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Connecting Culturally Relevant and Sustaining Education Competencies in Teacher Preparation Programs to the Experiences of Mixed-Race Learners in K-12 Settings: A Mixed Methods Study

A Dissertation Presented to

The Faculty of the Educational Doctorate in

Transformational Teaching and Learning Program of

Kutztown University of Pennsylvania

In Partial Fulfillment

Of the Requirement for the Degree Education Doctorate

By Marissa D. Wallace, M.Ed.

April 16, 2024

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CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

This Dissertation for the Education Doctorate in Transformational Teaching
and Learning Degree

By Marissa Wallace

has been approved on behalf of the College of Education

Dissertation Committee:

Dr. Amy Pfeiler-Wunder, Committee Chair

Dr. Helen Hamlet, Committee Member

Julian Saavedra, Committee Member

April 16, 2024

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ABSTRACT OF THE DISSERTATION

Connecting Culturally Relevant and Sustaining Education Competencies in Teacher Preparation Programs to the Experiences of Mixed-Race Learners in K-12 Settings: A Mixed Methods Study

By

Marissa Wallace

Kutztown University of Pennsylvania, 2024

Kutztown, Pennsylvania

Directed by Dr. Amy Pfeiler-Wunder

Mixed-race individuals are increasing in number within the United States population. There is limited research on mixed-race learners in K-12 school settings. This study delves into the unique educational experiences of this group of learners and provides implications for future teachers. With a focus on the Pennsylvania Culturally Relevant and Sustaining Education (CR-SE) competencies, the researcher incorporates the competencies into course work and field experiences for pre-service teachers taking a course focused on literacy instruction and intervention. Quantitative, pre- and post- surveys, and qualitative data, open-ended responses, observations, and end of semester reflections were collected from pre-service teachers. Qualitative data, anecdotal narratives, were collected from families of mixed-race learners. Through action research and a mixed methods approach, the insider researcher uncovers converging themes through the data analysis process. These converging themes center on the

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importance of culturally relevant and sustaining pedagogy and identity and sense of belonging. The connection between themes in the data and the literature review solidifies the need for changes to teacher preparation programs. This research suggests the use of the CR-SE competencies as an effective framework to infuse in courses and field experiences. In doing so, pre-service teachers will potentially increase their understanding and application of culturally relevant and sustaining education practices to create inclusive classrooms for their future, diverse students.

Keywords: Culturally relevant and sustaining pedagogy, mixed-race, pre-service teachers, diversity, identity, belonging, teacher preparation program

Signature of Investigator

Monica Wallace

Date 04/16/2024

Dedication

To my mother -You instilled the value of education in me as a child. It is one of the many gifts you gave me. I know moms are supposed to be their children's biggest fans, but you took this role to a whole other level. I always felt your sense of pride and unconditional love for me. Even though you are not physically with us, I thank God that I felt your pride and love throughout this dissertation process. It kept me going through some of the darkest days and trust me there were many! As a single parent, you never once made me feel less than or incapable of achieving my dreams. You fully supported me through all my endeavors and often sacrificed parts of yourself to do so. I'm beyond grateful for what you did and now that I'm a parent, I understand why you did it. Thank you. This is for you mom.

To my boys -You are my why. You deserve to be seen and celebrated. Embrace all parts of your identity, be your authentic selves always. I never knew I could love others as much as I love you two. You keep me on my toes and encourage me to be better for you. You were the strength and inspiration I needed when I wanted to give up on this dissertation. Being your mom and watching you grow up is the best blessing. I know you both will move mountains. And just like my mom was for me, I am your biggest fan.

To my students past and present -I wouldn't be here without you. The past 15 years in education has granted me the privilege of teaching amazing individuals in K-12 and higher education. You will always be at the center of my work, and I will never give up on equity.

Acknowledgements

Relationships are the glue that held me together throughout this dissertation journey.

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It was fate that I was selected to be a part of this doctoral cohort, such an impressive group of individuals that I am proud to call colleagues and friends. I am thankful to know each of you and admire your individual endeavors! A special thank you to my LSC, the fabulous Wunder Scholars, Melissa and Beth. I can't begin to express my gratitude without tearing up. You both have provided an immense amount of support for me during this wild ride. Thank you for listening, loving me, and always being there to help me out. I honestly don't know how I got so fortunate to be in your presence. To Chris, my presentation partner; thank you for the numerous check ins, holding me accountable, and constant meaningful discourse about life and academics.

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Thank you to my pre-service teacher participants and families of mixed-race learners. I am humbled by your willingness to engage in this study and trust me with your data. You are the heart of this research and the change agents.

Last but certainly not least, to my village, my family and friends. These past three years have been the most challenging and rewarding years of my life. I could not have made it to the finish line without your love, patience, and support. There are so many of you that have shown humanity through watching my kids, bringing me food, giving me pep talks, buying me drinks, and allowing me to cry on your shoulders. To the real MVP, my husband. Romario, thank you for being my partner through it all. You shared my vision and never once let me get off track. There is no one else I want to endure life with. Next stop, writing our book.

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CHAPTER 1: THE PUZZLE OF PRACTICE

The Beginnings

His winter jacket hid the **yellow, green, purple, orange,** and **black** designs. The intricate designs were meant to be seen. The colorful garment he wore under his boring, dark blue winter jacket remained unseen by his teachers and peers for most of the day. It made me wonder; did he feel unseen? There, in that space, did he not want to expose his true self, show his true colors? Was it safer for him to hide in his boring, dark blue winter jacket? The jacket was familiar to his teachers and peers. It was vanilla, no thrills. The jacket didn't draw attention to him. The colorful garment did. Within ten seconds after we entered his preschool that day, the questions started. "What is he wearing?" "What's that thing called again?" "Why is he wearing that?" I watched the smile on my formerly excited son's face begin to fade. The questions were too much for his three-year-old brain to process.

Earlier that February morning, there was a sense of pride when my son put on his dashiki. He didn't know what the West African apparel symbolized or the extent of its cultural and political uses. He did know that he loved the colors and that it was Black History Month. He knew he was Black, or as he referred to himself, tan – mixed with white and black. He knew he wanted to show off this article of clothing that he got to wear when he celebrated Kwanzaa. My three-year-old couldn't articulate any of this to those asking the questions, his White preschool director and his White teacher. And to be honest, neither could I. I mumbled forgettable responses to their questions. I felt the heat in my cheeks, and I was sure my white face was turning red. Was I embarrassed, angry? What were these feelings surging inside? Why couldn't I say anything to educate or school them on their cultural insensitivity?

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I wasn't always able to articulate the nagging thought in my subconscious when I found out I was pregnant with our first son. However, it became inevitable not to have conversations with my spouse, family, colleagues, and friends about bringing a mixed-race child into this world. At the time, his educational experience seemed like light years away. My husband and I, along with other biracial couples spoke at length about the importance of sending our mixed-race children to diverse schools where they would feel accepted and represented. While living in Philly, this seemed like a feasible plan.

Before we knew it, our first son was school-aged. We were living in the third largest city in Pennsylvania when he began Pre-K. He didn't even make it through his Pre-K year before we realized our optimistic plan was not a reality for our mixed-race son. I vividly remember the sadness and anger I felt the day he wore that dashiki to school and was made to feel self-conscious by his teacher's comments and confusion. It was a distinct moment in which I realized that he was more accepted in his school when he did not exercise his blackness. His whiteness was not confusing or different. This other, equally important part of him, created discomfort within his learning environment.

This duality of Black and White that our son experiences is not uncommon. In fact, there is an increasing number of individuals like him from various mixed-race backgrounds. Data collected by the United States Census Bureau shows the following, "The multiracial population has changed considerably since 2010. It was measured at 9 million people in 2010 and is now 33.8 million people in 2020, a 276% increase" (Jones et al., 2021, figure 3). A sense of urgency

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emanates from this data, and it directly impacts my puzzle of practice focused on connecting culturally relevant and sustaining education competencies in teacher preparation programs to the experiences of mixed-race learners in K-12 settings.

Researcher Positionality

The exploration and inclusion of my positionality will lend itself to understanding how my lived experiences brought me to this body of research. It also provides the reader with a glimpse into the limitations and bias that impact my interaction with this study. According to Herr and Anderson (2015), "...in making explicit the tensions we experience as researchers in our varying roles and statuses, we have the possibility of crafting uniquely complex understanding of the research question...we hope to avoid the blind spots that come with unexamined beliefs" (p. 55). I intend to be transparent and forthcoming in who I am and my connection to this research (professionally and personally) to yield validity and trust in the data analysis and outcomes of this research study.

I am a cisgender, white, heterosexual female with a hearing impairment. I grew up in a single-parent household in the third largest city in Pennsylvania. My mom worked as a server at Red Lobster when I was in elementary school. Growing up, I was unaware of how society viewed me and the limitations that I could/would experience as a lower-class, disabled, female. I recall my childhood as one filled with privilege. I had clothes, food, a house, Nintendo, a Catholic school education, friends, family, and vacationed every summer. My mom masked our financial shortcomings, and I never knew that we were "poor" or how much she sacrificed. I

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compensated for my deafness and single-parent household by excelling academically. As a child, my racial and cultural background positively influenced how I experienced the world. I believe our whiteness benefited us and shielded us from judgment, discrimination, and lack of resources.

I carried my whiteness with me to undergraduate and graduate school. I distinctly remember the first time I questioned our government and whether America really was the home of the “free.” I was a freshman sitting in my Honors English Composition classroom. We were reading *Freedom Riders* and *Angela Davis*. Eighteen years of privilege and socialization. Eighteen years of misconceptions. I didn’t know at that time what to do with this new information or how it was going to shape my future self.

When I moved to the largest city in Pennsylvania to begin my career in education, I became overtly aware of how I experienced the world. More importantly, I became uncomfortably aware that others didn’t experience the world the same way I did, especially in the realm of race and education. The weight of my privilege became heavy when I realized that my Black and Brown students were largely underserved and overlooked in the public school system.

I vividly remember the day I uttered the words, “I don’t see color” at a staff meeting at a predominantly Black middle school. It was my third-year teaching and 11 years after I began questioning the America I thought I knew. My naivety and absence of knowledge was excruciatingly evident to the diverse group of educators in the room with me that day. I was called out immediately and the discourse that followed was pivotal in my development as a

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teacher, leader, researcher, and human-being seeking to be anti-racist. I didn't understand the harm that I caused my students over the years as a colorblind individual until that day.

A variety of literature exposes the detriment of colorblindness or race-evasiveness in the education system (Howard, 2010; Chang-Bacon, 2022; Howard, 2018). When referring to colorblindness, Williams (2011) defines it as, "...the racial ideology that posits the best way to end discrimination is by treating individuals as equally as possible, without regard to race, culture, or ethnicity" (para 1). Failure to see color and embrace the lived experiences of non-White students can create academic and social gaps in our classrooms. According to The Conscious Kid Education, Research, and Policy Organization (n.d), "The transition to the term race evasive expands the framework of colorblindness by acknowledging the intentionality in avoiding substantive discussion or acknowledgment of race and its connection to White Supremacy, power and/or privilege and ableist language" ("Racial Literacy", race-evasiveness). Ignoring race and diversity can lead to students lacking a sense of belonging and educators lacking cultural proficiency.

Tyrone C. Howard's scholarship (2010) discusses the changing demographics and need to talk explicitly about race to build racial awareness and a culturally responsive pedagogy. Howard (2010) asserts, "educators must be willing to see how race shapes the way in which many young people understand their worlds and how the world shapes their understanding of themselves as racial beings" (p. 121). This is the forward movement that is pivotal in education.

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As colorblindness transitioned to race evasiveness, racial awareness needs to transition to culturally responsive pedagogy.

The day I previously described occurred over a decade ago. Yet it is etched in my memory as a turning point in my teaching career. It was the catalyst I needed to fully acknowledge my privilege and reflect on how my experiences impacted others, specifically my students. I committed to dismantling my colorblind ideology and embraced learning about other races, cultures and how people of color experienced the world. I am still a work in progress and often it's messy. My call to action has intensified over the past eight years and has become personal. I am now the wife of a Black man and the mother of two mixed-race sons, sons who society will see as Black. As a White woman I will never know how my Black and Brown students, my sons or my husband experience this world. Through this research I lift their voices, disrupt the dominant culture, and expose ways to create an equitable education experience for all.

Significance

As I sat through my first semester as a doctoral student, the subconscious nagging thoughts about my son's educational experiences as a mixed-race student would not leave my conscious mind. I decided to take a risk and explore this potential dissertation topic. Through courses, research, and much discussion with my cohort and professors, I am confident that I made the right decision. Much of my research on this topic suggested there was a lack of representation and knowledge around how to best support mixed-race students, especially in the K-12 setting. Research focuses primarily on creating equity among monoracial groups with little

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research done around the fastest growing population, mixed-race individuals. Additionally, scholarship is limited around effective culturally relevant and sustaining education in pre-service teacher preparation programs. These assertions are further discussed in chapter two.

One barrier to culturally relevant and sustaining education in pre-service teacher preparation programs involves race-evasiveness. Race-evasiveness is defined as a more accurate term for colorblindness in which an avoidance of racial discourse and a lack of attention to race exists and teaching systems like erasure, bracketing, and centering whiteness uphold this ideology (Chang-Bacon, 2022). With the changing demographics and increasing diversity in all classrooms, these systems of erasure, bracketing, and centering of whiteness must be halted by teacher educators. It's time to intentionally incorporate race and culture discourse into courses and fieldwork. Excuses such as personal discomfort, not aligned to the syllabus, or inadequate time can no longer be acceptable when preparing our pre-service teachers to engage with diverse learners.

The following development is timely and connected to the significance of this study. The Pennsylvania Department of Education in collaboration with the Pennsylvania Educator Diversity Consortium (made up of universities, organizations, and partners), and the US Department of Education's Region 4 Comprehensive Center recently developed and released the Pennsylvania Culturally Relevant and Sustaining Education Competencies (CR-SE) in 2021. These competencies are intended to guide and hold educators accountable to culturally responsive practices when working with learners, colleagues, and families. In addition, the

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Pennsylvania Department of Education has amended Chapter 49 (relating to Certification of Profession Personnel) to require instruction in CR-SE for pre-service teacher training beginning no later than August 2024 (Cole-Malott et al., 2022). This important addition to teacher preparation programs will encourage a more critical and intentional integration in courses and field experience for pre-service teachers.

Research has shown a lack of teacher preparation connected to mixed-race learners' experiences. One specific article highlights areas that need to be addressed in education to include and improve the experiences of mixed-race students. In the article, *What are you? A CRT perspective on the experiences of mixed-race persons in 'post-racial' America*, C.R. Anderson (2015) connects CRT and the classroom in a vignette about mixed-race twins. An activity at school that had good intentions ended with the twins in the office. The teacher in the vignette asked the students to go stand on the place their ancestors came from on the carpet map of the world. The darker hued twin stood on Asia and the teacher reacted surprised while the students laughed and joked stating that he didn't know where he was from. The other twin stood in the middle of the ocean and when asked why, he responded that he didn't want to pick a place in fear of leaving out one side of his background. More laughter and taunting pursued which led to the twins being sent to the office to cool down (Anderson, 2015).

A teacher with more preparation around teaching mixed-race learners may have handled the above situation differently. What happened in the classroom forces us to reflect on what is being offered in our teacher preparation programs to truly prepare educators for moments like the

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one described. Infusing training on culturally relevant and sustaining pedagogy and providing opportunities to apply these tenets could strengthen a teacher's ability to effectively respond to a scenario like that of the twins. It is imperative that schools move beyond celebrating diversity to critical social action and that teachers don't continue to avoid multiracial representation and instruction.

Some people have a hard time taking me at face value. When people who don't know me well, black or white, discover my background (and it is usually a discovery, for I ceased to advertise my mother's race at the age of 12 or 13 when I began to suspect that by doing so I was ingratiating myself to whites). I see the split-second adjustments they have to make, the searching of my eyes for some telltale sign. They no longer know who I am (Obama, 1995, xv).

The sentiment that Barack Obama shared is not foreign to most individuals who identify as Black and White. The complexity of being both in a society that constructed race to be a means for economic and social disparity can truly impact one's identity and sense of belonging. If a learner doesn't feel safe in their full identity and represented in their classroom/school, it may impact their sense of belonging and ultimately their learning. Ginsberg (2017) asserts, "I knew I turned off and on my identities based on how safe I felt" (p. 105). This assertion is further explored in her publication when she expresses the comfort in presenting herself as White since that is the dominant race. Ginsberg's text also investigates the lack of representation of multiracial curriculum and individuals in education. Ginsberg, as well as other researchers, share

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the glaring gaps in research around multiracial individuals and their educational experiences. Insufficient research, particularly in K-12 settings, upholds invisibility and uncertainty in how to best address mixed-race students. The significance of this research was to gain insight and converge the findings between lived educational experiences of mixed-race students and a pre-service teacher preparation program. The aim of converging this data is to identify trends (areas of focus) between the data sets and opportunities to strengthen the use of culturally relevant and sustaining education practices in teacher preparation programs.

