with her students. Cindy's coach challenged the students to argue the question, "was it Western Expansion or Eastern Invasion?" Cindy said that although she has adapted the strategy to fit the students she currently had throughout the years, "I have always gone back to that. And just asking them those questions so that they see both sides, but they can pick one. We all have an opinion, what is yours?" Cindy has since gone back and used these Critical Consciousness questions throughout her subject because of the support she received from her coach in implementing them.

Similarly, Ava attributed her success in implementing Critical Consciousness to her coach and the time he dedicated to planning a unit with her. As you can see in Figure 3, Ava had the highest ratings in Critical Consciousness out of the three teachers for this study. When Ava was asked in her second interview which CRIOP elements she has continued to use since the project, she first mentioned Critical Consciousness:

> Critical consciousness I feel like I've done a ton with, but I feel like that was probably one of my stronger pieces of it. Just because I feel like that's what [coach's name] and I worked the most on for me and my growth, just because it's like it's one that's kind of harder to grasp if you don't, I mean, I feel like I would not be as strong with it now if I hadn't had help planning a unit.

This unit was mentioned in the previous research question within the Instruction element. Ava's third-grade students completed a Critical Consciousness unit on plastics in the ocean, which she continues to implement and adapt to her first-grade classroom.

Likewise, Sophia shared a similar experience with her coach planning a Critical Consciousness unit. Sophia's coach shared Ava's plastics in the ocean unit and planned it with Sophia as well. However, Sophia noted that she needed time to process and think about how she would implement Critical Consciousness into her classroom. This was evident in Sophia's Critical Consciousness scores for this study, represented in Figure 3. Sophia was rated the lowest CRIOP score possible for Critical Consciousness during her participation in the CLDC project. However, for this study, she increased by a point or two from her post-PD score. Sophia mentioned that her coach helped her implement what was taught at the CLDC project PDs:

> Also, kind of using whatever we were taught in the CLDC Project trainings and then when we [coach and Sophia] were doing our planning be like, 'hey, let's try this'. So, we had talked about the Critical Consciousness with like the plastic straws, which was what Ava's project. I didn't use it that first year during the CLDC Project stuff. But I used it the next year. So, like, we did that whole informational writing, but I had that strategy already in my pocket to pull back up

> and use. So, like, I wasn't trying to reinvent the wheel. It [plastics in the ocean] was still a problem. When we were still able to talk about it in a real-world connection, but I wasn't trying to force it.

Sophia perceived her increased Critical Consciousness implementation as the time she had to reflect on this CRIOP element and implement it when it was not forced into her curriculum. By having the resources already provided to her by the project and her coach, she was able to implement a Critical Consciousness unit on her own after participating. The significant influence these teachers' coaches had on teachers' implementation has played a role in all three teachers continuing to implement the CRIOP elements into their instruction.

Teacher Presentations. Another aspect of the project teachers reported on was other teachers presenting their experiences implementing a CRIOP element into their classroom. PD facilitators invited past teacher participants or advanced leaders to present a CRP lesson they had implemented and share their experiences with teacher participants. The presentations would provide details on lesson planning, implementation, and reflections following the activity. All three teachers mentioned the benefit of these experiences and credited these presentations as one reason they continued to use CRIOP activities. In Sophia's first interview, she appreciated how the presentations were:

> Real teachers who had real classrooms who had tried real stuff, you know, and then they were able to say, like, I tried that one, but it didn't work. But I tried this one, and this is how it works.

Ava shared a similar reflection in her first interview about how these teacher presentations allowed her to see how the project's practices were adapted to different grade levels:

> I feel like they [teachers] got to get up and start sharing and showcasing things what they had done in their classroom that we had learned about but like how they had implemented it. And maybe they implemented it in a way that made more sense for the first graders or made more sense for the fifth graders… And so, I thought that was helpful too, to see pictures of the teachers, and what the kids were doing and letting me see evidence of what worked with your kids and what they actually did, and they let you know anything that they used to help them in they're planning for the lesson.

Cindy further discussed her experiences with other teacher PDs and their strategy of getting teachers to implement their practices compared to this project's implementation supports. When Cindy was asked in her second interview what has helped her sustain her implementation of the CRIOP, she said,

> There was always an example, it was never, ‘well, here's this idea and you should do it’, like with project place there was always, this is how you do it. This is us modeling it for you. This is someone who had success with it and that was always really helpful.

This form of support from other in-service teachers was highly influential in these three teachers' sustained implementation. In Sophia's third interview, she was asked what aspects of the PD most supported her in continuing to become a more culturally responsive teacher. She said, "Probably hearing what other teachers had done. So, having

access to already tried out. That's a big one." The opportunity to hear, see, and learn from other in-service teachers was mentioned by all three teachers as an essential support in their continued implementation of the CRIOP. While learning from these teacher presentations was highly beneficial to these three teachers, they also mentioned that collaborating and learning from the current cohort of teachers was also valuable.

Teacher Collaboration. One last aspect of the project teachers reported as a support in their implementation was the time they were allowed to collaborate at the PDs with other teachers in the cohort. During the PD sessions, teachers were often asked to bring a lesson plan or a text they planned to use in the near future and then given workshop time at the PD to collaborate with teachers and coaches to implement CRIOP elements into their future lesson plans. All three teachers reported this workshop and collaboration time as a support in their sustained implementation. This concept of the PD was brought about in several different ways, from sharing at your table with teachers' school teams, breaking groups up by similar grade levels and collaborating, whole group sharing activities like a gallery walk, or teacher leaders presenting CRP lessons at stations.

One activity Ava mentioned explicitly in her first interview was a “fishbowl” activity where a small group of teachers was in the middle of a larger circle of the rest of the teachers. The center circle of teachers was prompted to share their experiences on CRP topics like family visits or an instructional strategy. Ava reported that this activity specifically helped her continue to use CRIOP strategies:

> When we did the fishbowl thing and talking about you know our experiences and hearing from our, you know, colleagues’ experiences with certain things and you

> know, hearing successes with them, it was like, okay, well, I'm going to try that too. And again, I think just seeing like the benefits of it all makes you want to continue to do it.

All three teachers reported on the benefits of hearing from their cohort of teachers and learning from them. Ava mentioned in her second interview how she collaborated and listened to other teachers' experiences to adapt lessons for her teaching context. When asked what aspects of the PD were most helpful in implementing and continuing to use the CRIOP, she said:

> I think talking with other teachers and collaborating with them, seeing what worked, what did not work. You know what worked, like in Sophia's room with you know, where she has a room full of English language learners may look different than what's going to work in my room, but seeing what worked in her room, I can take that, scaffold to what my needs are, you know, where my kids are.

In her first interview, Sophia shared a similar experience about collaborating with other teachers and adapting lessons to her teaching context. Sophia responded to the question about what aspects of the PD were most helpful to her in implementing and sustaining the CRIOP, and she said:

> Bouncing ideas off people who were in the same space and like learning the same stuff. So, like being able to say, well, I don't know that that's going to work in my classroom because I have seven different languages, but it might work in your classroom because you only have Spanish.

When Cindy was asked the same question, she said an aspect of the project that helped her continue to implement the CRIOP was “the group work, and how we got a lot of time at our tables to explore what other people were doing in their classrooms. And so that was really different per classroom, and I found that very helpful”.

In Cindy's third interview, she reflected on her time as an advanced leader, the optional graduate certificate component, and shared her CRIOP experiences at a table station. Teachers rotated in small groups around stations, with advanced leaders presenting a lesson plan and conversing with teachers about their experiences. Cindy reflected on this experience. "That was very interesting in those conversations, when we would have to come up with posters and just hearing other people's ideas was very, almost humbling for me."She adds that although she was leading each of the small group sessions, she left those conversations with more great ideas to implement the CRIOP.

Sophia reported that participating as a school team benefited her implementation and continued use of the CRIOP. In her first interview, she mentioned that the "workshop in the moment" strategy was a valuable experience because her school team could collaborate and have that "constant conversation" about how they will implement the CRIOP. Sophia mentioned that since she completed the project, she has done vertical planning with the school team she participated with to incorporate CRIOP practices. She provided the following example when she was still teaching third grade:

> We would just do some like vertical planning, so like second and third would plan together. And the second-grade teachers were also in CLDC Project when I was also. So, if we need them to do this skill, well, let's try this strategy. And we didn't have to, like, explain it all. We already had an understanding.

Sophia provided context for this example by reporting that these strategies typically consisted of a Generative Vocabulary Matrix (GVM) or the Picture Word Inductive Method (PWIM).

For all three teachers, some aspects of the project supported them in continuing to use CRIOP practices after their participation. With the encouragement and dedication from their coaches, all three teachers have continued to use the strategies and lesson plans they implemented with their coaches. Hearing and learning from teacher presentations about their experiences in implementing CRP was a valuable experience in implementing the project's practices into their teaching context. Lastly, allowing teachers time to collaborate and workshop to create and adapt lesson plans to their students was highly influential in all three teachers' sustained CRP.

Another notable support from the PD that two of the three teachers mentioned was that the PD practices were simple to implement immediately and in multiple subject areas. Ava mentioned the resources provided by the PD and used these resources in multiple subject areas five times throughout her interviews. In her first interview, she said:

> I felt like it was one of those PD's where you, every time you would leave the PD, you're like, “Okay, there's like six things that I can go back and implement my classroom right now” that wouldn’t be stressful to have to figure out how to make it work. It’s not extra work on you… I think that was the most exciting thing for me was that I feel like all the things that I was able to take away, I was able to go back and implement automatically, easily, and in multiple areas of my classroom.

When I asked if she could provide an example, she described a writing strategy presented at the project. She reported on the "drive and excitement" the students had to write when Ava implemented the project's writing strategy. She used this strategy when her third-grade students completed writing pieces such as plastics in the ocean and the Civil Rights Movement.

Sophia shared a similar experience when she was discussing the number of resources she received at the beginning of the project, “I think it allowed us to see a lot of strategies and then I can pick and choose what I needed to try out and use while we were in the classroom." Sophia goes on to say that when she would try a strategy, she would "see if it works and what doesn't work and really through that I've been able to see like this was successful because I used it in this way, right away, so therefore I can continue to use it.”

The project contained several aspects that were helpful in teachers implementing CRP right away in their classrooms during their participation but also supported the teachers in sustaining these practices on their own. Teachers reported that the project's instructional coach was essential to implement and continue using CRP. Also, during their participation, all three teachers appreciated hearing about experiences from and planning with current in-service teachers on their implementation. Lastly, two of the three teachers found that the resources and simple-to-implement strategies were essential to their continued use of CRP.

Teacher as Expert

In addition to PD components that supported teachers’ sustained implementation of CRP, teachers reported seeing themselves as experts and sharing their CRP knowledge

with other teachers as a factor in their sustained implementation. Throughout my analysis, this form of support was coded 32 times. In their interviews, teachers described two opportunities in which they shared their CRP knowledge with other teachers. First, two teachers reported that they were asked to return to the project after participating and share a CRIOP lesson with the current cohort of teachers. Second, two of the three teachers shared that they have taught and collaborated with other teachers at their schools who were not participants in the project. All three teachers identified these opportunities to share their CRP knowledge as a factor related to their sustained implementation.

Presenting CRP Lessons at PD. In Ava's third interview, she was asked about supports related to her sustained implementation and reported that she had the opportunity to present a CRP lesson to the current cohort of teachers in the project:

> Being able to come back and present and share what I've done. Which I think almost keeps you on top of it too, because you want to be able to have new things to share if you do go back. You know you don't want them to see you doing just the same old, same old each year. So, I guess that in a way is to kind of to make you want to make sure you're thinking of other ways to implement things.

The PD facilitators will often ask past teacher participants to come back and share their experiences in implementing the CRIOP. During these presentations, teacher experts will discuss their lesson planning, experiences before and after the activity, and the current cohort of teachers will have opportunities to ask questions.

Cindy also noted that the opportunity to present at the PDs was a form of support in her sustained implementation. When asked if there were any other supports she wanted to mention, she said, "The only thing that I would add, and I don’t think I talked about it

earlier was how those opportunities to come and share have been helpful." She recalled a specific presentation on how she shared her strategies for using culturally responsive texts with her students. When planning for this presentation, Cindy shared:

> I had to go to my librarian and say, 'Hey, can you pull these books Because I don't have them in my own classroom library?' So, I was collaborating with her, because then she was like, 'Well, what are you doing?' And I had to really think through how to present that topic.

After this thoughtful collaboration, Cindy described her interaction with a teacher during her presentation at the PD:

> I vividly remember this, someone said, 'Well, how do you do this without being offensive' like, because that person wasn't tenured, and I said 'I am tenured, so I don't particularly worry about this, but presenting the truth has to be done; and if it's through children's literature, then that's how we do it,' and I feel like I have really stuck to that since I participated.

For Cindy, "those opportunities to present or to come back and visit are extraordinarily helpful." The experience Cindy received by presenting to the current cohort of teachers has been one factor related to her sustained implementation.

Sharing CRP Knowledge with School Teachers. The second opportunity where teachers shared their CRP knowledge with other teachers was in their schools. Ava mentioned twice in her interviews how she was always open to including and sharing her culturally responsive lesson plans with her team. In Ava's third interview, Ava answered a question related to factors in her sustained implementation. She reported that some third-grade team members used her culturally responsive lesson plan in their classroom:

> I told my team, like ‘you all I could not get over the fact that like my kids are writing pieces that fifth graders should be’. I said it's because of all of the things that we did to get them to this point, and two of my teammates actually used the unit on plastic in the ocean. They took the unit and used in their rooms, the other two didn't. But it's fine, it's good I got more on board. And I think once admin saw the benefits, they’re like ‘whatever, do whatever you want’. I think it's just like proving that it works.

Sophia has had a similar experience teaching other teachers how to use CRP in their classrooms. Sophia's school provides teachers time to collaborate with their own grade level and other grade levels. In Sophia's third interview, she described a situation that occurred a few times when she collaborated with another grade-level teacher and shared her knowledge of CRP. She shared this when I asked her what supports she has experienced in continuing to use the CRIOP:

> So, I share the CRIOP more with the content that I teach. So, like if I'm talking to the 4th-grade teacher and she's not trained in it or anything like that, I'll use some of those strategies that I've learned to teach her about it based on content.