Research Questions

My first research question and sub questions emerged from my inquiry of the teacher preparation program at my educational setting. I inquired about its inclusion of culturally relevant and sustaining education competencies in courses and fieldwork.

- What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?
 - What components of the course curriculum support culturally relevant and sustaining practices? What gaps exist?

I decided that pre-service teachers engaged in coursework and field experience would make up the most meaningful population for gathering quantitative data to support my hypothesis (supported by literature) that most pre-service educators are ill-prepared to best

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address and enhance the unique learning experiences of mixed-race, diverse individuals. The Pennsylvania Culturally Relevant and Sustaining Education (CR-SE) Competencies were used as a guideline for the quantitative and qualitative data collected in response to these questions. A pre- and post- survey was given to a cohort of undergraduate pre-service teacher candidates to collect quantitative data. Between the surveys, teacher candidates participated in lectures, discussions, assignments, and self-reflections involving the CR-SE competencies. Qualitative data was also accumulated throughout the process. This included open-ended survey responses, classroom observations and end of the semester reflections.

Another question connects more to the phenomenological lens of my research and my desire to truly grasp the lived experiences of mixed-race students in educational settings. I am most intrigued by the dichotomy of being a product of both the oppressor and the oppressed and how it impacts living and learning in the United States. The following question produced qualitative data towards this research.

- What do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?

Researcher Ginsberg (2017) explores the theme of safety and identity throughout her text and provides direction for my inquiry. If a learner does not feel safe, seen, validated, and represented, it will impact their sense of belonging and their learning. Ginsberg asserts, "After 13 years of schooling, my education had systematically erased a part of my identity. I never fought to save it. I was complicit in the process" (p. 105). I refuse for this to be my children's or any

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other mixed-race child's narrative. It is vital to reflect on teacher preparation programming to determine if there is intentional space for pre-service teachers to actively explore and determine how they will create classrooms that will welcome and encourage all parts of their students' identities.

Through gathering and analyzing data for the posed research questions, I accomplished the following goals that address my puzzle of practice:

- Connected the educational experiences of mixed-race students to teacher preparation programs
- Gained a better understanding of the educational experiences of mixed-race students through the illumination of their narratives shared by their families
- Identified opportunities to enhance teacher preparation programs around culturally relevant and sustaining education competencies
- Uncovered implications for pre-service teachers to help prepare them to teach diverse populations and create classrooms that provide a sense of belonging for students through an inclusion of all identities
- Determined recommendations to support parents of mixed-race learners, administration, policy, and higher education institutions with teacher preparation programs

Puzzle of Practice/What's Missing?

By the second, "what is that thing called again" followed by a few mispronunciations, I mustered the ability to at least state its proper name. "It's called a dashiki," I responded quietly. I

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followed this statement up by asking what the class was doing for Black History Month. The answer washed over me like lukewarm water. It left an uncomfortable residue. The answer was nothing, with some hints of friendship, differences, and kindness and a splash of character traits. Then, the teacher asked if my husband and I would like to come in to educate the children or do something special for Black History Month. In this moment, I audibly heard a record screech. My lukewarm face turned scalding hot again. This feeling was anger. But I didn't show it, I simply smiled and said I would get back to her. It made me understand the sentiment that many people of color have daily when white counterparts over-rely on them to educate/explain their experiences. I'm sure it's exhausting and emotionally draining. Why is race evasiveness so rampant in our American classrooms?

I played this experience over and over in my head the entire week. I dropped the ball. I didn't speak up for my child. I wasn't an ally at that moment. I encouraged him to withdraw into his boring, dark blue jacket. Why didn't I elevate him? Embrace his Blackness? In an article written by Ricki Ginsberg (2017), the following assertion is made, "As a multiracial student, I learned to reveal only the White aspects of my racial identity because this part of my identity dovetailed best with the way the school was structured" (p. 104). Did the events that took place at his school on that day manifest this narrative into existence for my 3-year-old multiracial son? I had to turn this potentially paralyzing moment into an opportunity. It was time to remove the boring, dark blue jacket and uncover the colorful fabric that makes up so many of our learners.

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Sharing this vignette and other anecdotes from families that participated in this study provides a glimpse into the lived experiences of mixed-race learners. These are important narratives that are learning opportunities for future educators. Future educators will hopefully employ a lens of critical consciousness (Freire, 1970, 1973, 1978, 1983, 2000, 2005) to create classrooms that change the narratives to ones of inclusivity and belonging. Critical consciousness requires reflective awareness of power inequities and the ability to shift one's gaze from self to others and the injustices of society (Kumagai & Lypson, 2009). Teachers must be aware of the lived experiences of their students and encourage mixed-race students to embrace their full identity in the classroom. Our schools should incorporate curriculum and opportunities for discussion and research around multiracial students. As Howard states, "The silence about multiraciality in teacher education indicates an implicit message 'that's not something we discuss' as teachers" (2018, p. 710). I believe that if discussions around race and culture were being held at more length and in more depth at my child's preschool, this event would not have occurred the way it did. Often a dominant group avoids discussion around messy or uncomfortable topics that could impact or change life as they know it.

The purpose of this research is to uncover themes pertaining to the educational experiences of mixed-race individuals and to identify ways to enhance pre-service teacher preparation programs to include knowledge on how to best teach and engage this growing population. Often literature draws on the experiences of monoracial individuals outside the dominant White culture, such as Black or Hispanic people. While this is a necessary area of

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research, it overlooks the uniqueness and nuances of the experiences of multiracial individuals. Frequently this monoracial focus pushes mixed-race students to ignore one side of their identity. One goal of this study is to understand how multiracial individuals, specifically those who identify as both Black and White, navigate the educational terrain.

Another goal of this study is to incorporate the CR-SE competencies more in teacher preparation programs as a framework for educators to be better prepared to teach multiracial students and offer engaging, culturally responsive, differentiated, and inclusive instruction to this group of students. The research in this domain is not as vast as had been imagined. To start, Howard notes in his literature that race is “underresearched” and “undertheorized” in connection to the school experiences reported by racially diverse students (2010). This notion is furthered by the following assertion, “Thus, there is a need for greater diversity and viewpoints of racially diverse students to evaluate how generalizable or representative various experiences are in schools” (Howard, 2010, p. 109). If educators and researchers listen to more diverse student narratives and encourage sharing of race and culture in their classrooms, more progress can be made towards culturally relevant and sustaining education.

Another caveat that impacts the amount of research done in K-12 educational settings around mixed-race and diverse learner experiences deals with risks involved in collecting data from minors. Herr and Anderson (2015) state, “As the adult, that sense of involving youth in the change process while being aware of the risks involved, can feel particularly worrisome and perplexing” (p. 152). I believe this is why the bulk of studies surrounding the educational

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experiences of multi-racial individuals is done in higher education. If there isn't an increase in research on K-12 racially diverse learners, it could limit educators' awareness and their ability to create spaces of acceptance and belonging for all student identities.

Methodology

Mixed Methods

During my literature review, I discovered a claim that teacher approaches and assumptions about multiraciality could impact student actions and their perception of school (Howard, 2018). These assumptions on multiraciality held by teachers encouraged me to conduct a mixed-method study in order to gather as much data as possible to inform my research and benefit mixed-race students. According to Creswell (2022), "when an investigator combines both statistical trends (quantitative data) with stories and personal experiences (qualitative data), this collective strength provides a better understanding of the research problem than either types of data alone" (p. 2). In addition to surveys providing quantitative data, qualitative data was collected from pre-service teachers and mixed-race K-12 students. Qualitative data was collected through narratives, open-ended survey responses, observations and end of semester reflections based on pre-service teachers' course assignments. Through this mixed-method approach, I identified gaps that need to be addressed, elevated the voices of the students' lived experiences, and provided potential enhancements to teacher preparation programs to support in the implementation of culturally relevant and sustaining education practices.

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Quantitative Methods

I collected and intentionally analyzed quantitative data provided by pre-service teacher candidates before and after their course assignments and field experiences aligned to the CR-SE competencies. Through the participation in survey responses, I determined a baseline of where students in this teacher preparation program were in providing culturally relevant and inclusive instruction to diverse students. The surveys provided an understanding of the perceptions of pre-service teachers around preparedness and understanding the culturally relevant and sustaining education competencies and how these competencies connect with educating racially diverse learners. A post-survey was administered after student engagement in course work and field experience. T-tests were run to analyze the data and determine statistical significance. These results are discussed at length in chapter four.

Qualitative Methods

Phenomenology synchronizes well with my qualitative research questions. According to Creswell, phenomenology describes the meaning of several individuals' lived experiences of a concept or a phenomenon (2018). The goal of phenomenological studies is for the audience to better understand the essence or experience of a particular group, in this case mixed-race individuals. In Peoples (2021) text, the author declares, "Through participants' vivid depictions of their experiences, phenomenological researchers construct a meaningful reality through data analysis" (p. 5). While the reality of mixed-race learners will vary, the hope of this research is

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that a deeper understanding of their lived experiences in the educational realm will evolve and provide clear considerations for educators.

Max van Maren's (1990, 1997, 2016, 2018) approach to phenomenological studies aligns with the goal of my research questions based on the focus of lived experiences. The model van Maren (2016) describes includes "textual reflection on the lived experiences and practical actions of everyday life with the intent to increase one's thoughtfulness and practical resourcefulness or tact" (p. 4). The textual reflection is specific to the lived experiences shared by K-12 mixed-race learners and their practical actions within an education setting. The pre-service teachers' preparedness to effectively and inclusively teach this cohort is the focus for increasing thoughtfulness and resourcefulness. Anecdotes are used as methodological devices to highlight the details and narratives of K-12 mixed-race learners. Manen (2016) shares, "Anecdote can be understood as a methodological device in human science to make comprehensible some notion that easily eludes us" (p. 116). The anecdotes collected as qualitative data for this study are used as narratives that informed and brought awareness to educators in their quest to create culturally relevant and sustaining education classrooms.

Theoretical Underpinnings

Critical Race Theory (CRT) typically is the focal underpinning when researching multiracial individuals, however, while CRT has its influence in my research, Jessica Harris' (2016) push toward Multiracial Critical Theory aligns more with my conceptual framework around sense of belonging and identity. These concepts exist among mixed-race individuals

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(especially those who identify as Black and White) in a more complex way than monoracial individuals. In Harris' publication, *Toward a Critical Multiracial Theory in Education*, there is an explanation of how CRT is not a one-size-fits-all theory when it comes to exploring multiracial individuals. Harris explains that the theory has evolved and been refined to include races outside of black Americans (2016, p. 796). Additional theories, such as Latina/o critical race (LatCrit) and Asian critical race (AsianCrit), remain grounded in CRT tenets with necessary clarifications and a clear belief in the opposition of oppression (2016, p. 796). However, the concern that Harris brings up is the focus on monoracial experiences which differ greatly from multiracial experiences. Harris states, "...this focus on monoracial populations may unwittingly reinforce monoracial paradigms of race" (2016, p. 796). This focus may lead to identity isolation and force multiracial individuals to only recognize one part of their racial makeup.

For my research, I touch on the following tenets of CRT, experiential knowledge, challenge to dominant ideology, and intersectionality (Crenshaw et al., 1995, 2010 Delgado & Stefancic, 2001, 2012, 2017). Experiential knowledge prioritizes the voices of marginalized populations; challenge to dominant ideology questions the status quo and harmful ideologies such as colorblindness; and intersectionality views the intersection of social identities (Crenshaw et al., 1995, 2010 Delgado & Stefancic, 2001, 2012, 2017). For this study, I incorporated the multiracial lens as a derivation. Like Harris' findings, I was not convinced that CRT would succeed in making sense of my data. Harris (2016) asserts, "As my multiracial identity became more salient, I noticed how CRT and its additions were rarely, if ever, utilized to account for my

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experiences as a student who existed outside of the monoracial paradigm” (p. 799). I didn’t want this to be the case with my research. Therefore, I expanded the CRT tenets to include the MultiCrit perspective that Harris includes in her scholarship.

The crosswalk of the tenets below (see Table 1) expresses the framework I used when looking at the data I gathered. The tenet, challenge of dominant knowledge, was explored through converging data collected from pre-service teachers and the narratives provided by families of mixed-race students. Exploring and converging this data helped to determine if ideologies like colorblindness were implemented as adverse effects to culturally relevant and sustaining education practices. Ideologies like colorblindness benefit the dominant, white agenda of many educational institutions and hinder progress. The sooner they can be identified, the quicker they can be dismantled in teacher preparation programs and remain outside their future classrooms. This way multiracial students can celebrate the complexity of their identity and develop a holistic sense of belonging.

The anecdotal narratives of mixed-race learners provided a rich opportunity for experiential knowledge. Their narratives highlighted their educational experiences and afforded implications on what does and does not benefit them in terms of belonging in school settings. Intersectionality, or in this case intersection of multiple racial identities, was examined for this research. Unlike in CRT when the intersectionality is between other social identifiers, in Multicrit the intersectionality that needs attention is between multiple racial identifiers. This was

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important to address the monoracial paradigm that often clouds the understanding of multiracial individual's unique experiences.

Table 1

Eight Tenets that Work Toward Multicrit

Table 1. Eight tenets that work toward MultiCrit.

CRT tenet	Definition	MultiCrit tenet	MultiCrit tenet
Challenge to ahistoricism	CRT insists on analyzing issues of race and racism in a historical and contemporary context	Challenge to ahistoricism	In order to more fully understand the experiences of multiracial students, this tenet can be used to historically analyze specific issues, such as the addition of the 'check all that apply' option on the US Census and college admission applications
Interest convergence	Interest convergence transpires when gains in racial equity are advanced only when it benefits white people	Interest convergence	This tenet exposes how multiracial students, who are positioned as objects to market diversity, are acknowledged only when it benefits the needs of the white institution
Experiential knowledge	CRT encourages a focus on experiential knowledge that centers the voices of marginalized populations	Experiential knowledge	Exploring the experiential knowledge of multiracial students centers their voices as well as challenges dominant ideologies concerning race and multiraciality
Challenge to dominant ideology	CRT challenges traditional claims that uphold the status quo, such as meritocracy and colorblindness	Challenge to dominant ideology	Dominant ideologies are challenged when narrative voice is utilized and the experiences of multiracial students are foregrounded in research
Racism as endemic	Though socially constructed, racism is endemic and permanent to US society	Racism, monoracism, and colorism	This tenet accounts for multiracial students' encounters with racism, as well as monoracism and colorism
Structural determinism: black/white binary	One dominant structure or mode of thought determines social outcomes and behaviors. One form this takes is the black/white binary, which determines race to be either black or white.	A monoracial paradigm of race	To fully account for multiracial students' racialized experiences, the concept of a monoracial paradigm of race expands beyond a critique of the black/white binary and focuses on the way that race is constructed in neat, fixed categories, disallowing for the recognition of a multiracial reality.
Differential racialization	Differential racialization recognizes how racial categories and their meanings are constructed, manipulated, and positioned throughout history to serve the needs of white America	Differential micro-racialization	This tenet accounts for the timing of differential racialization. Multiracial students are racialized differently on a daily basis to serve the needs of the white institution
Intersectionality	Race and racism must be viewed at their intersections with other social identities, such as gender and class	Intersections of multiple racial identities	This tenet allows for an exploration beyond the intersection of singular social identities and examines the intersections of multiracial students' racial heritage(s)

Note. Table from Harris, J.C. (2016). Toward a critical multiracial theory in education.

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Culturally Sustaining Pedagogy (CSP) was explored throughout this research. Paris & Alim (2014, 2017) emerged this pedagogy in response to other asset focused pedagogies. This

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theoretical lens lays a foundation for understanding what historically happens in schools and how detrimental it can be for students when educators are not exposed to this pedagogy in their teacher preparation programs. One study found that many tenured (seasoned) teacher educators reported low ratings in multicultural knowledge when asked what they know and include in their teacher preparation program (Goodwin et al., 2014). Goodwin et al (2014) asserts, "The implication is that much work is needed in the academy to help both experienced and novice teacher educators become conscious of their own biases and subjectivities, develop skills and sensitivities that can support social justice teaching and researching, build confidence as advocates for all learners and communities, and actively resist hegemonic practices and policies" (p. 298). Without this focus, educators risk the promotion of a white-washed, dominant societal view that negatively impacts non-white students' academic performance and at times erases their sense of belonging in the educational system.

It is important to note that CSP evolved from Culturally Relevant Pedagogy (CRP) originated by Gloria Ladson-Billings (1995, 1997, 2009, 2021). Ladson-Billings used grounded theory to develop CRP in the 1990s. Her research proposed that teachers meet three criteria: an ability to develop students academically, a willingness to nurture and support cultural competence, and the development of a sociopolitical or critical consciousness (Ladson-Billings, 1995). Ladson- Billings (1995) also explains that culturally relevant teaching must include conditions regarding self and other, social relations, and knowledge (p. 483). Ladson-Billings declares, "Thus, culturally relevant pedagogy must provide a way for students to maintain their

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cultural integrity while succeeding academically” (1995, p. 476). There is a distinct focus on the intersectionality of culture and academics, claiming that both are equally salient.

In the text, *Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World*, authors Paris and Alim (2017) claim that CSP “seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of schooling for positive social transformation” (p. 1). CSP intends to dismantle the dominant school institutions based on White middle-class, cultural norms. The theory enforces an additive mentality of culture instead of a subtractive one. This theory guides the Culturally Relevant and Sustaining Education Competencies that was a focal point in collecting data from pre-service teachers. This research study examined the gaps that exist in teacher preparation programs surrounding CSP. One goal of the findings was to yield implications to better incorporate CSP trainings and application in teacher preparation programs to ultimately create classrooms that promote multiethnic and multilingual cultures and communities. Current scholarship suggests that while there has been an increased use of CSP and culturally relevant practices in teacher preparation programs, there is much to be learned and researched, specifically in anti-racist theorization and broadening the focus from the individual to the system (Chang & Viesca, 2022).

Definition of Terms

Mixed-race - denoting or relating to people whose parents or ancestors are from different ethnic backgrounds (Howard, 2018)

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Multiracial – people of multiple races in accordance with the US census categories (Howard, 2018)

Monoracial paradigm – the idea that people fit into singular racial categories (Harris, 2016)

Ahistoricism – omitting the socio-historical and legal context of multiracial groups (Howard, 2018)

Colorism – using phenotype to place people in a racial hierarchy (Howard, 2018)

Race-evasiveness - racial ideology that suggests that the best approach to racism is to disregard racial differences and treat everyone equally, regardless of race (Chang-Bacon, 2021)

Pre-service teacher - defined as the student enrolled in a teacher preparation program who must successfully complete degree requirements including course work and field experience before being awarded a teaching license (Department of Education website)

Teacher preparation program - the Department of Education defines a teacher preparation program as a state-approved course of study, the completion of which signifies that an enrollee has met all the state's educational and/or training requirements for an initial credential to teach in a K-12 school (Department of Education website)

Culturally relevant and sustaining education (CR-SE) - an anti-racist undertaking that aims to eliminate the systemic and institutional barriers that inhibit the success of all students (Cole-Malott et al., 2022)

Urban – cities with dense populations (White, 2020)

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Suburban – locations outside of cities with less dense populations (White, 2020)

The meandering through positionality, personal anecdotes, research questions, the puzzle of practice, overview of methodology, and theoretical underpinnings was purposeful in defining the direction for my research study. Much thought was placed on this first chapter and the relevance of my puzzle of practice. As the chapters unwind, it is the intention that more clarity will be provided around the why, how, and the outcomes related to the connection between culturally relevant and sustaining education competencies in teacher preparation programs and the educational experiences of mixed-race learners. In the following chapter, the why will begin to unfold through an in-depth literature review.

CHAPTER 2: PERSPECTIVES ON THE PUZZLE OF PRACTICE

This research examines the implementation of CRSE competencies in a teacher education program alongside a deeper understanding of mixed-race K-12 learner experiences in schools. It was vital to survey literature grounded in qualitative and quantitative research to steer this study. Conducting an in-depth literature review helped contextualize my puzzle of practice. The undertaking provided an opportunity to evaluate scholarship that already existed and to confirm my inquiries about the phenomena of mixed-race learners in K-12 settings and the state of current teacher preparation programs implementing CR-SE competencies.

A trend in the research conducted thus far uncovered a need for more research surrounding mixed race (specifically Black and White) learners in the K-12 setting. The same

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seemed true when searching for scholarships on pre-service teacher preparation programs that specifically address culturally sustaining pedagogy and competencies that strengthen the experiences of mixed-race students. Throughout the literature review, the following themes arose; Importance of Culturally Relevant and Sustaining Pedagogy, Identity/Belonging, Invisibility: Lack of Representation, and Changes to Teacher Preparation Programs. Each of these themes plays a critical part in answering my research questions.

Importance of Culturally Relevant and Sustaining Pedagogy

Despite the increased infusion of culturally relevant pedagogy (CRP) in teacher preparation programs over the past two decades, many scholars believe shortcomings continue to impact the full potential of this pedagogy (Chang & Viesca, 2022). Critics argue that many practitioners “did not recognize and challenge systemic oppression and inequitable school and classroom practices, reducing CRP to cultural celebrations and procedures without sustaining the cultural and linguistic heritage of minoritized students,” “have not reached their transformative potential because whiteness and white supremacy have been insufficiently addressed,” and “a failure to grapple with race and racism in teacher education and CRP research” (Chang & Viesca, 2022, p. 199). Throughout Chang and Viesca’s critical review of research, there is a focus on Paris and Alim’s culturally sustaining pedagogy (CSP) and its six principles. The researchers suggest that we should move the field towards these six principles in teacher education programs.

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In their publication, Paris and Alim (2017) declare that “Culturally sustaining pedagogy exists wherever education sustains the lifeways of communities who have been and continue to be damaged and erased through schooling” (p. 1). Mixed-race individuals have shared accounts of erasure and invisibility throughout their educational experiences. CSP and its six principles can impact the current and future narratives of mixed-race learners. Throughout their book, the following principles unfold (1) decentering the white gaze, (2) recognizing culture as complex and evolving, (3) engaging in loving critiques and critical reflexivity, (4) sustaining and revitalizing toward socially just and pluralistic societies, (5) taking a desire-based approach to teaching and learning, and (6) sustaining lives and reviving souls (Paris & Alim, 2017). As you will read throughout this study, these principles are closely related to the Pennsylvania Culturally Relevant and Sustaining Education (CR-SE) competencies. An intentional focus and integration of these competencies into teacher preparation programs will be a catalyst in preparing pre-service teachers to teach in racially diverse settings.

The text is broken into two parts that include cases that exemplify either practices that lead to theorizing or theorizing that leads to practices (Paris & Alim, 2017). In one specific section of the book, details are provided that directly address teacher education programs. Three main points are made to leverage the preparedness of prospective teachers in diverse settings. The leverage points include diversifying admissions by aggressively recruiting those individuals we want to see in teacher education, set higher standards and “scrutinize” pre-service teachers before student teaching, and lastly teacher educators must make teacher candidates aware that

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certification isn't guaranteed just because they finished coursework and completed student teaching, the teacher preparation program must also recommend them to the state (Paris & Alim, 2017). These leverage points are not often considered by teacher educators. A shift in programming will lead to better outcomes for both pre-service student teachers and their future diverse students.

Tyrone C. Howard (2010) provides layers of statistical data, theory, and practical application to support the topic of his literature - why race and culture matter in schools. Howard specifically unpacks culturally responsive pedagogy in the fourth chapter of his book. In response to pre-service teachers questioning how and wanting explicit instructions on implementing CSP, Howard (2010) provides the following statement, "Culturally responsive pedagogy embodies a professional, political, cultural, ethical, and ideological disposition that supersedes mundane teaching acts; it is centered in fundamental beliefs about teaching, learning, students, their families, and their communities, and an unyielding commitment to see student success become less rhetoric and more of a reality" (p.67). There is much to explore here. Essentially, becoming grounded in CSP is a process that involves every part of an individual's being. It far exceeds the classroom. To begin pre-service teachers must engage in significant self-reflection. This aligns to competency one in the CR-SE competencies, "Reflect on One's Cultural Lens" (Cole-Mallott et al., 2022). Self-reflection and knowing one's own identity and biases is a non-negotiable when it comes to infusing the competencies into diverse classrooms.

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Howard (2010) recognizes that “practitioners are in dire need of the knowledge and skills that can assist them in their classrooms on a daily basis” (p.3). Therefore, Howard does provide more tangible ideas throughout his text to help practitioners apply CSP focused practices in their educational spaces. One helpful way this occurs in the text is through the incorporation of empirical data from schools that have implemented CSP to improve their achievement outcomes for racially and culturally diverse learners. This encourages educators and school systems to continue to work towards equity and make transformative changes towards true inclusivity for all.

If one is serious about transforming our educational system through action, the text *Tangible Equity* provides a user-friendly, straightforward approach to making CSP and equity a reality in diverse classrooms. Seale (2022) eloquently and honestly articulates the importance of moving past buzz words and theories and getting right to action. When referencing the purpose of his text, Seale (2022) states “This is about practical, Tuesday-morning-in-October instructional strategies educators, leaders, and families can use to give our children explicit permission to dare, to dream, to question, and to build the equitable system we have long deserved” (p. 6). So many times, educators leave professional developments and training on equity-based initiatives feeling inspired to do the work but lacking the tools to apply the heady concepts presented. Educators’ toolboxes remain empty, and they are uncertain about where to start. Seale provides concrete strategies and examples as a remedy for this common issue.

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Seale's text is portioned into four parts. The first part provides the why and historical, ethical, and practical reasons for creating environments focused on strengths and assets that affirm diverse identities (Seale, 2022). Part two outlines the "how" to leverage the power of identity and achieve and sustain equity priorities in education. Part three argues to move away from the individual approach to a systemic approach that requires philosophical shifts to make equity a reality at the classroom level. Lastly, Seale (2022) unpacks an identity-driven excellence model that guides his work and helps schools design curriculum-agnostic frameworks that make equity tangible across all grade levels and subject areas. A vital take away from Seale's text is that if we are striving towards incorporating CSP and the CR-SE competencies into our teacher preparation programs and our K-12 classrooms, educators must provide multiple opportunities for action and application of the pedagogy and competencies that intend to transform teaching and learning for diverse learners.

Identity and Belonging

One article provides an overview of multiracial identity development theories, examines links between theory and research, analyzes the challenges of the construction of multiracial identity theory, and recommends considerations for next steps. The authors grapple with the struggles surrounding theory construction for multiracial identity development. Rocquemore, Brunsmma, and Delgado (2009) discuss the following barriers to theory construction; disconnect from empirical data, disciplinary debates, and historically specific assumptions about race and racial group membership. In their article, the following assertion is made, "It is a moment in

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which we acknowledge that race is a social construct (as opposed to biological reality), but a construct that has real and measurable consequences” (2009, p.14). In multiracial individuals, these consequences can include a separation from one part of their identity which can lead to issues with belonging within certain monoracial groups.

The researchers unpack racial mixing and explain that it is not new. Racial mixing increased and has become more identified since the passage of Civil Rights legislation and emergent representation of multiracial individuals in the media. The researchers explain that mixed-race as a population forces society to reconsider mutual exclusivity of racial categories. In the article, it is noted that the study of mixed-race is fragmented and inconsistent which hinders the creation of multiracial identity development theory. The researchers proclaim, “Theory provides a road map for understanding emergent social phenomenon” (2009, p. 20). Regarding multiracial identity, the researchers claim that racial identity varies, changes over a lifetime, is not a predictable linear process with a single outcome, and the social, cultural, and spatial context is critical.

The researchers focus on differences between racial identity (self-identification), racial identification (the perception and categorization of others), and racial category (what racial identity is available and chosen in a specific content). It is also highlighted that mixed race individuals, mostly those who are Black and White, often shift between identities. The complexity of this research around identity impacts theory development and leads to questions

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that continue to need answers. This article made me search deeper for a more developed theory centered on multiracial experiences. I was fortunate to find the scholarship of Jessica C. Harris.

In Harris' text, she explores deficits in Critical Race Theory through the lens of a multiracial individual. Harris (2016) states, "To fully account for multiracial students' racialized experiences MultiCrit urges structural determinism to reach beyond the black/white binary and focus on a lesser written about, but still detrimental ideology; a monoracial paradigm of race" (p. 804). The societal pressure placed on multiracial individuals to identify as one race or the other exists to make it easier for others to classify them and assign characteristics based on their skin hue. This leads multiracial individuals to ignore part of their identity or code-switch in certain situations. If the intent is to recognize and celebrate dual identities of mixed-race individuals, we must first be aware of the dichotomy that society places on Blacks and Whites. This adds a layer of discomfort and challenge to effectively teaching and representing mixed-race individuals in curriculum and school settings.

American history and our current climate require unpacking and attention from in-service and pre-service teachers to best provide culturally sustaining pedagogy and inclusive spaces for mixed-race learners. In the Harris (2016) literature, there is reference to racial inequities being interpreted through "an ahistoric framework, which disregards the role history plays in the lives of people of color" (p.799). Failure to reflect and teach the issues of the past contradicts CRT and MultirCrit theory and misaligns with culturally sustaining pedagogy. The continuation of ahistoricism in classrooms promotes a White dominant culture subtractive of the experiences of

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mixed-race students. This is detrimental not only to mixed-race students, but to all students who should have access to historical truths involving race.

In researching contemporary art during my literature review, I came across Adrian Piper(1992). Piper is an American artist who is mixed-race (Black and White). Her conceptual art, minimalism, performance art, and feminist art align closely with the theme of identity and belonging that I uncovered during my literature review. According to Castano (2017) “Piper is not confused about her identity...she does not reject blackness, nor does she embrace whiteness...rather it is the descriptions and classifications around race that are inadequate” (p. 16). Piper is a maverick of her time and encourages questioning the social constructs of race that exist to separate individuals into monoracial paradigms. Some of her famous works include: ‘Self-Portrait: Exaggerating My Negroid Features’ (Piper, 1981) and “The Mythic Being” (Piper, 1973). Both works exploit bias regarding race. Piper’s artwork and life experiences sparked my interest in how to incorporate art forms as ways for mixed-race individuals to explore their identity and create a sense of belonging. With deeper research, the use of artwork can be a potential solution to help bridge the gap of mixed-race representation in curriculum. Art can be a creative outlet for pre-service teachers when thinking of ways to apply culturally relevant and sustaining education practices into their classrooms. This may become a future endeavor for a research study.

Adrian Piper (1992) shares a powerful account on identity and belonging in her article, “Passing for White, Passing for Black.” The article travels through her memories and encounters

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as a mixed-race individual who often had to prove one side of her identity to society. Piper begins her account with an incident at a graduate student reception. She shares a comment made by a faculty member pertaining to her light skin. The faculty member stated, “Miss Piper, you’re about as black as I am” in jest (Piper, 1992, p.1). Piper was no stranger to these types of comments, creating a spiral of emotions. Throughout the article, multiple examples were given to capture moments when Piper had to prove or cover her racial identity to fit in with monoracial groups. In Black communities, such as where she grew up, Piper often had to convince others of her blackness by sharing times she experienced racism.

As a light-skinned mixed-race individual, it was important for Piper to not rely on passing for White to gain privilege or access. She wrestled with her identity for most of her life and observed how other family members, especially those who were also white passing, navigated the challenges of not being enough of one race to truly fit in anywhere. At the end of the article, Piper (1992) concludes, “So no matter what I do or do not do about my racial identity, someone is bound to feel uncomfortable. But I have resolved that it is no longer going to be me” (p. 29). This sentiment is complex and unfair for our young K-12 mixed-race learners to have to embrace. It is unfortunate that one side of their identity may create discomfort for others and directly impact their own sense of belonging in spaces they deserve to be in. I’m optimistic that as educators we can begin to change the script in our classrooms so our mixed-race students will be able to provide counter-narratives to Piper’s accounts. Additional research around this topic of

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identity and sense of belonging has been done in educational institutions and provides insight on how to combat these issues.

Ginsberg's narrative also supports the idea that multiracial students feel pressured to pick a side in school settings, leaving one side out which can lead to feeling inauthentic. Ginsberg's narrative research highlights the need for multiracial students to understand that white identity should not be the only identity validated in schools. She encourages learners to think critically about culture, race, and ethnic identity (Ginsberg, 2017). Ginsberg also claims that she is not surprised that research is lacking in the real-world implications of multiracial identities since many scholars find this work challenging (2017). This article pushes readers and educators to rethink how race and ethnicity is viewed in today's classrooms. It questions how educational institutions can unlearn the way many think about and make assumptions about race and ethnicity. Higher education researchers attended to these questions around multiracial student experiences in colleges and have contributed valuable findings (Chang, 2014; Harris, 2016; Hurtado et al., 2015; Nelson Laid & Niskode-Dossett, 2010; Renn, 2004; and Rockquemore & Brunnsma, 2008). One study will be explored in conclusion to this section.