All three teachers identified in some variation how the opportunity to present their CRP knowledge to other teachers has been a factor in their sustained implementation.

Supportive School Context

All three teachers identified their school context as an essential support for sustainability. School context pertains to the school's distinct features and includes information reflecting educational, geographic, and social characteristics. During analysis, a support school context was coded 124 as a support in teachers’ sustained

implementation. All three teachers identified their Social Emotional Learning (SEL) class time as supportive of their CRP implementation. Two of the three teachers reported positive support stemming from their instructional autonomy and how that was an essential factor in their sustained implementation. Lastly, there were also different aspects of the school context that each teacher identified as a support in their implementation that will also be discussed in this section.

Social Emotional Learning (SEL). A theme related to teachers' school context and sustained CRP implementation that emerged from the data was that teachers used SEL class time to implement CRIOP elements. Throughout this study, there were ten instances when teachers described a time, they implemented the CRIOP elements into SEL class time. The district that these teachers worked in adopted an SEL curriculum and required a specific amount of class time every day to be dedicated to helping students develop five social-emotional competencies: Self-Awareness, Self-Management, Responsible Decision Making, Relationship Skills, and Social Awareness. During SEL time, students are encouraged to work through feeling words and use emotional vocabulary to communicate thoughts and feelings they may be experiencing. SEL time can also be used to address any issues that might be occurring in the school, community, or world that students want to discuss. Students frequently used accountable talk stems to discuss ideas or strategies for solving these issues during this time.

When I asked Sophia how she was able to implement the CRIOP elements into instruction, she mentioned three times in her interviews how SEL allowed students to bring up topics of interest that might not have fit naturally into the content they were learning. These conversations usually centered around a current event that the students

wanted to learn more about, or they wanted an opportunity to confront negative stereotypes or biases. For example:

> The election was a hot topic a couple of years ago. We talked about some real-world connections with that, you know, addressing the issue of like immigration and a law. It's more like not planned as much as it is like, OK, this is bothering you, let's have a talk about it.

Another instance Sophia mentioned SEL time in her interviews was:

> If there's like an issue, you know racial, let's talk about, like, racial injustices, right? So that got brought up for a little while last year. And so, it's like we looked at, it's like okay, we can talk about this through what's either happened in the past or what's currently happening and make those connections for kids.

Sophia mentions that sometimes these conversations would lead to an unplanned class project. While SEL time was helpful for Sophia to implement Critical Consciousness into her instruction, Ava and Cindy used this class time to develop and strengthen Classroom Relationships.

As previously mentioned, Cindy's school context is quite different from the prior school she was at during her participation in the project. Cindy mentioned six times in her interviews how this SEL class time allowed her to learn more about her students. In one instance, Cindy mentioned how around Thanksgiving, a few students shared about their holiday traditions. However, many students either did not have family holiday traditions for Thanksgiving or needed to know the meaning of a tradition. She goes on to say:

> We talked about what that [traditions] look like, and how that creates similarities and differences within our classroom community, and that is something that I

> have figured out like they're culturally, these guys are extraordinarily different than what I'm used to. And so, I'm trying to build that relationship in here through social-emotional learning.

Likewise, Ava used SEL class time to strengthen the five social-emotional competencies amongst students by facilitating meaningful conversations. Ava recalled a conversation with her students where she asked, "What does it mean to be grateful and why should we be careful of what we say and how our words affect others?" Ava says that she facilitates conversations because "they don't know how to be aware and how to navigate those conversations until they get taught." SEL time has allowed all three teachers to implement CRIOP practices, such as having critically conscious conversations and building classroom relationships with and amongst students.

Autonomy. As it refers to school context, instructional autonomy is based on the degree to which teachers can make autonomous decisions about what they teach students and how they teach it. Two teachers reported that their amount of autonomy with their instruction related to their sustained use of CRP. Both Ava and Sophia provided detailed information on what programs were mandated by their district or schools and how that related to their implementation of CRP.

At Ava's previous school, she was required to use a reading program called *Wonders* (McGraw Hill Education, 2020). She said they were allowed to supplement some stories and had some autonomy over how they taught the weeks of the program. For instance, her team would analyze the standards they were required to teach up to a certain point and create their lesson plans. Ava's team typically chose their texts for their students from a program called *Rooted in Reading* (Lemons, 2022) because the Wonders

texts they "didn't feel like the stories were beneficial to the kids." For math, they were required to use *Envision Math* (Savvas Learning Company, 2023) and followed it very closely.

Additionally, Ava emphasized how assessments, like *Measures of Academic Success (MAP*) (NWEA, 2017) data, were used to assess students' progress. Ava's current school uses a language arts program called *Journeys* (Houghton Mifflin Harcourt, 2023). Ava reports that her team "uses it with a grain of salt. We'll use the big stories but not much else". Her team supplements with resources from the Orton Gillingham program and the University of Florida Literacy Institute. Ava had different experiences with the amount of autonomy she had at the two schools she's taught. At her current school, she has more autonomy, and when I asked Ava what has supported her in continuing to use CRP, she said this in her third interview:

> I think not having the like restraints of you have to teach this book and this story makes it a little bit easier for me to be able to still implement the culturally responsive teaching because I can pick and choose when stories and want to use or what type of writing piece I want to do. I was able to do the "how to" piece to send to another school across the world because I wasn't stuck having to follow the Wonders writing curriculum.

The "how to" piece Ava is referencing is a writing activity where students describe how to do a section of their school day. Students wrote, "how to do lunch, how to do calendar math." Then Ava connected with another school in a different part of the world to write back and forth to each describing a part of their school day. Ava provides this example of how her school context supported her in continuing to implement CRP.

At Ava's last school, she had less instructional autonomy initially. However, when the school's leadership team saw that her third graders were creating writing pieces “that fifth-grade students should be writing", they allowed her more autonomy with her instruction. Ava was teaching her students using a specific writing strategy she learned during the project. In Ava's third interview, she said, "I think once admin saw the benefits and they're like whatever, do whatever you want. I think it's just proving that it works”. Once Ava was given more autonomy in her instruction, she was able to see higher achievement results in writing.

Sophia uses a district-mandated social studies textbook called My World Interactive in her fifth-grade reading and social studies class. For reading, Sophia mentioned that the school district has recently gone away from the Wonders reading curriculum, but Sophia will still pull some anchor texts from the program. She reported feeling more freedom in instruction since the district dropped this mandated curriculum. However, the district has provided teachers with long-range places with standards they are supposed to cover. Her school has mandated that teachers use the Orton-Gillingham literacy program during the small group reading sessions. However, Sophia has significant autonomy regarding her whole group instruction.

Sophia combined her two subject areas, where she taught social studies through reading strategies. She chose to do this with her instruction because the school allocated a different amount of time for each subject area but also because she saw higher student engagement when she combines the two subjects. For example, Sophia shared in her third interview that she has:

> Been able to integrate vocabulary strategies through content, so it makes it like a little bit more engaging for them. Plus, they're buying in because we're using social studies topics that they're more interested in it. So, like when we read the book the *Sign of the Beaver* [Speare, 2011], I'm really teaching them reading strategies like summarizing and paraphrasing and, you know, going back in the text, that kind of stuff. But the content, their interested and engaged. So, like some of those kids are like, 'are we going to read another book? What are we doing next?' So, therefore, they're truly enjoying the reading and the social studies content.

Sophia also emphasized how this autonomy the school provides teachers with allows them to "allocate time however we want to" during this instruction. She explains that this autonomy had allowed her to implement larger critical consciousness projects, making it "easier to implement when I didn't have to follow a district-mandated curriculum."

Ava and Sophia identified autonomy as a factor in their sustained implementation of CRP in their school context. As seen in Figure 1, a connection can be made between the amount of instructional autonomy Sophia and Ava have with their sustained use of CRIOP practices. Cindy reported a different experience with the amount of autonomy she has at her current school, and this will be discussed further in the section on challenges.

Other Context-Related Support. Within the teachers' school context, there were supports reported that varied among the teachers. One teacher referred to her student demographics as a factor in her continued CRP implementation. Sophia teaches at a school with a high EL population and says that before the project, she did not know if she was "necessarily prepared to teach the caliber of student" that is enrolled in her school.

Sophia explains, "through the CRIOP, I was able to have some more best practices for like that group of students because we've always had a high amount of EL kids in my class." Sophia further talks about how she has grown in her instructional skills because of the project. "I think I've definitely improved. I think that my confidence has built from [the project] and just from more experience of teaching in this building with a large EL population".

Another way the teachers' differed in their school context support was the school's mission. Several times in Ava's interviews, she mentioned how her current school's mission and goals were to create a more culturally responsive community. Ava mentioned an analogy that her administrators used during her first year at this school, where they wanted teachers' instruction to be like a "window and a mirror." Ava's school leadership encouraged teachers to make their instruction like a window so students can view perspectives from others' experiences and like a mirror. Hence, it reflects students' culture and helps them build their identity. Ava continued to emphasize the school's initiative to increase diversity within the school and instruction. Ava referenced the school's Diversity Mission Statement, which emphasized students' place in a global community and building a culture of understanding others from multiple perspectives, in her second interview as evidence for this encouraging push towards a more culturally responsive community. This school mission and the support from her administration have supported Ava in sustaining the CRP she learned during her time in the project.

One last support that one teacher mentioned was using the CRIOP as an extension of other school-assigned PDs. For example, Sophia mentioned in her first interview that

she uses the CRIOP and its examples of CRP in addition to practices she is encouraged to use by her school:

> So, I think kind of like taking in little pieces of what we've learned in the CRIOP, like critical consciousness, plus pairing it with this trauma training. So, like using both of those things. So, we're talking about big issues in the world, but through a trauma lens where our kids can kind of view things a little differently.

Sophia says the CRIOP has provided her with "tools to pull from rather than searching for all of them" in implementing trauma-informed PD practices. When I asked Sophia in her first interview if she felt like she was still able to use CRP when her school was encouraging them to implement other PD practices, she said:

> Yeah, I do because, like, when you talk about student relationships, like focusing on that area as well as building my classroom environment plus taking on their trauma-informed care strategies, it all kind of goes together. So, using those relationships and even building family connections with a trauma lens.

Although Sophia is required to participate in other types of teacher PDs and implement those practices, she has used this as a type of support in continuing to use CRP with her students and families.

In summary, all three teachers shared a similarity of support related to the school context. Teachers were able to use semi-structured SEL class time to implement CRIOP practices easily. Two of the three teachers agreed that their high amount of instructional autonomy supported them in continuing to use CRIOP practices. Furthermore, all three teachers had different experiences with their school context regarding their sustained implementation.

Impacts on Students

When all the teachers were asked in the interview what factors led them to continue to use the CRIOP, all three teachers identified high engagement and student learning when the CRIOP was implemented. During my analysis, these factors related to sustained implementation were coded 66 times.

Higher Student Engagement. Two of the three teachers reported high student engagement when the teachers implemented strategies they learned from the PD. In Sophia's first interview, she explained why she has continued to use some of the instructional strategies from the project, like GVMs and PWIMs:

> Because of student engagement with them. So, like when we used them, the kids are more successful or it's like they want to continue the conversation. Then they ask about it again later on or we've talked about something and then they make a connection to it later. So, I think just like kid engagement with the actual strategy.

Ava observed similar engagement with her students when implementing a third-grade critical consciousness writing unit. She said that her students had "drive and the excitement to write," which she had never seen her students so invested in a unit before. Ava credited this engagement to how she implemented the unit, which she learned through a strategy in the project. When Ava was asked why she continued to use the practices she learned in the PD, she said:

> I think that because they [the project strategies] were so simple and because my students did see so much growth and like I would have people walking down the hallways be like "you had kids doing this?" and I was like, "Yes! But like I gave

> them all this scaffolding to get there". And so, I think them seeing that like "oh these kids can do it."

Student Learning. Two of the three teachers reported student learning as a factor in their sustained implementation. As previously mentioned, Ava described a teaching situation where her third-grade students were writing at a fifth-grade level because of the scaffolds and writing techniques she implemented from the PD:

> I told my team, I was like, you all, I could not get over the fact that my kids are writing pieces that fifth graders should be. I said it's because of all of the things that we did to get them to this point, and two of my teammates actually used the unit on plastic in the ocean. They took the unit and used in their rooms, the other two didn't. But it's fine. So, I got more on board. And I think once admin saw the benefits and they're like 'whatever, do whatever you want.' I think it's just like proving that it works.

Cindy provided a similar example of how she has continued to use the practices she learned in the PD with her students and how that resulted in "the growth that you see in kids." In Cindy's first interview, she mentioned a discourse strategy she has continued to use called Socratic Circles, where students use academic language "to support their thinking and have almost a debate without an argument. Cindy explained that "students have learned to support themselves in that conversation" through her social studies content and implementation of Socratic Circles:

> And when you see them being able to do that about why the Europeans were wrong in bringing slaves. Or why the Native Americans should have gotten to

keep their land, when you get to see them be able to support their own argument, I mean, it makes it worth it.

All three teachers provided evidence of student growth in learning and higher student engagement as factors that have played a role in their continued use of the CRIOP. While they shared classroom activities that related to three different CRIOP elements, Instruction, Critical Consciousness, and Discourse, all three teachers identified that this growth in student learning and engagement contributed to their sustained implementation.

Summary

This section detailed findings for the second research question of factors and supports related to teachers' sustained implementation. Four major themes were described: specific PD components, opportunities to share their own CRP expertise, supportive school context, and impacts on students. Several of these findings were identified as factors and supports by all three teachers, while there were variations among other findings. However, these four themes are consistent with teachers' experiences with sustaining CRP implementation.

Challenges in Sustaining Implementation

The third research question focuses on the challenges teachers experience in sustaining CRP implementation. Data for this research question was collected through teacher interviews, which included questions that specifically asked participants what challenges they have experienced since their participation that they believed hindered their continued CRP implementation. This section is divided into four major themes: implementation of the Critical Consciousness element, constraints related to teachers’

school contexts, perceptions of student and family populations, and the COVID-19 pandemic.