Aurora Chang's research study (2014) asked the following question, "How do multi-racially identified college students come to understand and experience their racialized identities within a predominantly white institution?" Chang's study (2014) found, "the difference in perceptions is useful in understanding the complex ways in which multiracial students experienced their racial identity because it illustrates that the participants identities had many

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dimensions and respective consequences” (p. 721). These consequences for students are summarized as follows: ongoing impact of schooling experiences, failing to see themselves represented in everyday curriculum, and struggling with perceptions of self-identity which are race conscious. Even though the setting of this study was in higher education, the findings can potentially be transferred to K-12 environments and connect to another theme of invisibility/lack of representation. Chang later references a specific action plan that can be implemented to address these consequences. This will be reviewed in the changes to teacher preparation program section as a potential solution to this dilemma.

Invisibility: Lack of Representation

Invisible, “not noticed or acknowledged; treated as invisible, overlooked” (Merriam-Webster, n.d.) Often times the hyperfocus on monoracial identity overshadows those who identify as mixed-race. This overshadowing leads to invisibility and lack of representation in social institutions such as school. A mixed method research project, conducted in the United Kingdom, focused on educational attainment, experiences, and needs of mixed-race learners in primary and secondary education settings. Chamion et al. (2007) explored quantitative data from the Pupil Level Annual School Census and the National Pupil Database. This data provided background demographics and performance data. Based on the data collected, mixed White/Black Caribbean pupils were significantly underachieving and over-represented in school exclusions (Chamion et al., 2007). This data prompted the researchers to determine the cause behind the underachievement and over-representation in school exclusions.

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To explore this further, the authors engaged in qualitative research through semi-structured one-to-one and focus group interviews. They interviewed parents, students, teachers, and advisors in 14 schools (8 secondary and 6 primary) throughout 6 Local Educational Agencies (LEA) in England (Chamion et al. 2007). The findings from their mixed-method research project suggested that perceptions impacted low achievement and over-representation in school exclusions. While White/Black Caribbean pupils and their parents' perceptions were positive, teacher and professional perceptions were inconsistent and often included low teacher expectations for this cohort of pupils. In addition, the researchers identified the invisibility of mixedness at the policy level which led to difficulty in identifying specific barriers to achievement. Lastly, the authors urged expansion of research on mixedness in general and in education context. The researchers recognized that mixedness is in its infancy and much work needs to be done in many areas, including terminology and categorization.

In their article, Rozek and Gaither (2021) add to the claim that the biracial (the term they use) demographic is “rapidly growing and yet understudied” (p. 1309). They also note that this group faces “markedly high levels of social exclusion, belonging issues, and identity denial experiences compared to other racial/ethnic groups” (Rozek & Gaither, 2021, p. 1309). Their study examined the stereotype threat experience in schools for students with multiple racial identities. The article discussed how often biracial students are denied their identity and forced to choose a side. Rozek and Gaither (2021) suggest that biracial students claim their identities and/or perform in certain ways based on salience of stereotypes in schools. For example, biracial

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students who identify more with society's negative stereotyped racial background (Black or Latino) compared to their positively stereotyped background (White) were found to have a lower grade point average (Rozek & Gaither, 2021). Data of this sort must be researched and brought into question.

The study conducted by Rozek and Gaither provided statistical proof that there was a difference in the level of stereotype threats felt in school between monoracial and biracial students. Based on their findings, biracial students had less school trust and social belonging which possibly led to their feelings of isolation and being an "outsider" (Rozek & Gaither, 2021). In their conclusion, the researchers urge educators and researchers to consider that biracial students will not experience school in the same way as either of their monoracial peer counterparts who identify as only Black or only White. To create visibility and representation for biracial students, we must continue to seek ways to provide inclusive environments that provide more positive and effective school experiences in which salient monoracial stereotype threats don't exist.

According to Joy Howard (2018), "Several scholars have identified the need for further research on multiracial youth in K-12 schools and families" (p. 698). Throughout Howard's research which included statistics and qualitative data from three teacher studies, an evident theme evolved that multiraciality is invisible and not part of the discourse or representation in schools. Howard suggests that one implication for both practice and research would be providing access to resources, such as formal curriculum that includes social studies lessons or writing

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assignments that highlight students' family background (2018, p. 710). Additionally, Howard recommends classroom conversations that respond to monoracist bullying or public figures. These are ways in which representation can be integrated into classrooms. This literature also includes references to silence surrounding multiraciality in teacher education which proves the invisibility of this group of students (Howard, 2018). Teacher education, specifically pre-service teacher preparation, will be explored in greater detail under the next and final theme.

Changes to Teacher Preparation Programs

As a practitioner researcher with an insider positionality (Herr & Anderson, 2015), I sought scholarship that spoke to my inquiry around teacher preparation programs. My curiosity around the inclusion of culturally relevant and sustaining pedagogy and attention to K-12 mixed-race learners in teacher preparation programs led me to find researchers such as Joy Howard. Howard (2018) asserts, "Teacher approaches and assumptions about multiraciality likely affect student behavior and attitudes toward school, although this specific area has not yet been explored in teacher education literature" (p. 710). Research from Ginsberg, Chang, and other scholars support this claim. One effort of my research study is to identify the gaps in pre-service teacher preparation to change this assertion. Themes in recent literature substantiate inadequacy in teacher preparation related to effectively educating mixed-race students.

In one study, a researcher analyzes race-evasiveness of teacher educators in pre-service teacher preparation programs, specifically in courses on teaching emergent bilinguals (Chang-Bacon, 2021). The findings of this study suggest that teacher educators avoid discussions of race

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in their courses. Chang-Bacon (2021) claims, "...race-evasiveness becomes achievable through erasure, bracketing, and centering of whiteness in teacher education – strategies so well-practiced that they often fly under the radar as ‘norms’ of the field rather than as active processes” (p. 20). If race is evaded in teacher preparation programs, a disservice is occurring for pre-service teachers and more importantly their future students. Race-evasiveness is the exact opposite of what is expected to develop culturally relevant and sustaining education practices. This is an area that requires more attention and research. Teacher educators must reflect on their own practices and the content of their courses. Until race is no longer a social construct, it is imperative that teacher educators incorporate dialogue and training around this topic.

Umutlu and Kim (2020) focus their scholarship on the practice of reflection in pre-service teacher preparation programs. Their text highlights areas of reflection that require strengthening in connection with Critical Race Theory and culturally responsive teaching. It suggests reflection must be scaffolded to include critical reflection-in-action for pre-service teachers to improve their practices and adequately address student needs (Umutlu & Kim, 2020). Umutlu and Kim used a digital scaffolding tool, iReflectNow, to encourage and show the importance of critical reflection-in-action and cultural responsiveness (p. 598). Reflection and reflexivity are a vital part of CR-SE. Therefore, a scaffolded process to explicitly teach future educators how to productively reflect would improve teacher preparation.

In a mixed-method study of teacher educators, the quantitative data showed that pre-tenured track faculty rated their preparation in multicultural issues significantly stronger than

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their tenured-track counterparts (Goodwin et al., 2014). In the discussion and implications section of the article, the researchers state, “While our survey data revealed that less experienced teacher educators were more likely to consider diversity and multicultural issues as more important than their more experienced peers, these issues received minimal attention and resulted in few comments in the interview data” (Goodwin et al., 2014, p. 297). If teacher educators aren’t prepared to actively incorporate instruction around diversity and multicultural issues in teacher preparation programs, how do we expect our pre-service teachers to do so in their future classrooms? This article also provides a significant amount of quantitative and qualitative data that concludes teacher educators lack pedagogy and training around teacher preparation courses and programming. This can be seen as an opportunity to infuse culturally relevant and sustaining education pedagogies and competencies as a foundation for teacher educators working with pre-service teachers.

Now is the time to tend to these changes as Pennsylvania, like many other states, prepares to mandate Culturally Relevant and Sustaining Education (CR-SE) competencies into pre-service teacher preparation programs. The following bullet points are included in Chang’s (2014) scholarship as sound considerations for educators working with multiracial students:

- Remembering that some students don’t identify as monoracial and may feel unacknowledged when classroom discussions/activities are limited to monoracial discourses

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- Creating discussions/activities which increase inclusivity, articulating that race is a social construction and note it's fluidity
- Acknowledging one's own limitations as educators in reference to knowledge about race and its nuances
- Soliciting insights from students in the classroom that identify as mixed-race, and doing all that is possible to remain lifelong learners

These considerations provide a solid foundation which should be included in pre-service teacher preparation programs. In reviewing these bullet points, I was able to associate the considerations with the CR-SE competencies, specifically competency one (reflect on one's cultural lens), competency two (Identify, deepen understanding of, and take steps to address bias in the system), competency three (Design and facilitate culturally relevant learning that brings real world experiences into educational settings), and competency five (Promote asset-based perspectives about differences). Expanding on each of these considerations through the connection to the competencies will be one tangible way to enhance teacher preparation programs.

Conducting this literature review exposed perspectives to my puzzle of practice and supports the necessity of this research. The themes explored; Importance of Culturally Relevant and Sustaining Pedagogy, Identity/Belonging, Invisibility: Lack of Representation, and Changes to Teacher Preparation Programs capture the why behind this study. Exploration of these themes within the scholarship reviewed influenced my research design. The chosen research design,

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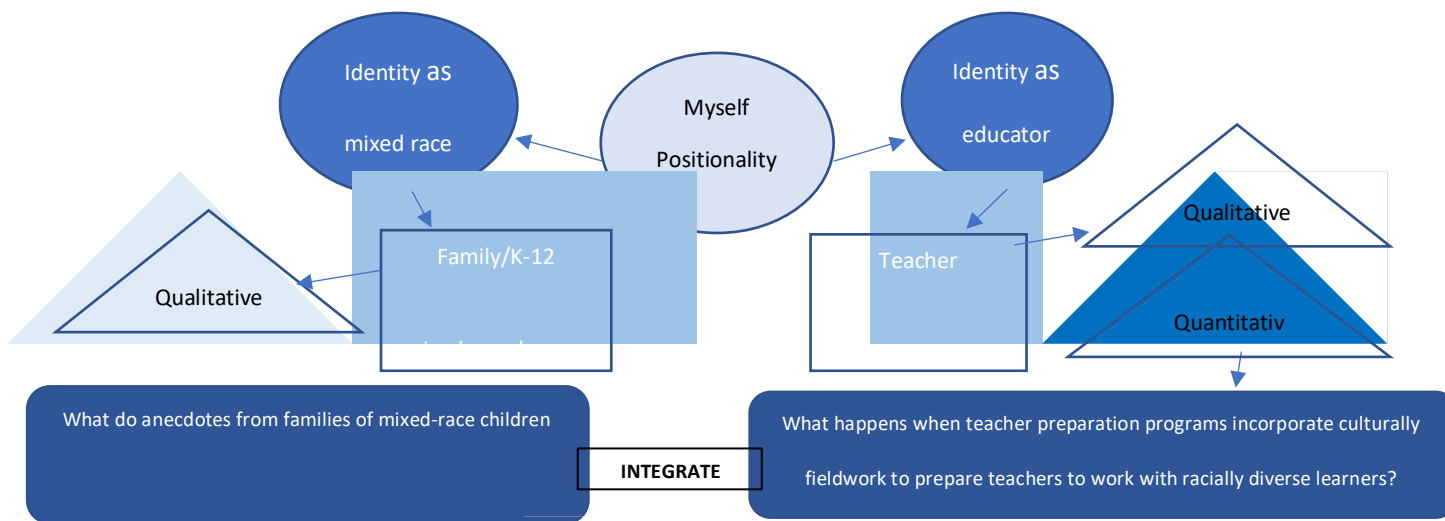
explained in the next chapter, addresses my research questions through the integration of quantitative and qualitative data from pre-service teachers and mixed-race learners.

CHAPTER 3: DESIGN OF THE CONTEXTUALIZED INVESTIGATION

Research Design

To best answer the research questions posed in chapter 1, what happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners and what do anecdotes from families of mixed-race (Black and White) children reveal about their learners' experiences in K-12 educational settings, a mixed-methods design was adopted. As an action researcher, it was helpful to create a visual (see Figure 2) to highlight the interaction between myself, the participants, and the outcomes of the data collection. This chapter includes an explanation of the methodology implemented to arrive at the outcomes connected to the research questions.

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Figure 1*Visual Representation of Mixed Method Study***Mixed-Methods**

According to Creswell (2022), there are three main aims of mixed method research (1) to measure changes through quantitative data analysis, (2) describe experiences through qualitative research, and (3) combine the quantitative and qualitative findings. In creating my research study, I contemplated a design that would highlight the unique experiences of mixed-race students in learning environments while also providing measurable data on teacher preparedness to effectively teach this population. Qualitative data will be gathered through anecdotes or story, “a common rhetorical device in phenomenological writing” (Manen, 2016, p. 115). Artifacts (observations, open-ended survey responses, and reflections) from my undergraduate course

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(SPU 316) will also be used as qualitative data. Quantitative data will be from pre- and post-surveys completed by pre-service teachers.

In drawing from both quantitative and qualitative data this study serves as a mixed methods participatory action research design. Creswell (2022) identifies this type of design where merging quantitative and qualitative data “flow into the framework at different points, while the participatory framework becomes a constant focus of study aimed at improving the lives of individuals or communities in our society today” (p. 8). Quantitative and qualitative data from pre-service teachers provided insights into possibility and potential gaps for effectively infusing CR-SE competencies in teacher preparation programs. Qualitative data in the form of anecdotal narratives from families of mixed-race learner painted a landscape that confirmed some of the areas identified by pre-service teachers as gaps and provided suggestions on what works well for students who identify as mixed.

Pre-Service Teachers

Qualitative Data:

Pre-service teacher qualitative data collection included observations, open-ended survey responses and end of semester reflections created for SPU 316: Literacy Development and Instruction in Core and Intervention Areas. This data was collected and analyzed as part of the assignments turned in by pre-service teachers throughout the Spring and Fall 2023 semesters. The reflections were products of observation hours and assignments aligned to the CR-SE

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competencies throughout the semester. This data was collected during the second half of the spring and fall semesters. Content and preparation occurred during weeks one through seven. Observations, open-ended survey responses, and end of the semester reflections took place throughout the final weeks of the semester – weeks eight through fifteen and finals week.

Qualitative data (open-ended survey responses, observations, and end of semester reflections) was coded to determine themes based on the experiences of pre-service teachers at the end of the course. The themes were analyzed and compared to the themes that arose from the qualitative data collected from the K-12 mixed-race learners' anecdotes. Creswell (2022) suggests, "Having different units of analysis should work especially well when the intent of the convergent design is to compare different perspectives" (p.90). This comparison will provide a better understanding of mixed-race learners' experiences in K-12 classroom settings and how pre-service teachers can prepare to best enhance their experiences using the CR-SE competencies. Convergent design fits best for my data analysis in this mixed methods study since I merged and integrated forms of collected qualitative and quantitative data (Creswell, 2022). The graphic (Figure 3) below displays convergent design.

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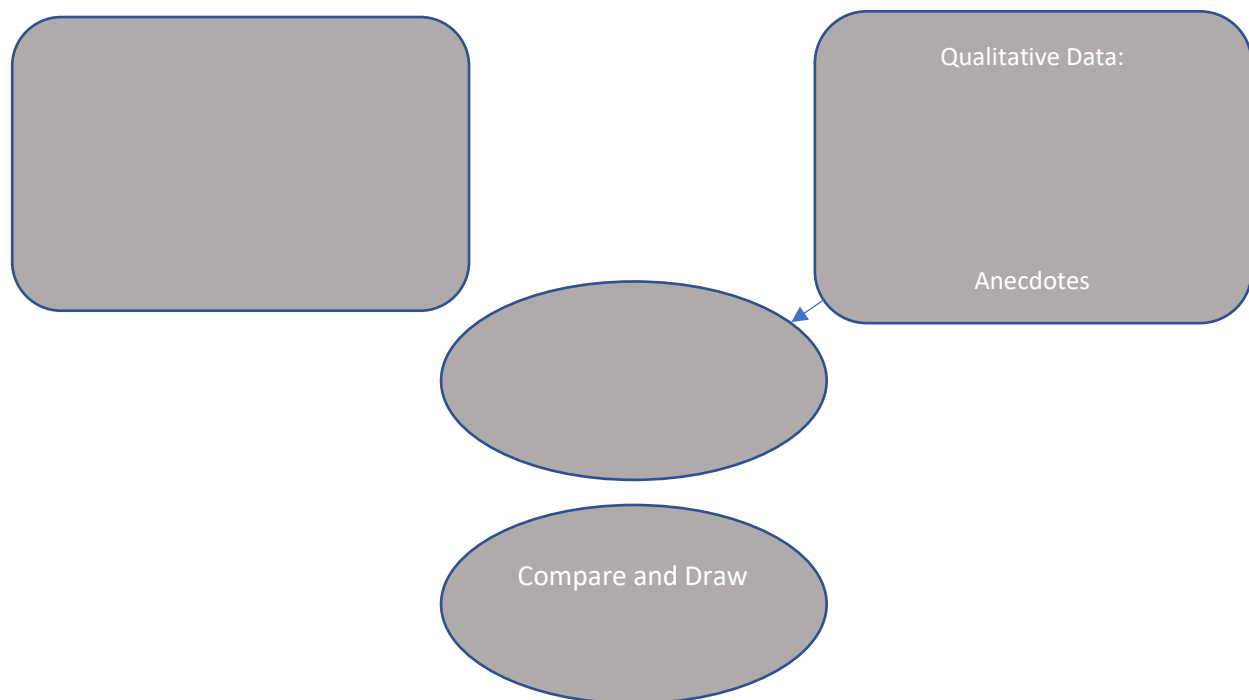
Figure 2*Convergent Design*

Figure adapted from Creswell, 2022

Quantitative Data:

As far as quantitative data, descriptive and inferential statistics were considered to support this research study's need. The descriptive statistics evolved from a common teacher inquiry – did my course have a positive impact on my students? I wanted to know if the planning and intentional incorporation of the CR-SE competencies increased their understanding and comfort level in implementing the competencies in their future classrooms. Inferential statistics

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were included to determine the statistical significance of change from pre- to post survey responses with my course as the treatment. A Likert scale was administered at the beginning and end of my course to quantify pre-service student views and preparedness to create inclusive academic spaces aligned to the culturally relevant and sustaining education competencies.

Setting

The setting for my research study took place at a mid-size university in a town with a population of 5,000 in the Northeast region of the United States. An appeal of this university is its location, nestled between two metropolitan areas that provide diverse environments and a plethora of culture. This university is known for its teacher certification program and remains consistent in its enrollment to the College of Education. Course lectures, activities, assignments, discussions, and engagement with the CR-SE competencies occurred in a classroom filled with undergraduates in the College of Education. Additionally, undergraduates completed five required observation hours in the field for this course, SPU 316 – Literacy Development and Instruction in Core and Intervention Areas. As part of their observation stipulations, students were to capture evidence of the CR-SE competencies exhibited in the literacy classrooms. The settings for the students' fieldwork varied since they were given the choice of any literacy-based classroom in any K-12 school. The focus on the CR-SE competencies was voluntary and deliberate for this study. As mentioned, there is a mandate for adding these competencies into curriculum and syllabi by Fall 2024.

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Participants

Most of the pre-service teachers in the three sections of SPU 316 (two in spring 2023 and one in fall 2023) were juniors (65 students). Out of the 88 enrolled undergraduates, eight were seniors and fifteen were sophomores. All undergraduates were above the age of 18. All sections combined, 46 students were elementary education majors, 11 students were special education (single certification) majors, 14 students were dual certification special education and elementary education majors, 1 was a dual certification special education and secondary education major, 1 was a dual certification special education and vision major, 1 student was a library science major, 2 students were special education studies (non-certification) majors, 6 students were music education majors, and 6 students were middle level education majors. 86% of the students identify as female, 12% identify as male, and 2% identify as gender neutral. On their pre-survey, students were given an option to list one or more races in which they identified and 79 out of 88 students opted to answer. Based on that survey, the racial identity of the participants includes 67 White/non-Hispanic students, 3 Black/African American students, 2 White/Hispanic students, 2 Arabic/White students, 1 South Asian/Mixed student, 1 White/Southeast Asian (Filipino) student, 1 Black/African/Caribbean American student, 1 Hispanic/Latinx student, and 1 Asian (Filipino, Korean, Chinese) student.

Participant Selection

I used random sampling (Creswell, 2022) for the participant selection process since I didn't recruit pre-service teachers for this study. Pre-service teachers enrolled in three sections of

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SPU 316 Literacy Development and Instruction in Core and Intervention Areas due to it being a requirement for teacher candidacy and graduation. This course was selected for this research study prior to receiving a class roster, therefore no bias existed in participant selection. It was chosen based on the content of the course and the required field work experience. The content and most of the assignments for this course are aligned to the Pennsylvania Culturally Relevant and Sustaining Education Competencies. The course is structured to enhance student understanding and the application of culturally relevant teaching practices in connection with literacy instruction.

There were 88 pre-service undergraduate students enrolled between three sections of the course, SPU 316. For this course, students are required to complete five observation hours (spring 2023 sections facilitated a culturally relevant lesson plan during observation hours), pre- and post-survey, and an end of semester reflection as outlined in the syllabus (see Appendix B). Additional assignments are required in the syllabus but were not part of this study. I gained approval from the Kutztown University IRB office to use the data I collected as part of my class for this research study. Additional consent forms and documents used to protect the individuals in this study are found in the appendix.

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K-12 Mixed-Race Students

Qualitative Data:

Data collection from K-12 mixed-race learners was acquired through anecdotes provided by participating families. These anecdotes included narratives of lived educational experiences reflected on by the family. The students involved in these stories provided their families with permission to share their first-hand accounts. This idea of inquiry through lived experiences evolved from the methods of Max van Manen. “Van Manen’s reflective phenomenological method is aimed at illuminating the lived experience or prereflective experience of a phenomenon” (Peoples, 2021, p. 118). This method guided my qualitative data analysis and illuminated the educational experiences of mixed-race learners in the form of narratives throughout my research study. Manen (2016) claims that, “Anecdotes can teach us” (p. 120). I want the narratives to do just that, teach pre-service teachers how to be better prepared to create diverse classrooms of acceptance, inclusivity, and belonging.

Setting:

The setting for the qualitative data collection from families of mixed-race learners (K-12) was mostly virtual. Virtual in this context means either over the phone or through email correspondence. The families ranged in physical location, with some families living in urban settings and other families living in suburban settings. Therefore, the school settings in which the learners attend varied from urban to suburban. These interactions took place throughout a

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calendar year from January 2023 to January 2024. It was most important for families to be in comfortable, familiar surroundings as they shared anecdotal stories of their children's educational experiences.

Participants:

Participants whose narratives were shared ranged from six years old to seventeen. All the participants identify as mixed-race (Black and White). The families are made up of one White parent and one Black parent. Five families participated in this qualitative research. All families are residents of Pennsylvania and currently send their children to in-person public and private schools.

Participant Selection:

Purposeful sampling (Creswell, 2022) was used for participant selection for the families of mixed-race learners in K-12 educational settings. This type of sampling was chosen to “best help the researcher understand the central phenomenon being explored” (Creswell, 2022, p. 88). To best explore the lived experiences of mixed-race learners in the K-12 setting, it was important to engage those individuals who identify as Black and White. Five families, including my own family, were selected to participate in this study. Participant selection was based on agreement from the families to share their learners' stories. All participants are anonymous and void of any identifiers. My positionality and involvement in this study as an insider researcher (Herr &

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Anderson, 2015) will be examined in the limitations section of this section. IRB approval was granted, and appropriate consent forms are included in the appendix.

Potential questions to use as prompts for families if they can't recollect anecdotes:

- How would you describe your school? What do you like best? What do you like least?
- Do you feel a sense of belonging at your school? For the younger kids, do you feel like you fit in at your school? Or do you feel safe and included? Why or why not?
- Talk about times you have been asked about your racial identity in school. Who asked you? How did it make you feel?
- Have you ever felt left out at school because of your mixed identity? Describe what happened and how you felt.
- What types of activities/lessons do you do at school that talk about race?
- Have you learned about mixed-race individuals in your classes? If so, who? Or have you read books with mixed-race characters?

Data Collection Procedure

I taught SPU 316 for the first time during my second year as a doctoral student. The summer prior, I was introduced to the CR-SE competencies at a department retreat. My department chair and I both would teach this class in the upcoming school year. We discussed incorporating the competencies into our syllabus and assignments. As I solidified my research topic and inquiry, I realized the opportunity I had for action research and data collection within this course. This sparked critical thinking around how students felt towards implementing the

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competencies in future classrooms knowing most of them did not have opportunities to interact with these competencies prior or apply these competencies in the field. I decided this would be the catalyst for my quantitative and qualitative data collection.

The chart (see Figure 4) exhibits a detailed data collection procedure for each of the research questions. It includes the data source, type of data, and timeline for gathering the data for each of the questions. Data collection happened during the 2023 spring and fall semesters and culminated in December 2023. Qualitative data from mixed-race families was collected over a calendar year from January 2023 to January 2024.

Table 2

Data Collection Procedures

Research Question	Data Source	Type	Timeline
What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	Pre-Survey (Pre-service teachers)	Quantitative (Likert) Qualitative (Open-ended)	Week of February 6, 2023 (Spring semester) Week of September 5, 2023 (Fall semester)
What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to	Post- Survey (Pre-service teachers)	Quantitative (Likert) Qualitative (Open-ended)	Due on April 30, 2023 (Spring semester) Due on December 12, 2023 (Fall semester)

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work with racially diverse learners? What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	Observations (Pre-service teachers)	Qualitative	Due on April 30, 2023 (Spring semester) Due on November 26, 2023 (Fall semester)
What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	End of semester reflection (Pre-service teachers)	Qualitative	Due on April 30, 2023 (Spring semester) Due on December 12, 2023 (Fall semester)
What do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?	Anecdotes from K-12 families of mixed-race learners	Qualitative	January 2023 – January 2024

Triangulation of Data

My decision to complete a mixed method study increases process validity. Multiple data collection methods, quantitative and qualitative, from a variety of perspectives benefited this study's outcomes. Herr & Anderson (2015) asserts, “The notion of triangulation, or the inclusion of multiple perspectives, guards against viewing events in a simplistic or self-serving way” (p.68). Throughout the triangulation process, critical colleagues, member checks, and inductive

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and deductive coding (Saldana, 2021) were used to examine and re-examine the qualitative data collected from pre-service teacher assignments and family narratives. This process led to emerging and converging themes that were analyzed in connection to the research questions - How do teacher preparation programs incorporate culturally relevant and sustaining education competencies into courses and field work to effectively prepare pre-service teachers to work with racially diverse learners? And what do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings? The data collected in response to these questions was explored employing a convergent design structure within the complex mixed method participatory action research study (Creswell, 2022).

Inferential statistical analysis was conducted to assess the quantitative data results from the pre- and post- Likert surveys. The purpose of this quantitative data analysis was to provide a comparison of where pre-service teachers rate themselves at the beginning of the semester and then at the end of the semester in reference to the CR-SE competencies and their preparedness to teach diverse learners. This analysis was construed in the convergent design structure. The quantitative findings were integrated with the qualitative findings to create outcomes to the research questions.

Limitations

In the realm of action research and due to the nature of this study, I am classified as an “insider” (Herr & Anderson, 2015). I’m an insider in the sense that I am conducting research in my own setting, the university in which I teach. One focus for this study is to contribute to

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strengthening the teacher preparation program at our institution through the lens and application of the CR-SE competencies. Additionally, my positionality as a mother of a mixed-race school-aged child impacts my personal connection to this study. It is imperative for me to be reflexive throughout this study especially since I am incorporating anecdotes from my own child's educational experiences. I must acknowledge my bias and positionality specifically when coding the qualitative data to interpret and integrate school experiences of mixed-race learners with the quantitative and qualitative data I collected from my pre-service teacher participants. This is a critical limitation I will expand upon in chapter five.

The time constraints of gathering data during a 15-week spring semester in which two weeks I was unavailable due to the delivery of my son in April limited components of my data collection. Limitations involving returned consent forms impacted my sample size. Due to the timing of my son's birth, consents were sent via email. I received less than a third of my student participants signed forms which impacted the qualitative data I was able to use due to identifiers. This prompted my extension of my research to fall 2023 to increase my pre-service teacher qualitative data sample size. These limitations are clearly articulated and discussed in more depth in chapter five.

Summary

Despite limitations, this action research study has the potential to shift mindsets and practices in teacher preparation programs through the infusion of CR-SE competencies. In following the research design and implementing a mixed-methods approach, the qualitative and

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quantitative data collected blended to provide insights to the research questions. Those outcomes will heighten mixed-race learners' experiences and influence changes to current course curriculum and fieldwork experiences of pre-service teachers. The phenomenological lens encouraged authentic narratives and the theoretical underpinnings coupled historical trends and explanations to the importance of this research. A close examination of the narratives and all other forms of data will come to life in the next chapter. Chapter four meticulously outlines the qualitative and quantitative data accumulated and the codes and themes that surfaced and make meaning of this study.

Chapter 4: Results Outline

Overview of Data – Mixed Methods

Daunting, necessary, and telling are the words that come to mind as I process the data collection and analysis completed for this research study. The best counsel I was given as an educator about data was to remember that it's attached to people. Our school leader at the time would preface every data meeting or professional development with those sentiments. As a former K-12 special educator, I was constantly overwhelmed by quantitative data; progress monitoring, MAP data, standardized cognitive and academic assessments, Likert scale behavior and adaptive functioning surveys. One would get lost in all that quantitative data and often forget the student connected to the numbers, baselines, and graphs. I didn't want that to be the story of my research study.

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When I set out on this study, I was determined to prioritize the people and the narratives behind the numbers. In studying the idea of “street data” (Safir & Dugan, 2021), I see its connection to my goal to highlight the experiences of pre-service teachers and mixed-race students to best understand the data. Street data defined by Safir and Dugan (2021) “...are the qualitative and experiential data that emerges at eye level and on lower frequencies when we train our brains to discern it. These data are asset based, building on the tenets of culturally responsive education by helping educators look for what’s *right* in our students, schools, and communities instead of seeking out what’s *wrong*” (p. 57). The use of street data speaks to the PA Culturally Relevant and Sustaining Education competencies and the theoretical framework that grounds my research. To pair with the street data and provide additional guidance for my qualitative findings, I chose a mixed-method approach to collect data and substantiate my research. (See Table 1 and Figure 1).

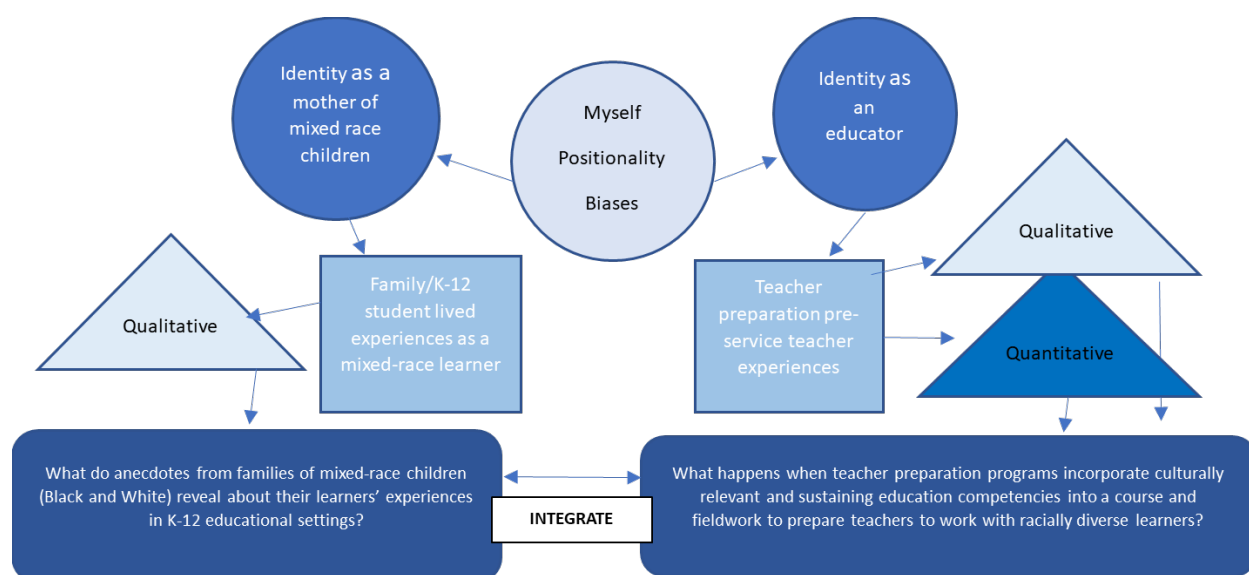
Table 3*Data Collection Procedures*

Research Question	Data Source	Type	Timeline
What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	Pre-Survey (Pre-service teachers)	Quantitative (Likert) Qualitative (Open-ended)	Week of February 6, 2023 (Spring semester) Week of September 5, 2023 (Fall semester)

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What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	Post- Survey (Pre-service teachers)	Quantitative (Likert) Qualitative (Open-ended)	Due on April 30, 2023 (Spring semester) Due on December 12, 2023 (Fall semester)
What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	Observations (Pre-service teachers)	Qualitative	Due on April 30, 2023 (Spring semester) Due on November 26, 2023 (Fall semester)
What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?	End of semester reflection (Pre-service teachers)	Qualitative	Due on April 30, 2023 (Spring semester) Due on December 12, 2023 (Fall semester)
What do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?	Anecdotes from K-12 families of mixed-race learners	Qualitative	January 2023 – January 2024

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Figure 3*Visual Representation of Mixed Method Study*

I began the data analysis journey with my pre-service teachers, particularly because the data collected from them is both quantitative and qualitative. The findings from this data connect with my research question, *what happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?* And the sub question, *what components of the course curriculum support culturally relevant and sustaining practices? What gaps exist?* In posing these questions, I was excited to learn the answers through action research.