Implementation of Critical Consciousness

Throughout teachers' interviews, all three teachers identified Critical Consciousness as a CRIOP element they experienced challenges in sustaining. During my analysis, Critical Consciousness was coded as a challenge 25 times. While all three teachers mentioned Critical Consciousness as a challenge, there was some variation among teachers. One teacher experienced opposition from parents when implementing Critical Consciousness literature, and two teachers identified the intentionality of developing critically conscious curriculum as a challenge. Lastly, one of the teachers also mentioned the time and intentionally a Critical Consciousness unit requires, which can be challenging to manage with the content they are responsible for teaching.

Parent Opposition. One of Cindy's most sustained CRIOP practices was her use of multicultural and diverse perspective literature. During her interviews, she reported two times on the type of literature she chose to introduce her fifth-grade students to and why:

> My read-aloud is by Jason Reynolds, who is an African American author. We're going through the life of four different African American teenagers, and one of the books vividly talks about how the dad tries to kill them, and they have to run away. And that is a book that resonates with these kids, and so I have to stand firm in that. They need a read-aloud that they can relate to.

As I shared in the previous research question, Cindy had returned to the project's PDs and presented on Critical Consciousness literature. Cindy’s presentation about diverse

perspective texts, is evidence that she has continued this practice from the project. However, when Cindy was asked in her first interview what challenges she has experienced in sustaining implementation of the CRIOP elements, she said:

> I think the biggest is pushback; sometimes, parents make a snap judgment. 'This teacher is teaching this, and I don't want my kid to know it.' And so, then I have asked the question, 'if I don't teach them, are you teaching them?' And when parents hear it in that context, if don't teach them that, who is? 'Are you doing that at home?' Then they're like 'well, no, my child's not being exposed to that at all.' 'So, do you want that exposure in a classroom setting where it is scaffolded and it is modeled, or do you want that when they go to middle and high school and they get it however it happens?' So, that's been something that I have had to become comfortable with, is having that parent conversation.

Cindy reported that while she has experienced parent opposition when it comes to her Critical Consciousness literature, this has not stopped her implementation. "Because I truly wholeheartedly feel that if I don't have those conversations, they won't get them."

Intentionality of Developing Curriculum. Two teachers reported challenges implementing Critical Consciousness since they moved to different grade levels after participating in the PD. Ava and Sophia both taught third grade during their participation. However, Sophia now teaches fifth grade, and Ava teaches first grade. In Ava's second interview, she said:

> I feel like in third grade, I was very, very good at it. I feel like first grade is still taking me a little bit of time to kind of figure out what's appropriate for the seven-year-olds versus what I had in third grade.

Sophia shared a very similar experience with her new position in fifth grade. When asked what CRIOP elements she has experienced challenges in implementing, she reported:

> Critical Consciousness. I think just switching grade levels wrapping my brain around a new grade level and what is appropriate critical consciousness content. Areas in fifth grade, it's like, you know, I had my set for third grade, not that they can't be repeated or reused. But also making sure that they are authentic to the class.

Both teachers emphasized that they experienced challenges with knowing what Critical Consciousness content was appropriate for their new grade levels. Sophia also added that these Critical Consciousness activities need to be authentic to her current class. In Ava's first interview, she shared a similar challenge when implementing Critical Consciousness:

> I feel like overall I think with the Critical Consciousness units, I feel like you definitely have to be intentional and on top of your game in order to plan those out ahead of time in order to fit with whatever, and again, this is a little bit easier where I am now, but I think that at my old school it was, you had to plan it to where it fits with whatever the curriculum was that you were teaching to at that point.

Ava's challenge in implementing Critical Consciousness at her previous school related to her autonomy and the curriculum programs she was mandated to use. Further on in this interview question, Ava said, "I think that's been a challenge in the sense of like doing it on your own." She goes on to explain how the support of her coach through the project played a significant role in her implementation of Critical Consciousness because she

could "bounce ideas" off of someone. When I asked her to describe this experience of planning Critical Consciousness units on her own, she said:

> It's doable. I mean, it's just you just have to carve out time for it. I think especially in public schools, it's so hard because you, there's, no time. I mean, you don't even get a full hour of planning.

The challenge of sustaining CRIOP implementation due to lack of time during the school day that Ava described, is shared by another teacher in this study, and will be discussed in the next section.

While all three teachers perceived challenges with sustaining Critical Consciousness, Sophia's observations for this study reflected an increase in implementation of Critical Consciousness since her participation in the project. Earlier, Sophia noted how she needed time to reflect on the Critical Consciousness element to determine how to implement it into her classroom instruction. Since her participation in the project, she has increased in implementation, however, she still perceived challenges.

Constraints Related to School Context

This section will identify challenges related to teachers' school context. Challenges within teachers' school context were coded 119 times. All three teachers reported aspects of their school context that were associated with challenges they experienced in sustaining CRP implementation. Two of the three teachers identified the lack of time to implement CRP as a challenge. Two of the three teachers reported that the level of their instructional autonomy or school-mandated programs were barriers. One teacher reported the school culture as not conducive to a culturally responsive

environment. Lastly, one teacher described how she would use her funds to purchase culturally responsive literature because public school funds were unavailable.

Time Constraints. When asked about challenges they have experienced in sustaining CRP implementation, two of the three teachers referenced a lack of time to plan for CRP implementation. Ava described a situation she was commonly in when she taught at her previous school:

> You had meetings that you had to have every week with the principal and admin team, whether or not you had any kids. Like our MTSS meetings, we would go sit in those meetings, and I would sit there for an hour and not speak anything about my classroom. And I was like, 'why did I sit here listening to her talk about these four kids she has? That doesn't apply to me.' I mean that was an hour of my time. I couldn't even be sitting on my computer doing stuff because they would be like, 'um, excuse me.'

In the previous section, Ava explained that she usually had less than an hour of planning a day to complete other teacher responsibilities. This detailed account of Ava's meeting sheds light on teachers' lack of time during the day to plan CRP lessons compared to the lack of time it takes to follow a prescribed curriculum.

Sophia also identified time as a challenge but connected this challenge to implementing Family Collaboration activities. When Sophia was asked about challenges, she has experienced with implementing the CRIOP elements, she mentioned Family Collaboration because of the time it takes to plan these activities. In her second interview, she said it is challenging because:

> Sitting down, actually planning, and creating authentic opportunities to allow for families to collaborate because there's a lot of planning involved… We've got to have a lot of time. And that's what teachers don't have a lot of right now, to plan events with them.

Following this question, I asked Sophia how she might overcome this challenge and she said, “you know adhering to it, it's really easy to like to drop it off and say we ran out of time. But really making a plan and devote time to it.” Again, she mentioned how time is essential to planning these activities to incorporate families into the classroom.

Sophia went on to reflect in her second interview on her implementation of the Family Collaboration element and the challenges she has experienced and said:

> I probably don't do that [Family Collaboration] as well as I should, I'll be honest about that, just because of time. And just, I guess like sometimes you feel more pressure of like I got to worry about what these kids are doing in this classroom and get them to do XY and Z, and so we overlook some of those pieces that are actually going to help me with that same skill in the long run.

Sophia has acknowledged that she does not implement the Family Collaboration well enough but understood that "those pieces" of engaging with families would benefit her instruction.

Previously, Ava mentioned that the lack of time was a barrier to her lesson planning. However, in her third interview, she identified time as a challenge regarding the actual implementation of the CRP lessons around school and district mandates. "I mean, just the time to be able to implement and do what you wanted and still stay within the standards that the rest of your team was teaching and where the district wanted you to

be." The following section will detail how teachers experienced challenges in sustaining implementation based on their amount of instructional autonomy and school mandates.

Lack of Autonomy. Instructional autonomy was discussed in the previous section on sustained implementation supports. However, in this section, two teachers will detail how their lack of autonomy and mandated curricular programs were a barrier in sustaining implementation. Two of the three teachers reported lack of autonomy and mandated programs as a challenge.

In Sophia's third interview, she described the challenge of "aligning everything with whatever the district is currently doing or whatever the school is mandating." For the first two years after Sophia's participation in the project, she was required to use a district-mandated language arts program, but that program has since been removed. Sophia reiterated in her third interview the constraint of "following what is expected of you versus making your own decisions."

In the previous research question, Ava and Sophia's curriculum programs were described, and their amount of instructional autonomy was detailed. Cindy has the least instructional autonomy out of the three teachers and the most mandated curriculum programs out of the three teachers. Cindy also perceived very tight time constraints around each component of her daily instruction.

For math, Cindy's school has teachers use enVision (Savvas Learning Company, 2023). Cindy reported that she has some autonomy with this program. However, Cindy indicated that a lack of training and time expectations around implementing the program left little room for CRP. The following quote illustrates her perceived lack of autonomy:

> So, I had no training, and I'm trying to figure that out and what that looks like in a 30-minute chunk of time. Because they [administration] also are very much about us having to stick to our schedule. So, my whole group math is 30 minutes and that has to include a Kagan structure. That has to include a warmup, the lesson and a wrap up. In 30 minutes for fifth grade.

With Cindy's whole group reading, she uses the school-mandated i-Ready Reading (Curriculum Associates, 2023) program. Cindy follows this program closely but can supplement it with some read-aloud texts. Cindy also reported that their class time dedicated to whole group reading had recently changed from 30 minutes to 45 minutes, allowing her to "have some autonomy to have discussions or a writing component" at the end of a lesson.

For small group reading, her school has directed teachers to use Literacy Footprints (Dufresne & Richardson, 2019), which was:

> Designed by literacy experts Jan Richardson and Michèle Dufresne, each Literacy Footprints kit includes teaching tools and components for K–6 Learners. Each book in Literacy Footprints is paired with a lesson card based on *The Next Step Forward in Guided Reading*. Lessons include word study activities, comprehension strategies, guided writing, and more.

Cindy reported that this program provides teachers with detailed lesson plans and books to follow. This program "tells you which of the guided reading cards to use, and it goes ahead and lays out your vocabulary. Um, it gives you the reading prompts, and it also gives you your writing prompt for the third day." Cindy identified small group reading time as the part of her instruction where she has the least autonomy.

At Cindy's previous school, she was not required to use any curriculum programs, and the school provided resources as needed. Therefore, Cindy had more autonomy at her previous school. In our second interview, Cindy said she reflected after our first interview:

> Well, after you and I talked the last time, I was kind of thinking, how do I actually, like, do this [CRP] in my classroom? Because I was like, well yeah, I could talk about the CLDC Project and what I learned, but am I actually being able to implement that? And I don't know that I do it very well. I think I did it a lot better at Stone. I don't have a lot of autonomy at Meadowbrook, so, like, culturally responsive stuff, that's huge with the project, but I don't know that I'm doing that to the best of my ability at Meadowbrook.

I followed this by asking "why do you think that?":

> Where we're [Meadowbrook] a [Priority] (pseudonym) school, we are completely 100% score driven and there's no room for anything except the improvement of scores in a very explicit way. And so, like culturally driven lessons like, for the past two days, Thursday and Friday, we were learning about Veteran's Day, and I got dinged for that because that wasn't a direct correlation to what they would need to know for improved scores. And so, it's like, what you learn in the CLDC Project like to help kids know about different people and know about different cultures, and you know that that's an important part of what they need to be doing, they [administration] don't want you to do that.

Cindy referred to her current school as a Priority school, a district initiative aiming to provide enhanced educational offerings for these children by extending the school day

and adding more days to the school year. Later in Cindy's second interview, I asked what CRIOP elements she feels she has been unable to continue using and why. She said:

> In some shape, form, or fashion, there's something of the CRIOP that I can't use here. Meadowbrook is very regimented right now to improve scores and our admin team has a very distinct thought pattern on how they want it to work. And I'm not sure that that will prove to be successful. But they have this grand picture, and it doesn't always include culturally responsive conversations or having like social emotional conversations around differences and having a good discourse. It's not always conducive to having like well-rounded lessons. Yeah, it is more about 'this is the reading skill. Here's how you get there'. And the CRIOP elements would say that there are 5000 different ways to get to that end result and that kids need those different experiences, and we're not allowed to have those.

The amount of instructional autonomy Cindy currently has is impacted by time constraints with instruction, mandated curriculum programs, and assessment-driven school culture. All of these make her feel like she is not teaching to the best of her ability.

School Culture. School culture is defined as the guiding beliefs and values of a school's operations (Fullan, 2015). One of the three teachers identified her school culture and their lack of school commitment to CRP as a barrier to her implementation of CRP. In Ava's first interview, she describes the culture of her previous school as not having "awareness about culturally responsiveness." She described how diverse student groups, and the school staff lacked a connection:

> I feel like the kids that were coming in would see these teachers that you know so prim and proper and all this and then there wasn't a huge connection between the

> kids and a lot of the staff. I just feel like it would be cool to go and see and learn and do and then be able to bring it back.

This disconnect between staff and students is one reason Ava joined the project.

Ava mentioned twice in her interviews the pressure and challenge of wanting to implement CRP lessons but felt nervous about planning and implementing something different from her team. In Ava's first interview, I asked her what challenges she had experienced in continuing to use the practices outlined in the CRIOP, and she said:

> I felt like when I was at my previous place that I had to give the excuse of "oh well I'm doing, I'm like implementing these for this for this project that I'm doing" like so the rest of the team that didn't necessarily, they weren't like, 'oh I'm all about it.' But they also, like I almost feel like I had justified why I wasn't doing the curriculum set. You know what I mean? I didn't have as much choice…

Furthermore, in her third interview, I asked Ava what her most noteworthy challenges in sustaining implementation, and she said:

> I think getting people on board to do it. You don't want to be the one teacher who's like trying to do the different things, but you also want to be the teacher who's trying to do the different things because you know it's good for the kids.