Essentially, I had the opportunity to enhance a literacy-based course I already taught by incorporating explicit instruction around the PA Culturally Relevant and Sustaining Education

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competencies and intentionally aligning most of the course assignments to these competencies. The semester began with students taking a pre-survey to determine their familiarity with the competencies and their level of comfort applying the competencies to their future teaching practice. The same survey was taken again at the end of the semester and used as quantitative data to analyze any change from the beginning of the semester to the end of the semester. Throughout the semester, the students were introduced to the competencies, engaged in discussion around the competencies, and completed four assignments aligned with the competencies.

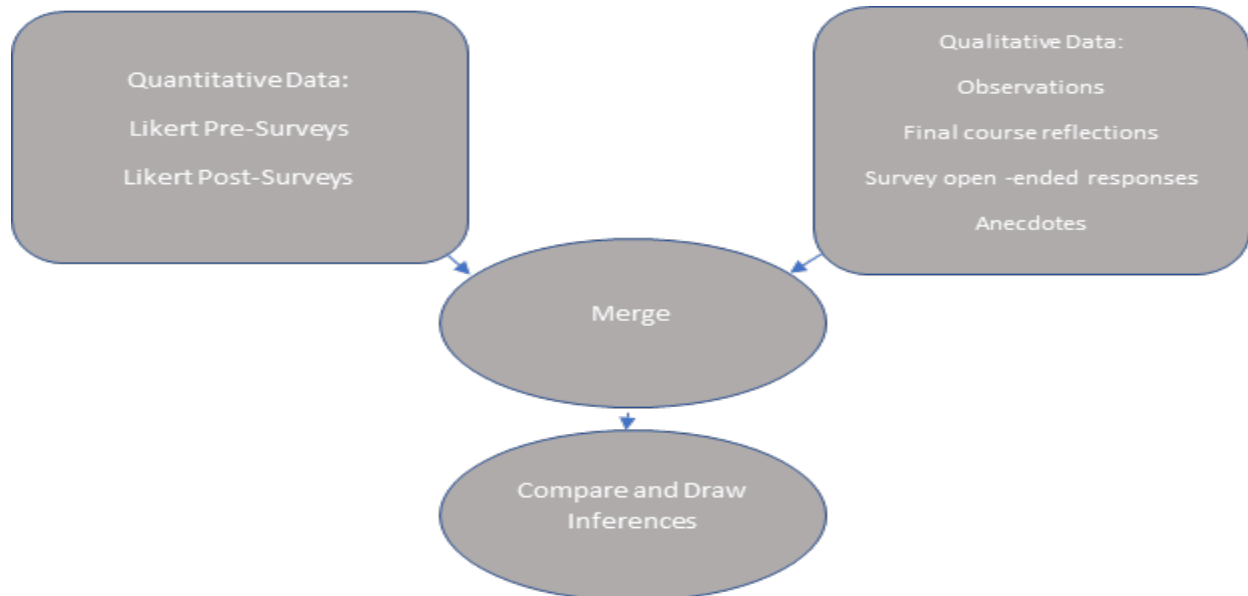
These four assignments included a literacy website critique, teacher interview, lesson plan, and observation hours. For the literacy website critique, students were to select a literacy-based website and respond to critical thinking questions about the content and formatting of the site. One question asked for evidence of the CR-SE competencies. The teacher interview required students to interview in-service teachers using approved questions that incorporated the CR-SE competencies and literacy. Spring 2023 students facilitated a pre-selected culturally relevant and sustaining literacy lesson during their required five hours of observations. For the observation hours, students could choose any K-12 literacy-based classroom and observe and reflect on specific CR-SE competencies and literacy strategies/instruction. I analyzed their final reflections on their assignments, open-ended survey responses, and observation hours reflections as qualitative data. The instruction around the competencies and the assignments are considered the treatment that could potentially impact student familiarity and comfort applying the

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competencies into their future classrooms. The findings were examined through a mixed-method approach. (See Figure 2.)

Figure 4

Convergent Design



The anecdotal narratives provided by families of mixed-race (Black and White) students are strictly qualitative. This data was analyzed through coding and intercoder critical discourse to determine themes specific to the current educational experiences of K-12 mixed-race students. This is where the “street data” really comes into focus. The better we as teacher educators and future educators can understand what is happening in present-day classrooms, the better we can prepare for inclusive, diverse spaces where students have a sense of belonging. Researchers like Joseph and Briscoe-Smith (2021) recognize “this generation is more racially diverse than any

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generation in the past” (p. 10) and “this generation were born into the presidency of Barack Obama, our 44th president, a mixed-race African American man who sang the praises of interracial unity” (p. 10-11). While there is an increase in awareness of this generation, there isn’t enough research from current K-12 students who identify as mixed-race to truly understand their educational experiences.

Quantitative Findings

To satisfy my inquiry around my institution’s teacher preparation program and the use of the CR-SE competencies, I enlisted quantitative measures. I sought out the guidance of a former professor in the doctoral program who had an expertise in statistics and quantitative data. Through numerous meetings, descriptive and inferential data was reviewed and examined to remove potential errors and increase validity in the results.

Pre-service teacher Likert scale responses

During the spring and fall 2023 semesters, 88 undergraduate pre-service teachers anonymously completed a pre- and post- survey as part of their course requirements (60 students from the spring semester and 28 students from the fall semester). This survey was comprised of questions based on the knowledge and engagement of the Pennsylvania CR-SE competencies. There were twenty questions aligned to the competencies. Students used a Likert scale to respond to each question. Their response choices included strongly disagree, disagree, neutral/unsure, agree, strongly agree. Each Likert response was given a numerical value from

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one to five (strongly disagree to strongly agree). Raw data was collected for each student Likert response to each survey question before and after engagement in SPU 316. (See Table 2 for Likert scale questions).

Table 4*Competencies and Specific Likert Scale Questions*

Competency	Questions
Overview	Q1 – I am familiar with the PA Culturally Relevant and Sustaining Competencies Q2 – I have or currently discuss culturally relevant and sustaining education practices in other courses. Q3- Overall, my courses are preparing me to teach diverse learners.
Competency 1: Reflect on One’s Cultural Lens	Q4 - I reflect on my own life experiences and membership to various identity groups (i.e. race, skin color, ethnicity, gender, age, nationality, language, class, ability, religion, etc.) Q5 - I engage in critical and difficult conversations with others to deepen my awareness of my own conscious/unconscious biases, stereotypes, and prejudices. Q6 - I respect, acknowledge, and affirm learners' diverse identities, histories, cultures, and value systems.
Competency 2 - Identify, deepen understanding of, and take steps to address bias in the system.	Q7 - I know and acknowledge that biases exist in the educational system. Q8 - I understand the importance of social markers, such as race, ethnicity, gender, age, language, class, ability, sexual orientation, and religion and how these markers impact the ability for individuals to access a wide range of opportunities Q9 - I am prepared to identify and make efforts to remove bias in my teaching materials, assignments, curriculum, and the allocation of resources.
Competency 3 - Design and facilitate culturally relevant learning that brings real world	Q10 - I respect the real-world experiences of learners, educators, educational leaders, and families and the diverse funds of knowledge they bring into educational spaces.

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<p>experiences into educational settings.</p>	<p>Q11 - I am comfortable integrating multiple perspectives into learning experiences and interactions by capitalizing on learners' real-world experiences, identities, and heritage.</p>
<p>Competency 4 - Provide all learners with equitable and differentiated opportunities to learn and succeed.</p>	<p>Q12 - I intentionally challenge my own beliefs, attitudes, assumptions, and behaviors regarding the knowledge and backgrounds of dominant and non-dominant social groups.</p> <p>Q13 - I am prepared to provide rigorous learning experiences and relevant projects in culturally supportive spaces that integrate advocacy skills, deep listening and thinking, collaboration, resource gathering, and strategic actions that build their sense of civic responsibility and their capacity to see themselves as agents of change.</p> <p>Q14 - I am prepared to create an equitable learning environment by challenging and debunking stereotypes and biases about the intelligence, academic ability, and behavior of BIPOC and other marginalized learners, educators, educational leaders, and families.</p> <p>Q15 - I am prepared to provide multiple pathways and opportunities for students to achieve academic and social success.</p>
<p>Competency 5 - Promote asset-based perspectives about differences.</p>	<p>Q16 - I recognize diversity to be an asset to the entire learning community and treat it as such. I nurture environments that are respectful and inclusive of every BIPOC learner.</p> <p>Q17 - I am prepared to help learners value their own and others' cultures by helping them develop a sense of responsibility for recognizing, responding to, and addressing bias, discrimination, and bullying when they encounter it.</p>
<p>Competency 9 - Educate oneself about microaggressions, their impact on diverse learners, educators, and families and actively disrupt the practice by naming and challenging its use.</p>	<p>Q18 - I believe and acknowledge that microaggressions are real, and I take steps to educate myself about the subtle and obvious ways in which they are used to harm and invalidate existence of others.</p> <p>Q19 - I am prepared to create learning communities and spaces that are inclusive and free of destructive and harmful microaggressions.</p> <p>Q20 - I engage in critically reflexive practice and have a high-level of self-awareness that enables me to assess a situation and immediately adapt.</p>

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To analyze this data, I performed Two Sample Assuming Equal Variances t-tests for the raw data for each of the twenty Likert scale questions. To address potential type 1 error, I also took averages of groupings of questions and ran the same Two Sample Assuming Equal Variances t-tests to increase validity. The questions were grouped into the following seven categories – Overview, Competency 1, Competency 2, Competency 3, Competency 4, Competency 5, and Competency 9. I engaged in this process twice and came out with the same results both times I performed the t-tests. I also consulted a critical friend who conducted mixed-methods research and met with two expert professors to ensure my data analysis was accurate. The next few sections furnish the outcomes of those t-tests and a brief look at descriptive data.

Descriptive Statistics for Spring and Fall 2023

I consistently reflect on my instruction and gather informal and formal feedback from my students. Since SPU 316 was used for my research study, I amplified my reflective practices and increased my personal critique on the goals intended for the course. What I hoped for most, as I do with all courses, is that students would leave the course better equipped with knowledge and confidence in their ability to apply the content to their future classrooms. Prior to conducting inferential data analysis, I took a preliminary dive into my survey data. I was curious to uncover the impact of my course on pre-service teachers and their engagement and comfort level applying the competencies in their future classrooms. The probing question, how did the treatment, that is introducing, exploring, and aligning the CR-SE competencies to course assignments, affect my undergraduate students? My hypothesis was that the treatment would

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impact the students and yield an increase in their post- survey responses compared to their pre-survey responses.

I decided to take the average of all students who responded “agree/strongly agree” to the three overview questions:

- Q1 – I am familiar with the PA Culturally Relevant and Sustaining Competencies
- Q2 – I have or currently discuss culturally relevant and sustaining education practices in other courses
- Q3- Overall, my courses are preparing me to teach diverse learners

I compared the pre survey average of all students who responded “agree/strongly agree” to the same questions in the post survey. This gave me a quick description of the change in responses before and after students took SPU 316. I used these outcomes to eject or confirm my hypothesis.

The mean of students who responded “agree/strongly agree” on the pre survey from spring 2023 were 86% in comparison with the 98% who responded “agree/strongly agree” on the post survey from spring 2023. The mean of students who responded “agree/strongly agree” on the pre survey from fall 2023 were 89% in comparison with the 97% who responded “agree/strongly agree” on the post survey from fall 2023. This confirmed my hypothesis. SPU 316 impacted students. After taking this course (the treatment), there was an increase in students who were familiar with the competencies, discussed them, and felt that their courses were preparing them to teach diverse students. There are limitations to descriptive data. I was

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committed to uncovering sound quantitative evidence that answered my research question and supported my hypothesis around pre-service teachers, the CR-SE competencies, and the structure of my course. I immersed my findings in inferential statistics.

Inferential Statistics

Looking at descriptive data from student surveys motivated me in my inferential statistics quest for this mixed-method study. As previously mentioned, I conducted independent sample t-tests to determine a change in agreement of student's responses to individual survey items pre and post SPU 316. I tested my hypothesis that an increase in scores would occur pre to post survey results for students who took this course and engaged in the treatment (introducing, exploring, and aligning course assignments to the CR-SE competencies). There was a significant difference between the means of six out of seven groupings from the spring 2023 data and three out of seven groupings from the fall 2023 data.

In t-tests, data rejects the null hypothesis and is statistically significant when the p-value is less than 0.05. A notable number of individual questions and groupings from each semester indicated a p-value less than 0.05 rejecting the null hypothesis. This signifies that the treatment (introducing, exploring, and aligning course assignments to the CR-SE competencies) impacted the post-survey student responses to show an increase in their knowledge and comfort level infusing the CR-SE competencies into their pedagogy. The following two sections will share specific data outcomes for each semester in which data was collected and analyzed.

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Spring 2023 Semester Data

Spring 2023 was the initial and planned semester to compile data for this research study. I taught two sections of SPU 316. A combined 60 pre-service undergraduates enrolled in the course. These 60 undergraduates anonymously completed pre- and post-surveys. I completed independent t-tests on the raw data collected for each student response to the 20-question survey. I then grouped these questions into seven categories and ran the t-tests on each category for validity. The results displayed statistically significant differences in individual survey questions one, two, three, four, five, nine, eleven, twelve, thirteen, fourteen, fifteen, seventeen, nineteen, and twenty. In the groupings, statistical significance was determined for the Overview, Competency 1 - Reflect on one's cultural lens, Competency 2 - Identify, deepen understanding of, and take steps to address bias in the system, Competency 3 - Design and facilitate culturally relevant learning that brings real world experiences into educational settings, Competency 4 - Provide all learners with equitable and differentiated opportunities to learn and succeed displayed the most questions with statistical significance, and Competency 9 - Educate oneself about microaggressions, their impact on diverse learners, educators, and families and actively disrupt the practice by naming and challenging its use. (See Table 3 for data results). Before providing my analysis of this data, I share the results from the fall 2023 semester.

Fall 2023 Semester Data

Fall 2023 was an additional semester for my data collection. I taught one section of SPU 316 and 28 pre-service undergraduates were enrolled. These 28 students anonymously completed

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the pre- and post-survey at the beginning and end of the semester. I followed the same procedure from the spring 2023 semester in analyzing their raw data. The results displayed statistically significant differences in individual survey questions one, two, twelve, thirteen, and twenty. In the groupings, statistical significance was determined for the Overview, Competency 1 - Reflect on one's cultural lens, and Competency 3 - Design and facilitate culturally relevant learning that brings real world experiences into educational settings (See Table 4 for data results).

Table 5

Spring 2023 Pre and Post Survey Quantitative Data Results

T-test Two Sample Assuming Equal Variance				
Df(118)				
CR-SE Competencies	Pre-Survey Mean and Standard Deviation	Post-Survey Mean and Standard Deviation	t-value	p-value
Overview (Q1-3)	M = 4.01, sd = 0.69	M = 4.48, sd = 0.53	4.25	P<0.001
Comp 1 (Q4-Q6)	M = 4.23, sd = 0.58	M = 4.49, sd = 0.46	2.75	P = 0.003
Comp 2 (Q7-Q9)	M = 4.48, sd = 0.53	M = 4.68, sd = 0.43	2.27	P = 0.013
Comp 3 (Q10-Q13)	M = 4.22, sd = 0.54	M = 4.60, sd = 0.42	4.23	P<0.001
Comp 4 (Q14-Q15)	M = 4.28, sd = 0.70	M = 4.60, sd = 0.24	2.87	P = 0.002
Comp 5 (Q16-Q17)	M = 4.55, sd = 0.52	M = 4.69, sd = 0.45	1.60	P = 0.057
Comp 9 (Q18-Q20)	M = 4.29, sd = 0.65	M = 4.58, sd = 0.46	2.80	P = 0.003

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Table 6*Fall 2023 Pre and Post Survey Quantitative Data Results*

T-test Two Sample Assuming Equal Variance				
Df(54)				
CR-SE Competencies	Pre-Survey Mean and Standard Deviation	Post-Survey Mean and Standard Deviation	t-value	p-value
Overview (Q1-3)	M = 3.81, sd = 0.77	M = 4.39, sd = 0.69	3.00	P = 0.002
Comp 1 (Q4-Q6)	M = 4.12, sd = 0.58	M = 4.37, sd = 0.47	1.77	P = 0.041
Comp 2 (Q7-Q9)	M = 4.57, sd = 0.45	M = 4.56, sd = 0.80	0.07	P = 0.473
Comp 3 (Q10-Q13)	M = 4.31, sd = 0.46	M = 4.58, sd = 0.49	2.10	P = 0.020
Comp 4 (Q14-Q15)	M = 4.48, sd = 0.59	M = 4.61, sd = 0.48	0.88	P = 0.193
Comp 5 (Q16-Q17)	M = 4.52, sd = 0.50	M = 4.64, sd = 0.47	0.97	P = 0.169
Comp 9 (Q18-Q20)	M = 4.33, sd = 0.51	M = 4.51, sd = 0.53	1.29	P = 0.102

Summary of Quantitative Data Findings

When reviewing the inferential statistics, more statistically significant data was detected in the spring 2023 semester than in the fall 2023 semester. One hypothesis as to why the spring semester yielded more statistically significant data includes the additional focus that other faculty members initiated around the competencies during the 2023-2024 academic year. Also, the sample size of students was double in the spring of 2023 (60) compared to the fall of 2023 (28). A final hypothesis examines the removal of an assignment from the fall 2023 syllabus. The assignment removed was a requirement to teach a CR-SE aligned lesson during observation hours. Logistically, this assignment was a challenge for many students which led to the removal of the assignment for fall 2023. These hypotheses will be explored in greater detail in chapter 5.

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Chapter 5 will investigate further common threads between the data results from the spring 2023 and fall 2023 semesters. Initial findings show similarities among questions and competency themes. For example, both generated statistical significance in the individual questions Q1 – I am familiar with the PA Culturally Relevant and Sustaining Competencies, Q12 - I intentionally challenge my own beliefs, attitudes, assumptions, and behaviors regarding the knowledge and backgrounds of dominant and non-dominant social groups, Q13 - I am prepared to provide rigorous learning experiences and relevant projects in culturally supportive spaces that integrate advocacy skills, deep listening and thinking, collaboration, resource gathering, and strategic actions that build their sense of civic responsibility and their capacity to see themselves as agents of change and Q20 - I engage in critically reflexive practice and have a high-level of self-awareness that enables me to assess a situation and immediately adapt. Additionally, there were three groupings from both semesters that displayed statistical significance. These groupings were the Overview, Competency 1- Reflect on one’s cultural lens, and Competency 3 - Design and facilitate culturally relevant learning that brings real world experiences into educational settings. These common threads from both semesters will support the merge between quantitative and qualitative data in this mixed method study.

Qualitative Findings

In my effort to bring to life the quantitative findings, I became absorbed with this study's qualitative means. I desired to know more about the pre-service teachers’ dispositions and growth from the beginning of the semester to the end of the semester. In examining this

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qualitative data, I was optimistic I could make connections with the qualitative data from the families of mixed-race students as well. In culmination, my convergent method would come into fruition in response to my research questions. But first, let's dive into the pre-service teacher qualitative data.

Pre-service teacher open-ended post survey responses

There were two optional open-ended questions included in the pre- and post- surveys administered to my courses. There were 35 responses from the combined spring 2023 and fall 2023 semesters for the first optional question - *What improvements can be made to your teacher preparation program to prepare you better to teach diverse populations?* This open-ended question connects to my research question: *What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?* There were 28 responses from spring and fall 2023 for the second optional question: *Multiracial individuals make up most of the population. What challenges do you foresee teaching students who identify as both Black and White? How could you ensure they feel a sense of belonging with both groups?* This question connects to both of my research questions - *What do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings? And What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?*

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I used an inductive coding method to analyze this data. This method of coding is when researchers "read through the data and let the codes emerge" (Bingham & Witkowsky, 2021, p. 134). I began with a preliminary code book and then created a second code book. Upon completion of the second code book, I met with critical friends to share and review the codes that emerged. The meeting with critical friends provided reliability and validity for my analysis. Specifically, it delivered dialogic validity which is a form of peer review that occurs when those who are familiar with the setting and your research act as a devil's advocate to push the thinking of the researcher and uncover any shortcomings (Herr & Anderson, 2015). After the meeting with critical friends, I conducted a third and final analysis of the codes and themes found in the open-ended responses of my students.

Data Analysis of Open-Ended Question One

For the first optional question, the analysis of the 35 anonymous responses generated 12 inductive codes. (See table 7). The most common code that evolved from student responses was "increase discussions around diversity." The following student response, "I think there should be more discussions in other courses and all subject areas. I think that sometimes it is just lightly glazed over and broad. I think we should be digging deeper into our biases and how it affects our students" (pre-service teacher, Fall 2023) captures similar sentiments shared by other students.

Two other common codes from this data included "expand courses/additional activities" and "preparation." Students provided the following recommendations aligned to these codes;

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create a whole course specific to the CR-SE competencies/diversity, more options for real-world applications, model proper CR-SE instruction such as how to choose literature, images, and media that represent all learners, provide specific examples and resources, and incorporate the CR-SE competencies into more courses including content specific courses such as Science and Social Studies.

One code that evolved as an outlier in this portion of data was the special education code. The course SPU 316 is intended to cover core and tiered literacy instruction. It is considered a special education course; however, it is for all education majors. Therefore, many general education majors want the course to delve deeper into special education categories and literacy instruction specific to students who are identified to receive services outside the general education classroom. I am glad general education majors want more focus on how to best instruct students requiring special education services. And while students with disabilities are part of our diverse populations, it does not fit with the research focus.

The codes for open-ended question data can be connected to my theme, “changes to teacher preparation program.” This aligns with my literature review and what I believe to be a main focal point and outcome of my study. Researchers, such as Chang (2014), provide tangible recommendations that coincide with the CR-SE competencies and the following pre-service teacher codes; increasing diversity discussions, real-world application, and expanding courses/activities. The codes were categorized into focus on diversity, ways the teacher preparation program can be enhanced, and roadblocks that potentially prevent pre-service

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teachers from developing into effective teachers of diverse populations. Roadblocks that were coded included bias, assumptions, and family involvement.

Table 7

Qualitative Data Codes from Post-Survey Question 1: What improvements can be made to your teacher preparation program to prepare you better to teach diverse populations?

Pattern Codes	Categories	Theme
<ul style="list-style-type: none"> • Increase discussions around diversity • Discomfort with diversity • Define diversity 	Diversity	Increase diversity development for pre-service teachers
<ul style="list-style-type: none"> • CR-SE competencies • Expand courses/additional activities • Across curriculum • Preparation • Real-world application 	Teacher preparation	Changes to teacher preparation programs (matches a theme from my literature review)
<ul style="list-style-type: none"> • Bias • Assumptions • Family involvement 	Potential roadblocks	Increase individual reflection and self-work (Reflexivity). Create ways to productively incorporate families.

Data Analysis of Open-Ended Question Two

For the second optional question in the survey, the analysis of the 29 anonymous responses yielded nine codes. (See table 3 for a list of the codes, categories, and themes). Identity

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was the code with the highest contributions for this data set. Many pre-service teachers shared the complexity of having multiple identities and seeing those identities represented and accepted in educational settings. There was a trend in the survey responses around the “challenge” for educators to create environments that support mixed-race students in embracing their dual or multi-identities. As mentioned by Joseph and Briscoe-Smith (2021), “Although race is filled with complexities and contradictions and constructions for all, answers to the questions surrounding race, the ‘what’, and ‘who’, and the ‘why’ questions of identity, can feel particularly complicated for children and youth who are mixed race” (p. 1). The goal to encourage mixed students to embrace and navigate identity while creating a sense of belonging in classrooms is a lofty one for educators and a theme seen in a variety of research.

Sense of belonging and embracing differences were two other reiterated codes in the student responses to this question. Students shared examples of how they plan to embrace differences in their classrooms. These examples included creating welcoming spaces, utilizing the community, families, clothing, food, and hosting show and tells. One student’s response, “I can ensure they feel a sense of belonging with both groups by putting images and books in the classroom that have multiracial individuals” (pre-service teacher, spring 2023) provides an actionable way to create a sense of belonging for mixed-race students in the classroom. The same student also shared their concern with creating lessons that include multiracial individuals. It takes planning and intentionality to create inclusive environments for diverse students, especially those with multiracial backgrounds.

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In coding the data for this question, I was most surprised when I realized that responses from this data set answered both of my research questions. Additionally, there were significant connections between the themes from my codes and the themes found in my literature review which will be further discussed in chapter five. The overwhelming responses that included identity/sense of belonging and embracing differences support what I envisioned as vital themes for my study and address both my research questions - *What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners and what do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?*. The outlier codes, diversity = problems, fear, and colorblindness contribute to the category, potential roadblocks. Potential roadblocks were a category from the first open-ended survey question as well. Chapter five recognizes potential roadblocks as an option for further research.

Table 8

Qualitative Data Codes from Post Survey Question #2: Multiracial individuals make up most of the population. What challenges do you foresee teaching students who identify as both Black and White? How could you ensure they feel a sense of belonging with both groups?

Pattern Codes	Categories	Themes
<ul style="list-style-type: none"> • Identity • Sense of belonging 	Identity/Belonging (theme from literature review)	Importance of representation in educational spaces (connection to theme from

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<ul style="list-style-type: none"> • Embrace differences • Family • Community • Curriculum 	Diversity practices	literature review – Invisibility- Lack of Representation)
<ul style="list-style-type: none"> • Diversity = problems • Fear • Colorblindness 	Potential roadblocks (same category as question #1)	Importance of culturally relevant and sustaining pedagogy (theme from literature review) Need for individual reflection, self-work (Reflexivity)

Assignment: Pre-service teacher classroom observations

Classroom observations were a requirement for SPU 316. Students could not pass the course without completing five hours of observations in a literacy-based K-12 setting. Submission of the observation hours were due towards the end of the semester after students mastered course objectives and gained perspective on tiered literacy instruction and infusion of the competencies. Observation forms provided space for pre-service teachers to record and reflect on the literacy instruction, interventions, and evidence of the competencies witnessed during their time in the educational setting of their choice. (See Appendix for observation form)

When coding this data, I used inductive and deductive codes to analyze the 35 observation forms in which I was given consent from spring 2023 and fall 2023 students. The deductive, a priori, codes (Saldana, 2021) were competencies one, two, three, four, five, and nine which were the same competencies assessed in the pre- and post-surveys. I completed one round of coding to uncover any general mention or connection to the specific six competencies. (See Table #) My first round of coding revealed that competency three and competency four were the

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most observed in the classrooms. This wasn't surprising since competency three, *design and facilitate culturally relevant learning that brings real world experiences into educational settings*, and competency four, *provide all learners with equitable and differentiated opportunities to learn and succeed*, were heavily discussed throughout the semester. I was surprised to find that seven of the thirty-five submissions did not include any reference to the competencies even though that was an expectation of the assignment.

Table 9*Codes Connected to Competencies*

Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	Comp 9	None
4	1	17	16	3	1	7

On my second and third round of coding, I examined the portions of their observations related to the six competencies for specific evidence of the use of the competencies in the classrooms observed by pre-service teachers. These examples and key words were inductive codes that emerged and connected to the competencies. I bridged these inductive codes to individual survey questions for each of the six competencies which were my original a priori (deductive) codes (See Tables 10-15) My goal was to uncover tangible documentation of theory put into practice.

Pre-service teachers noted the most examples of competency-related instruction connected to the following survey questions; "I respect, acknowledge, and affirm learners'

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diverse identities, histories, cultures, and value systems” (competency one), “I am comfortable integrating multiple perspectives into learning experiences and interactions by capitalizing on learners’ real-world experiences, identities, and heritage” (competency three), and “I am prepared to provide multiple pathways and opportunities for students to achieve academic and social success” (competency four). These three competencies were the most discussed throughout the course and easiest for students to relate to their future classrooms. The following tables link the inductive codes that emerged from the observations to specific survey questions from the pre-service teacher surveys. Each of these survey questions are connected to the competencies, the a priori codes used during the first round of coding.

Table 10*Competency 1 Codes– Reflect on one’s cultural lens*

Survey Question	Connected Codes
I respect, acknowledge, and affirm learners’ diverse identities, histories, cultures, and value systems	<ul style="list-style-type: none"> -cultural and diverse books -make all students feel important -posters of different genders, races, ethnicities -morning meeting to share out about different cultures -”Friday letters” to someone at home about something the students did that week -posters with different races and ethnicities -”like a family” -treats students with respect -values each individual student

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Table 11

Competency 2 Codes – Identify, deepen understanding of, and take steps to address bias in the system

Survey Question	Connected Codes
I am prepared to identify and make efforts to remove bias in my teaching materials, assignments, curriculum, and the allocation of resources	-”don’t really deal with bias in the classroom – upper grades problem” -use of diverse characters, different stories, different activities that represent different races and ethnicities in curriculum/textbooks

Table 12

Competency 3 Codes – Design and facilitate culturally relevant learning that brings real world experiences into educational settings

Survey Question	Connected Codes
I respect the real-world experiences of learners, educators, educational leaders, and families and the diverse funds of knowledge they bring into educational spaces	-students share personal stories related to the story the teacher read -writing connects to their own life experiences
I am comfortable integrating multiple perspectives into learning experiences and interactions by capitalizing on learners’ real-world experiences, identities, and heritage.	-students share cultural real-world experiences related to a video on kindness -real-life experiences of stealing and apologizing -during morning meeting students greet each other in different languages and give background knowledge about the language -intentional lessons/activities to include students that don’t celebrate Easter or other holidays -infused multiple perspectives into lesson through images and languages

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Table 13

Competency 4 Codes – Provide all learners with equitable and differentiated opportunities to learn and succeed

Survey Question	Connected Codes
I am prepared to create an equitable learning environment by challenging and debunking stereotypes and biases about the intelligence, academic ability, and behavior of BIPOC and marginalized learners, educators, educational leaders, and families.	<ul style="list-style-type: none"> -equity sticks to ensure all students participate -celebration of less dominant holidays such as Cinco de Mayo (Mexican culture), White Cane Day (visual impairment culture)
I am prepared to provide multiple pathways and opportunities for students to achieve academic and social success.	<ul style="list-style-type: none"> -students receiving one on one support -differentiated instruction sheets -guided writing (prompts at the beginning and end) -partner reading, independent reading, and teacher one-on-one reading -flexible seating – bicycle seating, wobble chairs, lap desks, rocker chairs -fidgets -use of technology -testing accommodations and fair assessments -alternative lighting – LED lights, free standing lamps -different response modalities – written, verbal -choice instruction -opportunity for feedback and revisions

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Table 14

Competency 5 Codes – Promote asset-based perspectives about differences

Survey Question	Connected Codes
I recognize diversity to be an asset to the entire learning community and treat it as such. I nurture environments that are respectful and inclusive of every BIPOC learner.	-”All about Me” posters in classroom -community discussions to help students feel included and heard -speaking to student in their native language

Table 15

Competency 9 Codes – Educate oneself about microaggressions, their impact on diverse

learners, educators, and families and actively disrupt the practice by naming and challenging its use

Survey Question	Connected Codes
I am prepared to create learning communities and spaces that are inclusive and free of destructive and harmful microaggressions	-teacher handles comments said between students and if problems arise, she handles it right away and doesn’t ignore it -assumption that teachers are well educated on microaggressions due to diverse group of students in the district

This data shows that many pre-service teachers were able to identify in-service educators utilizing the competencies in their diverse classrooms. One student shared the following, “After the classroom expectations, they move on to morning meeting where they greet each other in a different language” (pre-service teacher, spring 2023). This is a visible example of competency three - design and facilitate culturally relevant learning that brings real world experiences into

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educational settings. A few pre-service teachers also made remarks and reflected in their submissions that the competencies were not visible throughout their observations. One pre-service teacher shared, “I have been in this classroom six times and I have not seen anything relating to the CR-SE competencies. I also think the curriculum and classroom are very mainstream and lack diversity” (student, fall 2023). Another pre-service teacher stated, “I do think the inclusion of more culture needs improvement” and another echoed, “I do think that there could be more representation of student’s backgrounds in the classroom” (students, fall 2023). Reflections of whether the competencies were observed contributed to the critical lens through which students viewed the classrooms and in-service teachers. Critical thinking was a skill I hoped to strengthen in my students throughout the semester. Pre-service teachers continue to exhibit their critical thinking skills in the next data set, their course reflections.