While Ava experienced challenges of planning different lessons from her teammates and justifying her culturally responsive curriculum, she chose to continue to use CRP after her participation because “it was incredible what my kids produced from it, so I said, ‘I'm doing it anyways,' and I would always share everything with my team, but they would always do the same type of stuff." I followed by asking Ava if she received any opposition from her school administration for veering off the mandated curriculum. She

said, "No, I think had they not seen results from it like, they probably would have been like, ‘oh, what?’ But I think because it was so successful, they didn't, no.” This point was also mentioned in the previous research question related to Ava’s amount of instructional autonomy.

Lack of School Funds for Culturally Responsive Resources. One teacher identified a challenge regarding a lack of school funds to purchase culturally responsive texts. In Ava’s third interview, when asked about challenges she has experienced in sustaining CRP, Ava talked about when she was teaching at her previous school, her team would purchase literature they felt would be more beneficial to their students:

> I would have said in public school, money. I mean to get books that are in my classroom, I mean, you have to purchase all those kind of books on your own dime. But we [her team] did it because we felt like they were, I mean, much more beneficial to the kids…So, like all of our Rooted in Reading [2022] books that we would use instead of Wonders [2020] textbooks, we would purchase, like, personally buy those. The school didn't pay for those.

While Ava did experience the constraint of a lack of school funds to purchase culturally relevant texts, she used her personal funds to purchase books she felt would benefit her students rather than implement the mandated-curriculum texts.

Summary of School Context. All three teachers identified aspects of their school context that challenged them in sustaining implementation of the CRIOP elements. Two of the three teachers described the lack of time during the school day to plan and implement culturally responsive lessons. Two of the three teachers identified their lack of instructional autonomy and district-mandated curriculum as a challenge in implementing

CRP. One teacher described her school culture as not being culturally aware and feeling like she had to justify her culturally responsive lessons to her colleagues and administration. Lastly, one teacher reported the lack of school funds to purchase culturally relevant texts as a constraint on her CRP implementation.

Perceptions of Student and Family Populations

The findings in this section will detail information provided by teachers in interviews about perceived challenges they experienced in sustaining CRP. When teachers were asked about challenges they had experienced with their sustained CRP, two teachers mentioned perceived barriers that related to students “lack of outside experiences” and families lack of school engagement.

Perceptions of Students. Cindy identified her current students' "lack of outside experiences" as a challenge twice in her interviews. In her first interview, she gave an example of a culturally relevant text she used at her previous school but, for various reasons, she perceives she cannot use this text with her current students:

> Like at Stone, I would always do the novel *Chains* [Anderson, 2010]. It's a trilogy and in my highest reading group we would always do it. Well, I don't have any group that can function at that reading level right now here. And they’re construct of that is very different. Um. They don't know political leaders. They don't understand the concept of slavery in any way. That you were forced and taken. In their mind, it's like, it's almost fake. And so, you're building those scaffolds for them. But they’re making progress.

Cindy perceived students’ lack of knowledge about political leaders and slavery as challenging and seemed to suggest that her current students were not as capable as her

previous school students. In Cindy's third interview, she shared another example of how building students' background knowledge with vocabulary has been a challenge in her CRP implementation:

> Basically, to be honest, their lack of outside experience is really hard, because when you're trying to teach them even about just, like today. A conversation we had was a beach versus the coast, but these guys have never been to either one. They've never been to a coastline, but then they've not ever gone to a beach, so the relationship for them is not there, which then makes the vocabulary piece really hard, because you're trying to build in the vocabulary, which you know is important. And then, when you're trying to do that, you lose like it was, it was about the colonies. They lost the lesson in the colony geography part like, why would you pick the southern colonies versus the middle colonies versus the New England colonies based on geography. Well, they don't know what a beach was, and then they didn't know what harbor was, and so. Yes, I completely understand that those GVMs and that vocabulary is a huge piece. But when you're going backwards like that, then you lose the other content that you're trying to get to. So that's been a real challenge this year.

By pre-teaching vocabulary to students, Cindy is implementing CRP; however, she seemed to perceive students' backgrounds and experiences as a challenge in her instruction.

Perceptions of Families. In Cindy's first interview, she reported that one of her biggest challenges is communicating with her current group of students' families. Cindy also mentioned the high family engagement she had at her previous school and how this

change of schools has been a challenge for her. In Cindy's first interview, I asked her what communication has looked like with her current students' families. She said:

> That is not something that they're [parents] really willing to go with. They're very closed off, and they are, I'm not sure they've always had the best experiences in that manner... I'm having to readjust my own ability to connect to this group of parents, and that's been, it's been one of the hardest things.

Cindy perceived families' lack of communication as a challenge. Cindy did mention several times in her interviews how she has used several different methods of communication with families. Although she has made attempts, there were still families she had not been in contact with at that point in the school year.

In Sophia's second interview, she explained why she does not invite families into her classroom or contact them as frequently as a younger-grade teacher would:

> We don't ask our parents if they want to come volunteer at school because we know they work first shift or something like that. Like, no, I'm not asking you for this opportunity because I already know you're booked or whatever, yeah. And maybe that's me, just like presuming. And maybe I shouldn't do that. But not making them feel like the pressure of wait, 'I can't go because I have to work.'

Sophia tried to be considerate of her students' families and understand that they have responsibilities that may prevent them from sharing cultural knowledge in her classroom. However, as Sophia said in this comment, she presumes families will not want to participate in her classroom.

Sophia perceived challenges when she implemented a CLDC Project practice called Family Artifacts, where students bring in an item that is culturally valuable to their family and share it with their classmates. In Sophia's first interview, she shared:

> Some things that I haven't really tried a ton, would be like, we've done them, but we haven't done them consistently, like the family artifact things. I've tried that kind of stuff out, where they [students] like bring stuff in, but a lot of my kids will be like 'we don't have anything' or, you know, something like that. And so, then I always shy away from it because I don't want somebody to feel like they don't have anything.

Sophia reported that she would like to attempt activities like this more but is trying to figure out how to handle a situation where students say they do not have cultural artifacts to share with her class. Rather than thinking broadly about the cultural knowledge and artifacts that nearly all families possess (e.g., memories, stories, recipes, shared experiences, etc.), Sophia seemed rooted in more traditional conceptions of family artifacts.

Lastly, one teacher perceived low family engagement at school-wide academic events as a challenge in implementing the Family Collaboration element and attributed this low engagement to families' lack of availability or knowledge. Sophia said her school hosts various family night events that can be social or academic. In Sophia's first interview, she shared that family participation is typically low at academic family nights:

> So, like those kind of socially things our parents are very excited about. But then if we have like an academic night, like if we have a reading night or a math night,

> our parents are not so available for participation. And I'm curious you know if it just because of their own levels of understanding with content and things like that.

It is important to note that Sophia reported continued efforts to reach out to families and personally invite them to academic night events but has continued experienced challenges getting families to engage in them.

When teachers were asked about challenges they had experienced with their sustained CRP, two teachers mentioned perceived barriers that related to students "lack of outside experiences" and families lack of school engagement. The CLDC Project practices and the CRIOP would assert that these perceived challenges appear to reflect a deficit perspective of students and families. The CRIOP explains a deficit perspective model as a teacher "suggesting through words or actions that some students are not as capable as others" (p. 3). Regarding families, a deficit perspective is when "families are viewed as inferior and/or as having limited resources that can be leveraged for instruction" (p.5).

COVID-19 Pandemic

It is important to note that these teachers were all implementing and sustaining CRP implementation in the context of the COVID-19 pandemic. Teachers in this study participated in the CLDC project during the 2018-2019 school year. The following 2019-2020 school year is when the COVID-19 pandemic began, and teachers and students moved to virtual learning. During my analysis, COVID was coded 11 times as a challenge a teacher experienced in sustaining implementation. Although Cindy and Ava did not attribute their challenges in implementing CRP to the pandemic, Sophia reported

challenges with CRP and engaging families in the classroom since moving back into in-person learning.

Throughout Sophia's interviews, she mentioned that COVID had been a challenge in her CRP implementation four times. In Sophia's first interview, she said:

> Well, I think we [cohort 2 of the project] were unique in that it happened like, what, two years after we had gone through the thing? So, like, we were just getting used to, like, implementing that stuff, and then all of a sudden it was like, 'well, here you go, teach online.' So, it's like, 'okay, well. Let's get used to this now.'

In Sophia's third interview, she discussed what teaching was like when they returned to in-person learning and additional COVID challenges:

> So, like I had learned them [CRP] all and then we got shut down. So, now I'm learning virtual teaching and how do I embed all this discourse when a kid doesn't want turn their microphone on? And so, like, you did that for a year. And then you come back and teach them in the building, and they can't get within 6 feet of each other, so, they're not really having discourse, unless they're separated. So, there was like my training, then two years of like COVID, then going back. So, I've taken all this time off of utilizing those strategies the way that they were meant to be utilized. That's probably one of the big ones.

Sophia also mentioned in her first interview how she is trying to "get back into the swing of good practices" after COVID. She identified several PD strategies she hoped to continue implementing and improving her culturally responsive instructional skills.

Lastly, Sophia also identified a challenge of engaging families in the classroom due to COVID restrictions where schools were not allowed to have visitors in their classrooms. Sophia reported that the expectations needed to be clarified in her school if volunteers were allowed to enter the school. In Sophia's second interview, when I asked her about challenges, Sophia said, "just finding those opportunities and making sure that there is an allowance for it, like last year, you couldn't have parents come in, or anything like that." Sophia reported that the pandemic was her biggest challenge in sustaining CRP implementation.

Summary

This section detailed findings for the third research question of challenges teachers experienced and perceived related to their sustained CRP implementation. Four major themes were described: implementation of the Critical Consciousness element, constraints related to teachers' school contexts, deficit perspectives regarding students and families, and the COVID-19 pandemic. Several of these findings were identified as challenges by all three teachers, while there were variations among other findings. However, these four themes are consistent with teachers' challenges they experience with sustaining CRP implementation.

CHAPTER 5: DISCUSSION AND IMPLICATIONS

This chapter presents a discussion of the findings and implications of this intrinsic case study. Grounded in transformative and situated learning theories, this study was designed to help educators understand teachers' experiences sustaining CRP implementation after participation in PD. The following questions were considered for this study: (a) What CRP did teachers sustain three years after completing a CRP professional development program? (b) What factors and supports were related to teachers' sustained implementation? (c) What ongoing challenges did teachers experience related to sustaining implementation? This chapter includes the following sections: a discussion of the findings, limitations, implications for teacher education and practice, and recommendations for future research.

Discussion of Findings

This section includes a discussion of findings related to teachers sustained CRP, factors and supports that enabled teachers to sustain CRP, and challenges teachers experienced with sustained CRP implementation. The discussion of findings contains four themes: long-term implementation of CRP, concrete practices for immediate impact, supported CRP implementation for sustained CRP, and internal and external challenges affect sustained CRP.

Long-Term Implementation of CRP

After careful analysis of observation and interview data, the data showed that two of the three teachers sustained their implementation of CRP after participating in PD. Classroom observation data showed that two teachers' CRIOP scores three years after the PD were higher overall than their post-PD scores. These findings add to the limited knowledge base on the extent to which teachers sustain practices learned in PD. Similar

findings were found in Gore et al.'s (2017) study of a collaborative PD approach and its impact on the quality of teaching. Data gathered six months after teachers' participation in PD showed significant positive effects on teacher quality. An additional experimental study examining the impact of a year-long math PD measured teaching skills and student achievement one year later that showed a positive and sustained PD effect (Antoniou & Kyriakides, 2013). Although the findings of these prior studies added to the limited amount of research conducted on sustained PD practices, the researchers used a more limited scope of sustainability after only six months to a year post-PD. The current intrinsic case study provides a broader scope regarding teachers' sustained practices because teachers' practices were measured three years after participating.

Similar sustained PD practices were found in a longitudinal study investigating teachers' sustained practices after a cultural and linguistic instructional responsiveness PD (Penner-Williams et al., 2019). Researchers found sustainable teacher change in most indicators of effective pedagogy for culturally and linguistically diverse students as measured at the end of the PD and two years after participation. Penner-Williams et al. (2019) findings are significant additions to research on sustained CRP after PD, given the limited number of studies in this area. However, this study's findings did not answer why teachers sustained CRP or if there were specific ways in which the PD supported teachers' sustained implementation. This intrinsic case study fills this gap in research by providing data on sustained CRP implementation and detailed descriptions of teachers' first-hand experiences in sustaining CRP.

While two teachers in this study sustained CRP implementation, one teacher, Cindy, generally did not, as evidenced by the fact that her observation scores in this study

were lower than her initial pre- and post-PD scores. It is important to note that Cindy did report continued use of some of the practices that she had learned in the PD. However, she conveyed challenges in implementing many practices at her new school, and observations indicated her lower implementation overall. The finding that one teacher did not sustain CRP over the long term is consistent with previous studies showing that teachers often do not sustain practices learned in PD. For example, Wolf and Peele (2019) found that most of the growth that was measured during teachers' participation in PD connecting teachers' professional well-being with classroom practice faded out within one-year post-PD. In a different study conducted by Liu and Phelps (2020), teachers decreased their use of content knowledge for teaching mathematics after only 37 days concluding the PD. While the fact that two teachers in this study were able to sustain what they learned in PD contradicts this prior research, it also adds to the prior research by showing specific factors that can inhibit teachers' sustaining in certain contexts.

Concrete Practices for Immediate Impact

In this study, four themes emerged across teachers' classroom observations, and interviews regarding the CRP teachers sustained: teachers continued to implement specific instructional strategies taught in the PD, teachers chose to use either multicultural texts or literature that examined multiple perspectives, and teachers frequently used formative assessments to evaluate students' learning throughout lessons. In addition, during teachers' interviews, one other theme regarding sustained CRP emerged across teachers, a change in mindset about families. These four themes are important concepts to consider when facilitating PD on CRP and implementing CRP,

because knowing what teachers are able to implement and sustain can increase understanding about CRP PD.

Teachers continued to use instructional strategies that were modeled and strategies they implemented during their participation (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007). For example, teachers implemented the Picture Word Inductive Method during their participation with the support and modeling of the strategy from their coaches. The teachers in the current study were more likely to sustain these strategies because they received support in implementation and saw positive impacts to student learning. Therefore, to support teachers' sustained CRP, PD should support and model instructional strategies during teachers' participation.

Using multicultural literature can be used to reflect a diverse perspective and support teachers in moving towards a more inclusive, empowering classroom (Bishop, 1990). Teachers in the current study continued to use multicultural literature and explained that the PD considerably impacted their sustained use of multicultural literature. One teacher described how she uses her classroom literature as a "window and mirror" so that students see their cultures and identities reflected but also that they are exposed to other perspectives different from their own. Bishop (1990) described literature as a way for readers to look through an imagined window to become part of a new world but also that books can reflect our own lives and experiences. Bishop (1990) goes on to stat the reading can be a means of affirming people's place in the world. Using multicultural literature to expose students to new experiences and affirm their cultures

and identities was a concrete strategy that the teachers in this study were able to adopt and sustain without much difficulty.

Formative assessments are essential to implement within the curriculum to gather data on students' knowledge of learning outcomes and provide meaningful feedback (Sampson & Oldham, 2021). Teachers in the current study often used various types of formative assessments to determine students' learning throughout lessons. For example, one teacher used white boards, hand gestures, exit slips, and one-on-one conversations to evaluate students' learning in one lesson. The CLDC Project encouraged teachers to use various methods of formative assessment to allow students to express their knowledge in different ways. This frequent evaluation of students' understanding is a practice that teachers sustained from the PD due to the ability to quickly assess students' learning.

Lastly, the growth in mindset by all three teachers in how they approach and include families in their classrooms was critical to their success with sustained CRP. The CLDC Project emphasized to teachers the importance of creating a caring classroom environment that respects diverse populations while establishing genuine partnerships with families. To accomplish this, teachers need to learn about families' cultural knowledge and their funds of knowledge. Perry (2021) reiterates the importance of establishing partnerships with families to understand their cultural knowledge and contextualize instruction to students' lives. Therefore, it is essential for PD to educate teachers in how to approach and include families in the classroom. When the teachers in the current study saw an improvement in positive family relationships due to a more inclusive approach, they continued to use these approach methods when communicating and including families in their classrooms.

Supported CRP Implementation for Sustained CRP

The following sections provide an overview of the ways in which the findings of this study extend research and theory on factors and support related to teachers' sustained CRP implementation. After careful analysis of teachers' reported supports, four themes emerged from the data: specific PD components, opportunities to share one's own CRP expertise, a supportive school context, and impacts on students. These themes were drawn from across teachers and affected their sustained CRP implementation.

Collaboration at PDs. The first major finding about factors and supports related to teachers' sustained CRP implementation that emerged from the data was that teachers reported specific PD components that helped them sustain PD practices independently. In this study, teachers identified the support from their assigned PD coach, teacher presentations, and collaboration with colleagues as essential to their sustained implementation. The findings of this study were consistent with research and theory on effective PD (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007). For example, one of this study's findings are that teachers reported sustaining practices that were explicitly modeled in the PD and related to the teachers' curriculum. Desimone's (2009) core conceptual framework of effective PD which focus on content focus, active learning, coherence, sustained duration, and collective participation, suggest PD content must relate to teachers' work and that they need to be able to "see" how practices fit into the curriculum.

All three teachers seemed to implement the instructional strategies explicitly demonstrated in the PD and connected to their classroom lessons. Teachers could immediately implement these instructional strategies into their specific context with the

support of the PD facilitators and their assigned coach. This finding relates to previous research from systematic reviews by which PD programs considerably influenced student achievement when the PD practices were related to teachers' content subject (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007). The current study extends this research because teachers sustained specific strategies from the PD that helped students learn content.

One subtheme all three teachers identified was the support of their coach during their participation in the project as essential to their sustained CRP implementation. The teachers seemed to appreciate and learn how to implement CRP with their coaches' support and therefore were able to sustain CRP on their own after their participation. Other research has shown similar findings where effective PD programs featured coaches who collaborated with teachers on lessons and provided modeling of PD practices instead of taking the role of evaluator (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007). This case study supports prior research findings because the coaches in this study took a partnership approach (Knight, 2011) and collaborated with teachers during the implementation process. While prior research showed that coaching is critical during teachers' implementation, this study showed that not only does coaching help during teachers' participation, but it also shows that coaching during PD can influence teachers' abilities to sustain implementation.

The second subtheme related to PD components that supported teachers' sustained CPR implementation was teacher collaboration with other teacher participants and PD facilitators. Research has shown that collaboration is an essential aspect of teacher PD

which can make an impact on teacher practices and increase their self-efficacy (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007). Through a PD workshop approach, teachers were given many opportunities to collaborate with others through lesson planning and brainstorming implementation techniques. They also received support and guidance from one another to integrate the PD concepts. In this case study, teachers participated in the CLDC Project to gain knowledge from PD facilitators and other teachers on their experiences with CRP implementation.

Another finding related to specific PD components was that teacher presentations supported teachers in their CRP implementation. Other researchers have found similar findings in their investigations of effective PD (Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016; Yoon et al., 2007). For example, in Darling-Hammond et al.'s (2017) review of research on the characteristics of effective PD, one widely shared feature of effective PD was to provide models of effective practice for teachers. Darling-Hammond et al. noted that PD practices that provide teachers with models through "demonstrations of lessons, observations of peers, and curriculum materials have all been proven successful at promoting teacher learning and supporting student achievement" (p. 11). This case study expands Darling-Hammond et al.'s findings because teachers reported that presentations and modeled lessons from peer teachers supported them in implementing PD practices. Teachers identified this support as a way to visualize the PD practices in their context.

Several researchers have found that these specific PD components, modeled lessons, collaboration, and teacher presentations, are essential to the implementation of

PD practices during participation (Darling-Hammond et al., 2017; Desimone & Garet, 2015; Kennedy, 2016; Yoon et al., 2007), yet these studies did not address PD components that supported teachers in sustaining PD practices. The current study extends the research on essential PD components. It indicates that teachers can sustain PD practices independently with the support of these specific PD components during their participation.

Sharing CRP Knowledge Supports Teacher Self-Efficacy. The second major finding about factors and supports related to teachers' sustained CRP implementation that emerged from the data was that teachers reported seeing themselves as experts and sharing their CRP knowledge with other teachers was a factor in their sustained implementation. Teachers indicated that the opportunity to share their knowledge increased their self-efficacy. This finding demonstrates the importance of teachers increasing their self-efficacy by presenting their CRP knowledge to other teachers through collaborative practices.

Two teachers were invited to present strategies to later cohorts of teachers in the CLDC project and all three teachers gave roundtable presentations to their own cohort during the year of PD participation. All three teachers had opportunities to share their own knowledge and practices during structured collaboration times during the PD sessions. When the teachers presented at the PDs, they shared a culturally responsive lesson and allowed time to collaborate with the participating in-service teachers. During this time, teachers could ask questions and collaborate with others in the group to plan this CRP lesson in their school context. The teachers in this study identified this time of sharing lessons and collaborating with other teachers as essential to their sustained

implementation. They credited the interactions to discussing CRP with other in-service teachers as vital to their sustained implementation because they could talk through experiences with CRP together. This finding shows that it is essential for PD to include an opportunity for teachers to collaborate and share their expertise. Other research has presented findings on the effectiveness of collaboration among teachers related to PD (Cantrell et al., 2022; Darling-Hammond et al., 2017; Desimone, 2009; Desimone & Garet, 2015; Kennedy, 1998, 2016). However, these studies do not describe teacher collaboration's long-term effects on teachers' sustained PD practices. The current study extends prior research on effective PD practices. It indicates that teachers' time to collaborate with peers and learn from one another is essential to sustaining PD practices after participation.

Instructional Autonomy as a Critical Factor. The third finding pertaining to factors and supports related to teachers' sustained CRP implementation that emerged from the data was a supportive school context. Two of the three teachers identified their supportive school context as a factor in their sustained implementation, such as class time to implement CRP and instructional autonomy. This finding indicates the importance of a supportive school context in sustaining CRP.

One of the factors that teachers noted as support for their implementation of CRP was their schools' mandated Social Emotional Learning (SEL) class time. SEL was a designated amount of time in the teachers' classrooms where students were encouraged to discuss emotional topics and address any issues that might be occurring in their school or community. The teachers in the current study described how SEL time provided an easy way to implement CRP because they could incorporate students' cultural knowledge or

discuss critically conscious topics. The teachers in this study found a way to connect SEL and CRP, which supported them in sustaining CRP. In a systematic review conducted by McCallops et al. (2019), SEL interventions were examined for the use of CRP. Of the 51 studies included in the review, only five studies indicated the use of CRP. In those five studies, teachers used SEL time to incorporate students' lived experiences and reinforce cultural expressions, similar to the current study's finding. However, the current study extends this research because teachers could implement CRP in various ways during their SEL class time which supported them in sustaining CRP implementation.

The teachers in this study also emphasized the importance of instructional autonomy and curricular flexibility in enabling them to implement and sustain CRP. Two teachers had significant instructional autonomy, and they reported this autonomy as critical. This finding shows the importance of allowing teachers' instructional autonomy to implement CRP to sustain PD practices. Pasternak et al. (2022) examined teachers' implementation of CRP and how their school context empowered or engaged them in the CRP from PD. In one of the four schools, the instructional policies promoted teacher autonomy and allowed teachers to design and implement CRP (Pasternak et al., 2022). The current study extends this research because teachers' instructional autonomy mattered to their CRP implementation during their participation and significantly impacted teachers' sustaining CRP.

Higher Student Engagement and Learning. The last finding pertaining to factors and supports related to teachers' sustained CRP implementation was that when CRP was implemented, all three teachers reported higher student engagement and student learning. Once teachers saw an impact on their student's engagement and learning, they

were more likely to continue using these CRP after participating. Researchers have found similar findings related to teachers' implementation of PD practices and positive student impacts (Guskey, 2002b; Guskey & Yoon et al., 2009). Guskey (2002b) studied teacher efficacy and found that teacher efficacy may increase student achievement but also reported that improved student achievement is likely to increase teachers' self-efficacy. The current study supported this finding due to higher student engagement and learning when teachers' implemented CRP. Guskey and Yoon (2009) emphasized that when teachers see positive student impacts based on their change of practice from PD, they are more likely to continue implementing those practices. The current study extends this research with evidence that teachers sustained PD practices due to positive student impacts.

Additionally, this current finding is connected to adult learning theory and the self-efficacy phase of transformative learning (Meziorw, 1978). As teachers observed the positive impacts on students in this study, they were supported in moving to the higher self-efficacy phase of transformative learning. When teachers applied their CRP knowledge in their classrooms and explored their roles as culturally responsive educators, their self-efficacy increased when they saw a positive impact on student engagement and learning.

Teachers' self-efficacy increased when they saw impacts on students' learning and engagement, and some studies have found that this led to sustained implementation of PD practices (Deglau & O'Sullivan, 2006; Gore et al., 2017; Havice et al., 2018; Malo-Juerva et al., 2018; Parkhouse et al., 2018). However, this study illustrates the ways in which student learning, engagement, self-efficacy, and autonomy can be inter-related,

particularly in the case of Ava. Ava stated that she continued to use CRP because when CRP was implemented in her classroom, she observed an increase in student learning and engagement, which affected her own self-efficacy. When Ava's principal also noticed these impacts on students, her principal allowed Ava more curricular and instructional autonomy.

It is important to note what supports were in teachers control for their sustained implementation and which were out of their control. Teachers' ability to share their CRP expertise with other teachers was the support that was most in their control. This is important for teachers to realize after they complete a PD on CRP and how they can control their sustained CRP by sharing expertise. Teachers do not have much control over their instructional autonomy or the PD components that are implemented during their participation. Therefore, it is essential for school leaders and PD facilitators to understand that these supports are important when it comes to teachers sustained CRP.

Internal and External Challenges Affect Sustained CRP

The following sections provide an overview of the ways in which the findings of this study extend the research on challenges related to teachers' sustaining CRP implementation. Teachers faced challenges in four areas: implementation of the Critical Consciousness element, constraints related to teachers' school contexts, deficit perspectives regarding students and families, and the COVID-19 pandemic. These themes were drawn from across teachers as challenges that impacted their ability to sustain CRP implementation.

Intentionally Implementing Critical Consciousness. The first major finding about challenges related to teachers' sustained CRP implementation was that teachers

reported difficulty implementing Critical Consciousness into their curriculum. There was some variation among the specific challenges teachers experienced in implementing critical consciousness, such as parent opposition, the intentionality of developing a critically conscious curriculum, and the time and intentionally a Critical Consciousness unit requires. Despite these variations, all three teachers reported challenges with the Critical Consciousness element.

Ladson-Billings' (2021) states that teachers often ignore this component of culturally relevant pedagogy because they do not want to get too political. She explained that teachers are often in fear that their administrators will find the topics "too dangerous" (p. 19). Additionally, Ladson-Billings shared that teachers of younger students frequently avoid critically conscious instructional practices because "they may feel that any problem-solving work with younger children represents indoctrination" (p. 20). The current study corroborates Ladson-Billings' assertions because teachers in this study were also hesitant to implement critical consciousness for the reasons Ladson-Billings suggests. It also extends Ladson-Billings' research because the teachers in this study experienced parent opposition to critically conscious material, and teachers struggled to plan and implement critical consciousness into mandated curricular programs.

Cantrell et al. (2022) discuss the challenges in adopting culturally sustaining literacy pedagogies, including developing critical consciousness. Cantrell et al. shared statements from teachers in a graduate class who expressed apprehension about implementing critical consciousness, partly due to push back from parents, coworkers, and administration. Cantrell et al. reported that teachers were "fearful of engaging students in conversations and action around topics that are central to students' identities,

families, and communities" (p. 166). However, it is important that teachers embrace a pedagogy of discomfort that allows them to deconstruct their curriculum that has perpetuated students' marginalization (Boler, 1999; Zembylas & Boler, 2002). The current study indicates teachers experienced opposition from parents when critical consciousness practices were implemented, and they also experienced challenges navigating a mandated curriculum and planning and implementing critical consciousness.

It is important to note that one teacher, Sophia, actually increased her implementation of Critical Consciousness after her participation. While she did experience challenges, she was implementing Critical Consciousness at higher levels since her participation. This finding shows that teachers need time to process and reflect on the aspects of critical consciousness to implement it into their classrooms. Gay and Kirkland (2003) explained that teachers need time and support to develop a cultural critical consciousness and self-reflection about cultural and ethnic diversity. This finding should be considered within teacher PD on CRP to support teachers in developing critically conscious curriculum.

Non-Conducive School Context as a Barrier. While the teachers in this study identified a supportive school context as a support for sustained implementation of CRP, they also noted a constraining school context could be a significant challenge for implementing and sustaining CRP. Aspects of school context that teachers reported as a challenge to sustained CRP were lack of time to implement CRP, instructional autonomy and mandated curricula, and a school culture not conducive to a culturally responsive

environment. This study provides insights into teachers' specific experiences with their school context and the barriers they encountered in sustaining CRP from PD.

First, teachers perceived a lack of time to implement CRP. Two teachers referenced their lack of time to plan and implement culturally responsive lessons due to school meetings and other teaching responsibilities. This finding highlights the perceived challenges teachers experience in sustaining CRP but also how teachers imply that CRP is an add-on to their already planned lessons. Teachers in the current study often referred to CRP as something they had to add to a lesson plan they already had or did not have time to make a lesson culturally responsive. Similar findings were reported in Powell et al.'s (2017) study in that the teachers "implied that CRI was an instructional strategy versus a complex array of behaviors" (p. 24). The current study supports and extends this research, as indicated by the need to educate teachers on how to address the complexity of CRP within what they are teaching rather than something to be added.

Second, teachers were constrained by a lack of instructional autonomy and high demand for using scripted curriculum programs mandated by their school or district. Two of the three teachers identified mandated school programs as a barrier to their sustained CRP implementation. Teachers reported being restricted and implementing less CRP due to less instructional autonomy. An example of this came from Cindy's implementation of CRP in two different schools. Cindy implemented more CRP in the first school where she taught, which was rural and predominately White, she had more instructional autonomy. However, since moving to a high-poverty urban school, she has had less instructional autonomy, a more regimented schedule, and several mandated curriculum programs, which she described as barriers to her sustained CRP. Other researchers have also

reported barriers to teachers' PD practices implementation due to restricted instructional autonomy (MacGillivray et al., 2004; Malo-Juerva et al., 2018; Powell et al., 2017; Shelton, 2010). Teachers in these studies identified challenges in deviating from curriculum programs to make their instruction incorporate students' lived experiences and a lack of power in determining best practices for their students' needs. The current study extends this research because the teachers in this study explained that their lack of instructional autonomy was still a challenge in sustaining CRP. It is important to note that "teacher autonomy is often disproportionately limited in poorer and more diverse schools" (Wei et al., 2009). This was the case in Cindy's situation. When she moved to a highly diverse high poverty school that been designated as a "[Priority] School", she was forced to adhere to a tightly prescribed, skill-oriented curriculum.

Finally, this study illustrates how a school's culture and lack of commitment to culturally responsive teaching can impede a teachers' implementation. Ava identified her previous school's culture as a challenge in sustaining CRP due to a lack of culturally responsive awareness. This finding shows that a school's culture matters when sustaining CRP from PD. For teacher practices to change, changes and support must be established at the school level (Gay, 2018; Rueda, 1998). Similar challenges were found in Pasternak et al.'s (2023) study on teachers' experiences related to their school culture as they participated in PD on CRP. The findings showed that the culture and climate in the teachers' schools influenced teachers' engagement with CRP. Pasternak et al. (2023) stated that a supportive school system is needed for teachers to engage in CRP from PD. The current study extends this research in that the school culture also plays an essential role in teachers' sustaining CRP after PD.

Deficit-Oriented Challenges. The third major finding concerning challenges related to teachers' sustained CRP implementation related to teachers' perceptions that could be categorized as deficit oriented. Two teachers described perceived challenges in engaging with families and students' lack of background knowledge and lived experiences. As teachers described these challenges, it appeared that the teachers saw their students and families as less capable. One teacher described parents as "closed off" and that family engagement at her current school "is not something that they're [parents] willing to do here". CRP views families and students from an asset-based perspective and includes cultural and family-lived experiences in the classroom. It appears the teachers in the current study needed more knowledge and engagement with an asset-based pedagogy approach. Other researchers have also found that teachers can have a deficit perspective toward their diverse student populations (Keefer & Haj-Broussard, 2021; Ladson-Billings, 1994; Malo-Juerva et al., 2018). For example, Malo-Juerva et al. (2018) found similar results from teachers in their study on teachers' self-efficacy for culturally responsive instruction. The researchers noted teachers' negative views of families and called for improving teachers' attitudes and self-confidence toward working with ELL students and families. The current study extends this research as indicated by the deficit perspective teachers continued to have of families and students after participating in CRP PD.

Disruptions Due to the COVID-19 Pandemic. The last major finding concerning teachers' sustained CRP implementation challenges related to the COVID-19 pandemic. Teachers in the current study were moved to virtual learning during the school year following their participation in the CLDC Project, and Sophia described how that

impacted her ability to sustain PD practices. She also reported challenges with engaging with families since COVID-19 began and implementing effective CRP since returning to in-person learning. Minimal research has been conducted on the impacts of the COVID-19 pandemic on teachers' sustained CRP PD practices. However, several researchers have reimagined CRP PD due to COVID-19 and suggested a virtual PD expand teachers' attitudes and beliefs about culturally responsive teaching (Brown et al., 2021). One study conducted with first- and second-year teachers' experiences using online instruction and implementing Culturally Responsive Pedagogy found that a very small percentage of sample teachers were able to implement CRP effectively due to inequitable resources (Bhatnagar & Many, 2022). The current study adds to the research on the impacts teachers have experienced with sustaining CRP after the COVID-19 pandemic.

It is also important to note here what challenges teachers can control and which they cannot. As discussed previously, teachers do not have much control over their instructional autonomy, but school leaders should be aware that the more mandated programs teachers are required to teach, the less teachers are able to implement CRP. PD facilitators should be cognizant of the challenges teachers experienced that they could help mitigate during teachers' participation such as implementing Critical Consciousness and their perceptions of students and families. However, teachers can have control over their mindset towards students and families by continuing to learn about CRP in including families in schools.

Limitations

The current study has several limitations that must be considered when interpreting the findings of this research. Regarding the sample of teachers for this study,

multiple limitations must be considered. First, this study was limited to only three teachers from the original cohort size of 23 teachers. As a result, it does not represent teachers' sustained CRP implementation for all participants of the CLDC Project. Second, the teachers in this study were selected because they grew considerably during the PD. Therefore, these findings cannot be generalized to typical participants because these participants were selected based on a high success criterion. Furthermore, the teachers in this study taught in elementary schools, so it cannot be determined that the sustained CRP and supports and challenges these teachers experienced would be the same as what secondary teachers may experience.

Additionally, the three teachers in this study volunteered to participate. Desimone (2009) questioned whether PD effectiveness findings might differ if research were not so frequently limited to volunteers. Lastly, all three teachers were advanced leaders who participated in the optional graduate certificate component of the project. It cannot be assumed that other teachers in this cohort who did not have benefit of taking the four graduate courses would have the same experiences as the sample teachers for this study.

This research included three months of observations and interviews. Each teacher was observed three different days for 2.5 hours, approximately once a month. In each interview, I asked teachers to recall their CRP since our previous interview, since I was not able to see all that they do over a course of a week or year. As evidenced by the variability in ratings across the observations, teachers do different things on different days. Furthermore, since I was the sole researcher and had to schedule interviews following each observation at the teachers' convenience, some interviews did not occur until a week after the observation. However, typically interviews were conducted within

three days of each observation. This time gap between interviews may have caused the teachers to forget about CRP they had implemented. Therefore, while interviews did allow participants to elaborate on other CRP they had implemented, it cannot be generalized that the observed and reported sustained CRP was the only CRP implemented since their participation in the CLDC Project.

An additional aspect of the interviews and the findings from this study that is important to recognize is that it was not always clear in the interviews if teachers were talking about CRIOP practices they had implemented during their participation in the project or practices they had implemented in the last three years. Therefore, this limits the ways in which I can discern these findings.

Another limitation to be considered is my positionality within this research. In chapter 3, I described my positionality as a CLDC Project teacher and coach. While my positionality afforded advantages, my position could have potentially impacted the ways in which I interpreted the data.

Lastly, these teachers participated in the CLDC Project the school year before the COVID-19 pandemic, meaning their sustained practices were most likely impacted by the virtual teaching that had to occur so soon to their participation. A generalization cannot be made that teachers would make the same instructional practice choices in the same ways the teachers did in this research.

Implications for Teacher Education and Practice

The findings from this study suggest that teachers experience many barriers in sustaining CRP implementation; however, teachers can sustain PD practices when certain factors and supports are in place. These findings are essential for PD facilitators, teachers,

and other stakeholders to understand because, as this study showed, when essential PD characteristics were implemented, teachers could sustain CRP implementation three years after participating in PD. Kennedy (2016) agreed that to determine the effectiveness of a PD program, teachers should be evaluated following the PD to determine lasting changes to teachers' practices. However, this rarely occurs, and this study sought to fill this gap in research. Moreover, this study also showed what barriers teachers experience in sustained CRP implementation and what CRIOP elements teachers struggle to sustain the most. Avalos (2011) called for a continuous study of teacher PD that accounts for the changing school environments, student demographic changes, and educational policies. Although more research is needed on effective PD practices that enable teachers to sustain CRP, several implications from this study have started to fill a gap in research.

One implication is that facilitators of CRP PD should include frameworks for essential PD characteristics to support teachers in implementing and sustaining PD practices (Darling-Hammond et al., 2017; Desimone & Garet, 2015). It was evident from this study that when effective PD practices were implemented in the CLDC Project, this was related to teachers' sustained CRP implementation. For example, teachers credited their sustained use of CRP to the support they received from their coach and the collaboration among teachers during their project participation (Darling-Hammond et al., 2017; Desimone & Garet, 2015; Kennedy, 2016). Additionally, teachers also mentioned that when they were asked to come back after this participation to the CLDC Project and present on CRP, this encouraged them to continue to use new CRP. These presentations were a powerful collaboration experience for the teachers and allowed them to share their CRP knowledge with other teachers. These aspects of effective PD were also essential to

teachers sustaining CRP independently after participating in the project. As a result, teacher PD on CRP should include effective PD characteristics, especially coaching, collaboration, and include teacher presentations, to support sustained implementation.

A second implication is that a supportive school context where teachers can implement and grow in their CRP is essential for sustained practices. Teachers in the current study identified their amount of instructional autonomy as crucial to their sustained implementation. When teachers had higher levels of instructional autonomy with few school- and district-mandated curricular programs, they were able to sustain more CRP overall. As a result, it is recommended that school administrators and district instructional leaders should provide teachers with appropriate support to implement their learned CRP and minimalize mandated curriculum programs. Additionally, school leaders should participate in professional learning experiences where they can see the value of instructional autonomy. Allowing instructional decision-making would allow teachers to contextualize their instruction to students' lived experiences and enable students to build connections between the curriculum and their culture.

A third implication of this study is that teachers may need more support in implementing Critical Consciousness during their participation in CRP PD. Teachers in the current study experienced challenges in sustaining Critical Consciousness due to parent opposition, the ability to be intentional in developing a critically conscious curriculum, and the time to implement Critical Consciousness units. During teachers' professional learning experiences, support should be given to teachers to navigate these barriers. It is recommended that more attention be given to supporting the implementation of Critical Consciousness during teachers' participation in professional

learning and providing guidance to the perceived challenges they may encounter afterward. For example, teachers could work with their PD coach to plan and implement a Critical Consciousness unit while meeting content standard mandates, and advice can be given to the teacher on how to respond to parent opposition.

A fourth implication of this study relates to teachers' deficit perspectives regarding students and families. Two teachers in this study reported perceived challenges that could be categorized as deficit oriented. When teachers implement CRP, they should view families from an asset-based perspective and include family culture in their classrooms. This finding suggests that more attention should be focused on supporting teachers in developing an asset-based perspective during their professional learning experiences.

Recommendations for Future Research

There are several considerations for future research in teacher PD on CRP related to teachers' sustained implementation. First, since the research involved a specific PD on CRP and training with the CRIOP framework (Powell et al., 2016), teacher PD that uses a different framework, such as the Sheltered Instruction Observation Protocol (Short et al., 2012), could be examined for its impact on teachers' sustained implementation. This comparison would allow future research to examine the effectiveness of the PD program on teachers' sustained CRP.

Secondly, the current study was an intrinsic case study that provided an in-depth understanding of teachers' experiences sustaining CRP three years after participation in PD. While this study has started to fill the gap in the limited research on teachers' sustained CRP after PD, more research needs to be conducted. For example, a more

extensive mixed-methods study could be conducted to determine teachers' sustained CRP and the impacts on student achievement. Also, a large-scale study could be conducted where they survey participants about their CRP and experiences with sustaining CRP. Furthermore, future research could sample teachers with varying levels of motivation and improvement during their participation to determine how their changes during participation relate to their sustained CRP.

Lastly, it is essential to further study teachers' sustained implementation after participating in a PD on CRP. While this study showed a glimpse of teachers' sustained CRP, it would help to continue to learn about teachers' experiences with sustained CRP implementation since few studies have been conducted. Kennedy (2016) also calls for future studies to determine lasting changes to teachers' practices after PD due to the limited research conducted thus far. Also, I recommend that future research be conducted with teachers without the impact of the COVID-19 pandemic soon after their participation. Future research can use the information gathered here to investigate whether the findings are replicable or limited to the study participants.

Conclusion

This study aimed to examine and understand teachers' experiences with sustained CRP three years after participation in PD. In this chapter, I discussed the findings from teachers who sustained CRP three years after participating in PD and linked those findings to existing research and theory. The chapter further discussed factors that related to supports and challenges that teachers experienced in sustaining CRP. Implications of this study include the use of effective PD components, more consideration for teaching through an asset-based mindset during CRP PD when it comes to approaches and

inclusion of families in classrooms, and professional learning opportunities for administrators and stakeholders regarding the impact of instructional autonomy and mandated curriculum programs can have on sustained CRP.

Appendix A

Culturally Responsive Instruction Observation Protocol (CRIOP): Holistic Areas and Indicators

Classroom Relationships

1. The teacher demonstrates an ethic of care
2. The teacher communicates high expectations for all students
3. The teacher creates a learning atmosphere that engenders respect for one another and toward diverse populations
4. Students work together productively

Family Collaboration

1. The teacher establishes genuine partnerships (equitable relationships) with parents/ caregivers
2. The teacher reaches out to meet parents in positive, non-traditional ways
3. The teacher encourages parent/family involvement
4. The teacher intentionally learns about families' linguistic/cultural knowledge and expertise to support student learning

Assessment Practices

1. Formative assessment practices are used that provide information throughout the lesson on individual student understanding
2. Students are able to demonstrate their learning in a variety of ways, including authentic assessments
3. Authentic assessments are used frequently to determine students' competence in both language and content
4. Students have opportunities for self-assessment

Instructional Practices

1. Instruction is contextualized in students' lives, experiences, and individual abilities
2. Students engage in active, hands-on, meaningful learning tasks, including inquiry-based learning
3. The teacher focuses on developing students' academic language
4. The teacher uses instructional techniques that scaffold student learning
5. Students have choices based upon their experiences, interests, and strengths

Discourse

1. The teacher promotes active student engagement through discourse practices
2. The teacher promotes equitable and culturally sustaining discourse practices

3. The teacher provides structures that promote academic conversation
4. The teacher provides opportunities for students to develop linguistic competence

Critical Consciousness

1. The curriculum and planned learning experiences provide opportunities for the inclusion of issues important to the classroom, school, and community
2. The curriculum and planned learning experiences incorporate opportunities to confront negative stereotypes and biases
3. The curriculum and planned learning experiences integrate and provide opportunities for the expression of diverse perspectives

Appendix B

Core Semi-Structured Interview Questions

1. What is your definition of culturally responsive practices? What does it mean to be a culturally responsive teacher?

2. What have been your biggest successes in using culturally responsive practices with your students?

3. In the culturally responsive practices you are using with your students, what has helped you continue to use those? Are any of these continued practices related to your experiences with the CLDC Project?

4. What have been your biggest challenges in using culturally responsive practices with your students? Have these challenges kept you from being a more culturally responsive teacher?

Family Collaboration questions from CRIOP

1. Please tell me about the conversations you have had with the parents/caregivers of your students. Where did these meetings occur? What did you learn from those conversations? What if anything have you done differently around parent conversations this year?

2. Can you give me some examples of how you've used the knowledge you've acquired from parents/caregivers to enhance student learning and/or classroom instruction? Is there anything new in how you have approached this?

3. What methods do you typically use to communicate with parents/caregivers? How often does this communication occur? Please describe all of the methods you use (notes home, phone calls, home visits, social events, parent workshops, etc.). Why do you

choose to use these means to communicate? Is there anything different in how you communicate this year?

4. If you have conducted home visits, what is the purpose for the visits? What information do you gather? How do you use that information? If you don't conduct home visits, what are the reasons you don't?

5. Do parents/caregivers participate in classroom activities and events? If yes, describe how they participate.

6. What else can you tell me about how you work with the families and students in your class?

Appendix C

Semi-Structured Interview Protocol for First Interview

1. How did you come to participate in the CLDC Project?

2. Talk to me about your experiences in teaching English Learners.

3. Reflect on the time during your participation in the CLDC Project. What was that experience like?

4. Talk to me about what I observed today in your classroom. Was the lesson you taught today typically of your classroom instruction? Are there other lesson components that you usually include in your classroom instruction that you didn't include in this lesson?

5. Is there anything specific that you did today with your instruction that was impacted by your participation in the CLDC Project?

6. During my observation I noticed your classroom setup. Did the CLDC Project have anything to do with how you chose to setup your classroom?

7. Is there anything else you would like to tell me about your experiences in the CLDC Project or my classroom observation today?

Semi-Structured Interview Protocol for Second Interview

1. Reflecting on your time in the CLDC Project, what are some aspects of that PD that have continued to stick out to you?

2. Were there aspects of the PD that were more helpful to you in implementing culturally responsive practices? Was there anything that wasn't helpful?

3. Thinking back to the CRIOP elements, Classroom Relationships, Family Collaboration, Assessment, Instruction, Discourse, and Critical Consciousness, are there elements that you have continued to use since you participated in the PD? Any CRIOP elements you haven't continued to use?

4. What has impacted your abilities to continue to use the CRIOP elements you mentioned? Is there anything from the CLDC Project that have helped you continued to use the CRIOP elements?

5. With the CRIOP elements you haven't continued to use, what factors have prevented that? Have you found ways to overcome those challenges?

6. Talk to me about what you have done in your classroom since my last visit. Any specific examples of culturally responsive practices?

7. Now talk to me about what I observed today in your classroom. Was the lesson you taught today typically of your classroom instruction? Are there other lesson components that you usually include in your classroom instruction that you didn't include in this lesson? Was anything you did today related to your experiences in the CLDC Project?

8. Is there anything else you would like to tell me about what you have done in your classroom this school year or other school years since you participated in the PD?

9. Is there anything else you would like to mention about the CLDC Project or the culturally responsive practices in your classroom?

Semi-Structured Interview Protocol for Third Interview

1. Talk to me about your instruction since your time in the CLDC Project? What have been your biggest changes as a culturally responsive teacher? What do you attribute to those changes?

2. What have been your teaching experiences since you participated in the PD?

3. How have you become a more culturally responsive teacher since you first participated in the PD? What about after your participated in the PD?

4. What aspects of the CLDC Project have supported you in continuing to become a more culturally responsive teacher? Were there specific components of the PD that helped you continue to use the CRIOP elements?

5. What other things have impacted the ways in which you use culturally responsive practices?

6. What challenges have impacted your use of culturally responsive practices? Was there anything from the CLDC Project that helped you overcome these challenges?

7. Talk to me about what you have done in your classroom since my last visit. Any specific examples of culturally responsive practices? Can you attribute any of these practices to your experience in the CLDC Project?

8. Now talk to me about what I observed today in your classroom. Was the lesson you taught today typically of your classroom instruction? Are there other lesson components that you usually include in your classroom instruction that you didn't include in this lesson? Was anything you did today related to your experiences in the CLDC Project?

9. Is there anything else you would like to tell me about what you have done in your classroom this school year or other school years since you participated in the PD?

10. Is there anything else you would like to mention about the CLDC Project or the culturally responsive practices in your classroom?

APPENDIX D: FIRST-LEVEL CODING CHART

1st level coding	Sub-coding	Example from Data
CRIOP	Assessment	Teacher: "So, they [students] use their math journals, we'll use performative assessments, whiteboards. They'll write on the tables. I feel like math is a lot of manipulatives and hands on stuff. The formative assessments are much more like a checklist, me walking around, who's getting what, who's not?"
CRIOP	Classroom Relationships	Teacher: "I told the kids, and I emailed their parents, and I said I like, love to try to come to, you know, one thing per semester for the kids. Like if it's a birthday party, great, if it's, you know, if they have a gymnastics practice they want me to come and watch them at like you know,

		I've been to horse shows.”
CRIOP	Critical Consciousness	Teacher: “We [teacher and coach] had talked about the critical consciousness with like the plastic straws, which was what Ava’s project, I guess. Um and I didn't use it that first year during project place stuff. But I used it the next year.”
CRIOP	Discourse	Teacher: “We're focused really heavily this year on including speaking and writing more in whole group curriculum times. So, having kids have access to opportunities to speak or write more.”
CRIOP	Family Collaboration	Teacher: “So, they [students and family] put that [scrapbook page] together. Students get to share with the class and kind of, you know, tell them about their life and their people.”
CRIOP	Instruction	Teacher: “I've talked a ton about the picture

		word induction method and GVMs like I think those are beneficial just to increase the way that my kids talk about content in my classroom."
Supports		Teacher: "I think not having the like restraints of you have to teach this book, and this story makes it a little bit easier for me to be able to still implement the culturally responsive teaching because I can pick and choose when stories and want to use or what type of writing piece I want to do."
CRIOP elements continued to use		Teacher: "Critical consciousness. I feel like I've done a ton with it, but I feel like that was probably one of my stronger pieces."
Challenges		Teacher: "I think the biggest is pushback; sometimes, parents make a snap judgment. 'This teacher is

		teaching this, and I don't want my kid to know it.”
CRIOP elements not continued to use		Teacher: “Um, in some shape, form, or fashion, there's something of the CRIOP that I can't use. Meadowbrook is very regimented right now to improve scores and our admin team has a very distinct thought pattern on how they want it [instruction] to work.”

APPENDIX E: OPEN CODING CHART

Code	Sub-coding	Definition	Example from Data
Assessment	- Authentic assessment - Differentiation - Formative - Self-assessment - Standardized - Student choice	Teacher used various forms of assessment to determine student learning.	Teacher: "We were standards based at Stone. And so, they [students] got to try and try and try until they had a mastery score."
Attribute changes	- Coach - District support - Seeing other teachers; experiences with CRP - Start with small activities from PD	Teacher answered interview questions about what they attribute their changes to with implementation of CRP.	Teacher: "Probably when [coach name] came in and she was like, 'let me show you how to do this picture word induction method'."
Challenge	- "Getting other teachers on board - "Aligning it with what the specific class would need" - Autonomy - COVID - COVID soon after PD participation - Critical Consciousness activities that are age appropriate - District/school curriculum mandates - Family Collaboration - Family opposition - Funds - Intentional - Other school responsibilities - School culture	Teachers' perceived challenges with sustaining CRP implementation	Teacher: "I feel like overall, I think with their Critical Consciousness units, I feel like you definitely have to be intentional and on top of your game in order to plan those out ahead of time, in order to fit with whatever, and again, this is a little bit easier where I am now, but I think that at the old school it was you had to plan it to where it fit with

	- “Students say they don’t have family artifacts” - “Students are not biliterate” - “Students’ lack of outside experiences” - Time		whatever the curriculum was that you were teaching to that point.”
Changes	- “Have nuanced conversations that just pop up [with students and families] - “Just thinking through, how can I make this make sense to my kids?” - All kids benefit from CRP - Building relationships with students and families - Critical Consciousness - CRP can be in every subject - Definition of CRP changes - How to best scaffold - Success criteria for students - Using more visual instruction	Teachers’ responses to interview question, “What have been your biggest changes as a culturally responsive teacher?”	Teacher: “I just think that like thinking through the end result of whatever it is that I'm teaching. And figuring out how to best, I mean best to scaffold it for my kids. And I think again, we started off with our kids that were ESL. And we realized, like, ‘hey, all these kids can benefit from having this system’ [CRP].”
Classroom Relationships	- Affirming messages - Classroom library shows appreciation to diverse groups - Classroom setup - High expectations - Identity activities - Students see each other as resources - Students work productively together	How the teacher established teacher care and a culturally responsive classroom environment	Teacher: “We would hang those [posters], and we were talking about those around Día de Los Muertos. So, yeah, like some cheesy things like that. But also, if there's something that they were proud

			of, we would display it or something like that.”
Continued to use explanation	- "I still do them because it was successful when we first learned it" - "Regular teaching practices" - "Seeing benefits of it [CRP]" - Coach support - Collaborated with school support staff - In yearly lesson plans - Participating in this study - School culture - Student engagement - Student growth - Teachers' shared experiences at PD	Teachers were asked what CRIOP elements they felt like they have continued to use. Then following their response, they were asked, “what helped you continue to use CRP?”	Teacher: “Probably student engagement with them [CRP]. So, like when we used them [CRP], the kids are more successful or it's like they want to continue the conversation, or they want to you know ask about it again later or we've talked about something and then they make a connection to it later.”
COVID	- "Getting back into the swing of things" - Accountability (students) - Impacted discourse - Impacted family collaboration - Little impact on practices - Soon after PD participation	Teachers’ responses on how COVID impacted their use of CRP	Teacher: “I feel like I got very, very lucky where I was. I feel like I was still able to use a lot of the same strategies and little tips and tricks from the CLDC Project through my zoom”
CRIOP elements continued to use	- “Naturally good teaching” - Assessment - Critical Consciousness - Family Collaboration - Instruction	Teachers were asked what CRIOP elements they felt like they have continued to use.	Teacher: “Critical consciousness. I feel like I've done a ton with it, but I feel like that was

			probably one of my stronger pieces.”
CRIOP elements not continued to use	- All of them - Family Collaboration - None of them	Teachers’ responses to the question regarding what CRIOP elements they have not continued to use	Teacher: “I don't think so. It's like they're all really important and I feel like it's just, they're all part of like, being a naturally, you know, that's just naturally good teaching. It's like you need to have all those aspects.”
Critical Consciousness	- Inclusion of topics important to classroom, school, and community - Stereotypes and biases - Writing - Literature - Multiple perspectives - Questions - Real-world issues	How the teacher explored issues important to students and their families, encouraging students to engage in problem-solving of real-world issues, and analyzing biases in texts and aspects of popular culture	Teacher: “So, the plastic in the ocean of writing pieces that we did. I mean we had kids coming to us that couldn’t write in complete sentences, let alone write a five paragraph, you know essay about why they think people should use less plastic. And just the drive and the excitement to write, I feel like was very eye opening to a lot of teachers.”
Definition of CRP	- "All-encompassing" - "Everybody is given the tools that they need to be successful academically and socially within school"	Teachers were asked to explain their definition of CRP	Teacher: “I feel like being aware of obviously like your students, the world around you, making

	- "Manner's teacher now" - "Opening students' eyes" - "Seek and learn new information about their (students') cultures - "Teaching students about other people, cultures, and differences" - "The world is so much bigger than themselves (students)" - Awareness - Classroom environment - Definition changed because of teaching context - Make connections to classroom - Open mind - Student representation - Students' needs		sure that they are aware of the world around them and where they fit into it. And that the world is so much bigger than themselves…"
Discourse	- Accountable talk - Culturally sustaining discourse practices (speak L1) - Registers for language - Students creating questions	How the teacher provides abundant opportunities for student conversation and explicitly teaches the "language of power".	Teacher: "Getting them [students] access to some of those accountable talk stems that they can actually naturally use."
Family Collaboration	- "Asking more information of the parents instead of being totally kid focused" - "Important to keep the rest of it (CRIOP) flowing" - "Just because the family is speaking a different language, they know what's	How the teacher promotes open communication between families and the teacher, developing partnerships with parents and caregivers, and valuing "funds of knowledge"	Teacher: "I think asking more. Like asking more information of the parents, not just keeping it totally focused on the kid. Like what do you like? What do you do? Or

	going on" (avoiding deficit perspective) - "Their (ELs) families are receptive" - Building trust/relationships with families - Communication about academics - Communication about behavior - Communication about SEL - Conferences - Families don't participate in academic events - Families participating at school - Family artifact project - Family notices students' academic improvement - Family scrapbooks - Family survey - Family/Home visits - Funds of Knowledge - Learning about families - Learning about students - Partners in students' education - Positive contacts home - School counselor - School support staff - School-wide/Grade level event - Seeing families outside of school - Teacher is coach of sports team - Translation - Volunteer		asking them what do you like to do at home or things like that? So, try to make like an actual, authentic connection with them. That's not just kid focus.”

Instruction	- "Drive and excitement to write" - "Explain their (students) thinking" - "How to" writing piece - "Science of reading" - Academic language - Asking questions - Authentic audience - Autonomy - Centers - Cognates - Critical consciousness literature - Differentiation - Family member leading instructional activity - GVM - Hands on - Hook - Kagan - L1 - Language objectives - Math - Math program - Model - Modeled writing - Multicultural/bilingual literature - Opinion pieces - Partners - Phonics - PWIM - Read aloud - Reading - Reading comprehension - Reading program - Scaffolding - Science - Science program - SEL	Instructional practices teachers implemented	Teacher: “So, like vocabulary or using like the picture word induction method to generate more vocabulary and having them being able to write and use those words.”

	- Sentence stems - Social studies - Student choice - Student engagement - Student interests - Students checking each other's work - Students saw their own growth - Teacher plans with school support staff - Team/grade collaboration - Technology - Using visuals - Verbal rehearsal - Vocabulary - Whole group - Word wall - Writing		
Overcome challenge:	- "Having different conversations with a new team" - "If it's important to you, you're going to do it (CRP)" - "Required us to think differently" -Be more intentional with family collab - Coach - District support - Other teachers in PD were inspiring - PLACE made it "okay to slow down" instruction - PLACE was an "excuse" for teacher to use different instruction - School schedule flexibility - Students need exposure to hard conversations	Teachers were asked to describe how they have overcome challenges they experienced in sustaining CRP implementation	Teacher: "I feel like it's [CRP] one of those things, but if it's important to you, you're going to do it."

PD helpful in implementing CRIOP	- Can adapt activities to context - Collaborating/sharing experiences with other teachers - Goal of CRP referenced frequently - Resources provided to teachers - Teacher presentations	Teachers' response to "what aspects of the PD were most helpful in implementing CRP?"	Teacher: "I think talking with other teachers and collaborating with them, seeing what worked, what did not work."
PD	- "Beneficial" - "Community" - "Empower students" - "Grow from discomfort" - "Ingrained in your mind because you had done it [activity]" - "It [PD] made CRT okay" - "Using these strategies with all of my kids, not just ELs" - Aware of teachers' other school responsibilities - Build background knowledge - Can adapt activities to context - Coach - Coach "encouraged and supported" - Coach modeled - Coach planning/brainstorming ideas - Collaborating with another teacher from a different country - Collaboration across grade levels - Compared to other PDs - CRIOP	Components of the CLDC Project teachers mentioned	Teacher: "I would think that learner aspect is probably one of the bigger ones, like, they stuck better, I guess. Being able to experience it versus just look at it or hear about it. So, I think that one definitely resonates. The yearlong was very beneficial that it wasn't all crammed into three days and then all of a sudden, you're supposed to use it, right? It was like spread out. We had multiple check-ins.

	- CRIOP provided "best practices" - Discourse - Door prize books - Duration - Facebook - Facilitators/Other researchers - Family collaboration - Felt comfortable sharing - Follow up/accountability - Hands on - Implement strategies in multiple content areas - Implement strategies right away/Simple to implement - Instructional activities - Motivation to join PD - Multicultural/bilingual literature - Multiple approaches to goal of CRP - Participated as a school team - Planned unit with coach but couldn't use it until next school year (positive) - Presentations - Provided "hard copy" resources to implement - Provided all the resources needed to implement CRIOP - Teacher adds CRIOP to other PD practices - Teacher came back to present at PD - Teacher collaboration		

	- Teacher was the learner in activities - Teachers had common pedagogical values - Teachers sharing CRP effects - Teachers sharing experiences - Texts provided - Took strategies back to other teachers at school - Vertical planning - Vocabulary - Workshop - Writing strategies		
School context	- "Family collaboration was always huge" - "Had to justify why I wasn't using the curriculum set" - "No connection between students and staff" - "Window and the mirror" - Admin/district/other teachers saw CRIOP benefits - CSI school - Expectations about instruction - Have to teach at grade level - Huge push to attend other PDs - Lack of cultural awareness - Large EL population - Mentor program - No mandated curriculum - Not as open since Covid	Characteristics of teachers' school context	Teacher: "The family collaboration was always huge at Stone. Here, um, I'm growing in the relationships that I have with the parents and the families. And I'm seeing some improvement."

	- Provided other PD trainings - Push to become more culturally responsive - School mission - School took away time to build relationships with students - Scores driven - Teacher thinks vocabulary PD is needed in school		
Success	- "Aha moments" - Classroom relationships - Collaborating with school support staff - Discourse - Family collaboration - Involving community members - Literature - PWIM - Scaffold - Student academic confidence - Student engagement - Student growth - Students take ownership of school-wide family event - Vocabulary - Writing	Teachers identified their biggest successes with CRP	Teacher: “Using some of their [students’] background in my teaching concepts. So, like understanding that they do have this whole other language that they speak at home, how can we connect it to what they're doing in class?”
Supports	- Admin and school culture - Collaborating with other school teachers - Coming back to present at PLACE - Facebook page - Open invitation to call CLDC project people - PD	Teachers were asked multiple times what kind of factors or supports they have experienced in sustaining their CRP implementation	Teacher: “So, like if I'm talking to like the fourth-grade teacher and she's not trained in it [CRIOP] or anything like that, I'll use some of those strategies that I've learned to

	- Teachers from the same school are participating now - Training other teachers about CRIOP		teach her about it based on content.
Teacher	- "Drawn to them (ELs)" - "I don't know that I do it (CRP) very well" - "Need to do a better job of it (family collab)" - Change of grade levels - Chose EL students - Confidence - Deficit perspective - Got other teachers to use CRIOP units - Influenced other teachers (positive student effects) - Reflected after our interviews - Share past teaching experiences with current students - Unprepared to teach ELs when she started teaching	Significant reflections by the teachers	Teacher: “I think they've [her instructional practices] definitely improved. I think that, you know, with my confidence being built just from more experience of teaching, but my experience has been in this building with a large EL population. So, like not only did we have you know, the project training, but we've had other training to support the needs of this specific student group here.”

APPENDIX F: SECOND-CYCLE CODES AND THEMES ACROSS TEACHERS

Research Question	Theme	CRIOP Codes	Codes	Code Count
RQ 1	Change of mindset about families	CRIOP: Family Collaboration	- Family collaboration: "Asking more information of the parents instead of being totally kid focused" - Family collaboration: Learning about families - Family collaboration: "Important to keep the rest of it (CRIOP) flowing"	15
RQ 1	Multicultural literature	CRIOP: Classroom Relationships CRIOP: Instruction	- Classroom relationships: Classroom library shows appreciation to diverse groups - Instruction: Multicultural/bilingual literature	12
RQ 1	Instructional strategies	CRIOP: Instruction	- Changes: How to best scaffold - Changes: Using more visual instruction - Instruction: GVM - Instruction: PWIM - Instruction: Sentence stems - Instruction: Using visuals	34
RQ 2	Specific PD components	CRIOP: Instruction	- PD: Coach - PD: Coach "encouraged and supported" - PD: Coach modeled - PD: Coach planning/brainstorming ideas - PD: Collaboration across grade levels - PD: Planned unit with coach but couldn't use it	60

			until next school year (positive) - PD: Presentations - PD: Teacher came back to present at PD - PD: Teacher collaboration - PD: Teacher sharing CRP effects - PD: Teachers sharing experiences - Supports: Coming back to present at project	
RQ 2	Opportunities to share their own CRP expertise	CRIOP: Instruction	- PD: Presentations - PD: Teacher sharing CRP effects - PD: Teachers sharing experiences - Supports: Collaborating with other school teachers - Supports: Training other teachers about CRIOP - Teacher: Got other teachers to use CRIOP units - Teacher: Influenced other teachers (positive student effects)	32
RQ 2	Supportive school context	CRIOP: Assessment CRIOP: Discourse CRIOP: Instruction CRIOP: Critical Consciousness	- Assessment: Standardized - Discourse: Accountable talk - Instruction: SEL - Instruction: Autonomy - Instruction: Read aloud - Instruction: Reading - Instruction: Reading program - Instruction: Math program - Instruction: Social studies - Instruction: Vocabulary	124

			- PD: Teacher adds CRIOP to other PD practices - School context: "Had to justify why I wasn't using the curriculum set" - School context: Large EL population - School context: No mandated curriculum - School context: Expectations about instruction - School context: Admin/district/other teachers saw CRIOP benefits - School context: School mission - Supports: Admin and school culture	
RQ 2	Impacts of students	CRIOP: Classroom Relationships CRIOP: Critical Consciousness CRIOP: Instruction	- Continued to use explanation: Student engagement - Continued to use explanation: Student growth - Instruction: Academic language - Instruction: Student engagement - Instruction: PWIM - Instruction: GVM - Instruction: Scaffolding - Instruction: Students saw their own growth - Instruction: Writing - Success: Student engagement - Success: Student growth	66
RQ 3	Implementation of Critical Consciousness	CRIOP: Critical Consciousness CRIOP: Instruction CRIOP: Family Collaboration	- Challenge: Family opposition - Challenge: Critical consciousness activities that are age appropriate	25

			- Challenge: District/school curriculum mandates - Challenge: Time - Critical Consciousness: Literature - Instruction: Critical consciousness literature - PD: Coach - Teacher: Change of grade levels	
RQ 3	Constraints related to teachers' school contexts	CRIOP: Instruction CRIOP: Assessment CRIOP: Family Collaboration	- Challenge: Autonomy - Challenge: District/school curriculum mandates - Challenge: Family collaboration - Challenge: Funds - Challenge: Other school responsibilities - Challenge: School culture - Challenge: Time - Challenge: "Getting other teachers on board" - Instruction: Autonomy - Instruction: Critical consciousness literature - Instruction: Multicultural/bilingual literature - Instruction: Reading - Instruction: Reading program - Instruction: Math - Instruction: Math program - School context: CSI school - School context: "Had to justify why I wasn't using the curriculum set" - School context: "No connection between students and staff"	119

			- School context: Expectations about instruction - School context: Lack of cultural awareness - School context: School took away time to build relationships with students - School context: Scores driven - Teacher: "I don't know that I do it [CRP] very well" - Teacher: Reflected after our interviews	
RQ 3	Deficit perspectives of students and families	CRIOP: Instruction CRIOP: Family Collaboration	- Challenge: “Students' lack of outside experiences” - Challenge: “Students don't have family artifacts or traditions” - Challenge: Family collaboration - Family collaboration: Families participating at school - Family collaboration: Family artifact project - Family collaboration: Families don't participate in academic events - Family collaboration: Funds of Knowledge - Family collaboration: Volunteer - Family collaboration: School-wide/Grade level event - Instruction: Critical consciousness literature - Instruction: Vocabulary - PD: Build background knowledge - Teacher: Deficit perspective	64

RQ 3	COVID-19 pandemic	CRIOP: Family Collaboration CRIOP: Discourse CRIOP: Instruction	- Challenge: Covid - Challenge: Covid soon after participation - Covid: "Getting back into the swing of things" - Covid: Soon after PD participation - Covid: Impacted discourse - Covid: Impacted family collaboration	11

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VITA

Brittany Manion

Professional Experience

Research Assistant: University of Kentucky	August 2019-July 2023
Science Teacher: Tate's Creek Middle School	July 2015-July 2019
Science Teacher: Second Street School	December 2013-June 2014

Education

University of Kentucky: Doctoral Degree (Expected)	August 2019-August 2023
Graduate Certificate – Teaching in Culturally and Linguistically Diverse Classrooms	June 2018-May 2019
University of the Cumberland's: Master's Degree	August 2016-July 2017
University of Kentucky: Bachelor of Science	August 2009-December 2013

Recognition

Cantrell, S. C., Perry, K., & **Manion, B**. (December, 2021). *Lessons learned from listening to teachers reflect on their experiences with external coaches.* Paper presented at the annual meeting of the Literacy Research Association, Atlanta GA.

Cantrell, S. C., Graham, A., & **Manion, B**. (October, 2019). *Strategies for culturally responsive instruction in the content areas.* Paper presented at the annual meeting of the Association of Middle Level Educators, Nashville, KY.

Publications

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Publications in Progress

Cantrell, S., Perry, K., & **Manion, B**. "I'm Pretty Sure We Did Every Idea": Teachers' Experiences with External Coaches and their Relation to Transformative Learning". Submitted to Teacher Development, has been reviewed.