Pre-service teacher end of semester course reflections

This final assignment of the semester allowed students to critically contemplate the course structure, the content, and the required assignments. To examine this data, I used a priori coding since I was looking for explicit connections to my research and this culminating assignment had reflective questions pertaining to my course, the treatment. I ran the data through two rounds of coding and had a critical friend review my analysis for validity and reliability purposes (Herr & Anderson, 2015). I received 35 signed consent forms from pre-service teachers in my spring and fall 2023 courses. Unlike the survey data, which was anonymous, I knew the creators of each of these assignments since they were submitted for grades for the course. The

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number of signed consent forms was less in the spring due to my maternity leave that occurred at the end of the semester when consent forms were to be collected. If students did not email their consent to me, I did not find it ethical to reach out to them to gain consent. Therefore, the 35 total consent forms received are the 35 assignments which I coded for this research.

The following four questions were asked as part of the end of the semester course reflection: 1. Name two ways you will teach literacy in your classroom. 2. What do you think is the most challenging aspect to providing inclusive and accessible literacy instruction? 3. Which assignment (literacy website critique, teacher interview, CR-SE lesson plan, observation hours, or core project) do you feel was most beneficial and aligned to this course's learning objectives? 4. Please provide feedback (adjusting and/or affirming) on the content of this course and how it was taught.

For questions one, two, and four I examined responses looking for the following a priori codes, diverse/diversity and CR-SE. The word diverse was found twelve times and diversity was found three times throughout the 35 student responses. CR-SE (culturally relevant and sustaining education) was uncovered twelve times in the responses. (See Table 16) These codes were specifically chosen because I was curious if diverse/diversity and CR-SE became common language for pre-service students. I wanted to analyze student reflections to determine if these terms were part of their big takeaways from the course. About a third of the students incorporated these terms in their responses.

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Table 16*A priori codes from Questions 1, 2, and 4*

Codes	Total number
Diverse	12
Diversity	3
CR-SE	12

All assignments were explicitly aligned to the CR-SE competencies except for the core project. The core project was focused on interviewing a student, identifying an area of need in literacy, and creating an intervention plan to support the student. Table 17 displays a matrix of the student responses to question three which asks which assignment students felt was most beneficial and aligned to the course objectives. Most students chose one assignment, and a few chose two as most beneficial and aligned to the course. One student chose the literacy website critique, fifteen students chose the teacher interview, five students chose the CR-SE aligned lesson plan, ten students chose the observation hours, and eight students chose the core project. An in-depth explanation can be found for each of these assignments in the appendix.

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Table 17*Question 4 Assignments Matrix*

Student	Website Critique	Teacher Interview	Lesson Plan	Observation Hours	Core Project
1		x			
2					x
3		x			
4			x		
5			x		
6			x		
7			x		
8		x			
9		x			
10		x			
11		x			
12		x			
13				x	
14	x				x
15				x	
16		x			
17		x			
18				x	
19		x		x	
20				x	
21			x		
22		x			x
23				x	
24				x	x
25					x
26					x
27		x			
28		x			
29				x	
30		x			

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31		x			
32					x
33				x	
34					x
35				x	
Total	1	15	5	10	8

Two additional a priori codes I looked for in the responses to questions one (name two ways you will teach literacy in your classroom) and two (what do you think is the most challenging aspect to providing inclusive and accessible literacy instruction) were ways to create inclusive classroom environments and sense of belonging for students. I examined the data for specific examples of how pre-service students planned to do this in their future classrooms.

Table 18 displays the answers provided by students that were found in connection to the a priori codes, inclusivity and sense of belonging. This is a literacy focused course, therefore, most of the responses involved books, reading, or writing.

Table 18

Student answers that support the codes inclusivity and sense of belonging

Ideas that connect to the codes of inclusivity and sense of belonging
<ul style="list-style-type: none"> • Diverse books and making sure that every student has an opportunity to see themselves represented in a book • Having books in the classroom library that students will enjoy and can relate to • Texts that relate to students and allow real world application • Group work that allows peers to socialize together • Encourage students to choose their own books • Bringing in the different backgrounds of my students into each lesson or unit • Strengths-based approach where each child is seen for their strengths and not their deficits

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- Equitable and diverse way to teach literacy
- Provide books that are diverse and culturally accurate and relevant
- Make sure that children are represented
- Diverse classroom library
- Take in information and interests about students to make book selection more diverse
- Learn about biases on all levels (personal, administration, curriculum) and prevent them in the classroom
- Add books about race, culture, and ethnicity to make all students feel seen
- Create lessons and activities that include all students
- Accessible and inclusive books
- Having enough materials like diverse books and writing/drawing materials
- Technological tools
- Teachers being able to educate themselves, so they know what to look for and how to provide inclusive, accessible literacy instruction
- Find examples of real-life people that identify as both Black and White to help students feel encouraged with belonging to both groups
- Create welcoming environment
- Realize that relatability does not always have to come from their own ethnic or cultural background
- Find resources such as books that are diverse for the entire class
- Ensure that each and every student feels seen, and represented in the literature read in class
- Show connections of literature to everyday life
- Consider language differences and cultural backgrounds
- UDL
- Teachers need to be culturally responsive, recognizing and respecting the diverse linguistic and cultural backgrounds of their students
- Teachers job to understand that students are unique and come from different backgrounds
- Students connect to the material they are reading

Anecdotal narratives

At the heart of this research are the families who shared their personal narratives. These narratives showcase lived experiences of mixed-race learners. Five families participated in the

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study. Each family included one Black parent and one White parent. Parents were provided with prompts to encourage dialogue with their mixed-race children if needed. Families could share any anecdote that they felt captured their mixed child's educational experience. The prompts provided are listed below and as part of the consent form found in the appendix.

- How would you describe your school? What do you like best? What do you like least?
- Do you feel a sense of belonging at your school? For the younger kids, do you feel like you fit in at your school? Or do you feel safe and included? Why or why not?
- Talk about times you have been asked about your racial identity in school. Who asked you? How did it make you feel?
- Have you ever felt left out at school because of your mixed identity? Describe what happened and how you felt.
- What types of activities/lessons do you do at school that talk about race?
- Have you learned about mixed-race individuals in your classes? If so, who? Or have you read books with mixed-race characters?

My positionality and role as insider researcher (Creswell, 2022) motivated me to pursue intercoder reliability for this data set. My closeness and bias as a parent of a mixed-race student and instructor of pre-service teachers led me to this pursuit. In accordance with Cofie et al. (2022), "This approach must emphasize the need to achieve consistency between coders rather than mere quantification of the extent of agreement between coders and encourages

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reflexivity and authenticity throughout the qualitative analysis process” (p. 74). The commitment to reflexivity and authenticity was the reason for engaging in intercoder reliability. I wanted to check my bias as I coded this corpus of data. The process was less about a quantitative value (percentage) of agreement of codes, and more about interpreting the data with fidelity and engaging in critical conversations. Table 19 provides the questions I asked to frame the purpose of intercoder reliability.

Table 19

Cofie et al. framework for this process of intercoder reliability.

Table 1. Ways to get a grip on Intercoder Reliability

Aspects of Intercoder Reliability	Present		Justification (If 'no' selected)
There was a minimum of two coders.	Yes	No	
At least one coder was more removed from data collection (to address bias).	Yes	No	
At least one coder had expertise and previous experience with coding qualitative data.	Yes	No	
If there were multiple participant groups, a minimum of two researchers (coders) coded transcripts from each participant group.	Yes	No	
The coders used the same framework for analysis (e.g., inductive, deductive, abductive).	Yes	No	
Coders focused on shared meaning of *codes through dialogue and consensus.	Yes	No	
Another coder with expertise in qualitative methods was consulted to resolve outstanding conflicts.	Yes	No	
Coder consensus resulted in a codebook** that was applied when coding the remaining transcripts.	Yes	No	

* The code names do not have to be identical, but the meaning of the codes must be the same.

**In inductive and abductive analyses, coding can be an iterative process; therefore, new codes may be added to the codebook until code saturation is reached.

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For my first round, I used descriptive coding to see what emerged from the narratives. Descriptive coding is basic and primarily used to summarize and create a categorized inventory of the data (Saldana, 2021). This form of coding gave me the chance to read the family narratives for what they were, without a priori coding. Descriptive coding lays the groundwork for second coding cycles (Saldana, 2021). Thirty-two descriptive codes were uncovered during this first round. (See table 20) These codes were then compared to those from a colleague who participated as an intercoder.

Table 20*List of descriptive codes*

Codes from Narratives	
Love of learning	Family values
Friendships	Family involvement
Connected to teachers	Inclusion/inclusive
Quality of teachers	Community/cultural events
Predominantly white teachers	Climate/culture surveys
Safe	Class chats
Identity	Peer mentors
Black History Month	Embrace curiosity
Culturally relevant	Welcomed
Inconsistent	Celebrate diversity
Bare minimum	Diverse
Lack of representation	Curriculum
Ignorance	Resources
Microaggressions	Communication
Misidentification	Activities/projects
Belonging	Sports

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The critical colleague works at the same university as the researcher and identifies as a white female. This colleague was chosen as an intercoder because she was removed from the research study and had experience coding qualitative data. The colleague engaged in her own inductive coding cycle to allow natural codes to emerge from the narratives, the intercoder went into the process with an open mind (Bingham & Witkowsky, 2021; Saldaña, 2021). After the researcher and critical colleague coded the data independently, they met to compare their findings and dialogue about the codes that emerged. Through this dialogue, the duo discovered many similar codes. The codes that overlapped in both of their initial coding sessions include friends, connection to teachers, predominantly white teachers, safe, identity, belonging, bare minimum, curriculum, misidentification, family involvement, inclusion, community/cultural events, sports, resources, diversity, culturally relevant, and climate/culture surveys.

After the comparison of inductive codes, the colleague shared discrepancies that she uncovered between the urban and suburban settings. For this research urban settings are defined as cities with dense populations and suburban settings are defined as locations outside of cities with less dense populations (White, 2020). This led to a valuable discourse around the different experiences of mixed-race learners based on their specific setting. The general takeaway from this conversation was that suburban schools have access to more effective community programs and culturally relevant curriculum than urban schools. In turn, there is more involvement of administration and families in suburban settings which benefit the mixed-race learners. A

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concern discussed was that even though urban settings may have a more diverse student population, the faculty remains predominantly white. This concern can also relate to suburban settings, but these districts have more resources and opportunities to develop culturally relevant and responsive teaching environments.

The conversation prompted a second round of coding to determine themes that considered each participant and their unique experiences. The five themes that surfaced were teacher knowledge and resources, family involvement, peer interactions, sense of belonging, and cultural awareness. A deeper discussion around these themes and their implications for this research is found in chapter five. A third look at the narratives employed inductive, in vivo coding, “the terms used by participants themselves” (Strauss, 1987, p. 33). Since one aim of this study is to capture the essence of the mixed-race student’s educational experience, in vivo coding provided evidence of each of the themes uncovered. Each family that participated in this study provided narratives connecting to the five themes. The next section will include brief descriptions of the families and the in vivo codes that support the five themes. Family demographics are included in table 21.

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Table 21*Family Demographics*

Family Name	Mother's Race	Father's Race	Setting	Child's Grade
Harrison	White	Black	Suburban	Kindergarten Second
Cooper	White	White	Suburban	Seventh
Gadson	White	Black	Urban	Eighth Eleventh
Washington	White	Black	Urban	Second
Sanford	White	Black/Hispanic	Suburban	Third Fourth

Harrison family. This family consists of a Black father, a White mother and their two mixed-race children. They provided accounts from their son in kindergarten and their daughter in second grade. The family lives in the suburbs and their children have attended a Christian school and a suburban public school.

Peer interaction - "She told me a boy said that another boy couldn't sit with them at recess because he had brown skin."

Cultural awareness - "When my daughter was in kindergarten during Black History Month, her teacher came out to talk to me at pick up and said when they talked about Dr. Martin Luther King Jr. She asked who knew who he was and A didn't raise her hand. Jokingly, the teacher said to me, I told her I am so surprised that you out of anyone didn't know. The teacher's demeanor was joking when she told me this story but I was

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left feeling off put – like was she implying my kid wasn't black enough because she didn't know about him.”

Teacher knowledge and resources - “I wound up buying some resources for teaching black history (outside of just february) that were appropriate for small children and sharing them with the teachers. One teacher (the only black staff member in the building) asked me questions and said they used it in the classroom but I never heard anything else from the staff. They did things to celebrate black history month but it was very basic.”

Sense of belonging - “My kids are also in out of school activities where they have been able to connect with other kids.”

Family involvement - “I mentioned a little bit about conversations I've had with staff but we are constantly having conversations at home. We talk about how and why my entire family has a variety of skin colors - my son just completed a family tree project and told my husband he wanted to split everyone up by the people who have the peach skin vs the people who have the brown skin”

Cooper family. This family consists of a White father, a White mother and their adopted mixed-race son. They shared the educational experiences of their 7th grader. The family lives in the suburbs and their child attends a suburban public school.

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Peer interaction - “We are thrilled that N has friends of all different backgrounds and interests. In the long run, this will give him a better perspective on life outside of high school.”

Cultural awareness - “They incorporate different activities throughout the school year which address cultural, religious and ethnic differences. Last year they held a Community Inclusion and Belonging forum as well as a Community Resource Fair which included over 90 different community agencies. The school also regularly conducts climate/culture surveys, host class chats, and incorporate new student activities and peer mentoring to help newcomers feel welcomed and as though they belong.

Teacher knowledge and resources - “His school does an excellent job and including cultural diversity in their everyday curriculum and we feel fortunate that N attends a school where things like this are a priority.”

Sense of belonging- “N absolutely feels included at school. He is well liked by his peers and teachers”

Family involvement - “Following a racially charged episode of a favorite television show (All American) N had many questions surrounding interactions between white policemen and black teenagers. He did not understand why the teenagers were being treated so poorly given that they did not do anything. This experience opened the door to some tougher conversations about racism. N has had exposure in school to topics

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stemming from racism and slavery, but seeing this first hand in the television show was an eye-opening experience for him, learning that unfortunately the issues he learned about in school are not completely in the past. We purchased some books for him to read when he is ready- that would address these topics even further. Two of the books are “Stamped for Kids” by Jason Reynolds and Ibram X. Kendi, and “Uncomfortable conversations with a Black Boy” by Emmanuel Acho. We chose not to force N to read these, but rather have them available for him, and encourage him to read them when he is ready.

Gadson family. This family consists of a Black father, a White mother and her mixed-race son and daughter. The father and mother are amicably separated and do not reside in the same household. The children live with their mother, and she was the individual who shared the experiences of her 8th grade son and 11th grade daughter. Her children attend an urban public school.

Peer interaction - “When the kids ask, it doesn't seem to bother them as much. I know that my son is often teased in a joking way that he talks "white". And he responds... Well, I am white.”

Cultural awareness - “A gym teacher asked K to translate something in Spanish to another student last year and K was like, "HUH"? She said she just didn't understand why that assumption was made.”

Teacher knowledge and resources - “The curriculum is very behind. While the district is

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trying to up their game, there is definitely a disconnect between the educators and the children. I strongly feel that children are being left behind.”

Sense of belonging - “I could tell K was maybe questioning where she belonged..... like could she rock braids and what would people think or is she trying too hard.”

Family involvement - “As a mother of mixed children, their father and I will never be able to relate to what it is to be interracial. We do our best to support them and guide them in everything they do. I believe both of our children know that we are their biggest fans and while we can't necessarily relate we will always support them and if they need anything that we cannot provide, we will find someone that can provide the conversations and guidance that is needed.”

Washington family. This family consists of a Black father, a White mother and their two mixed-race children. The family provided the educational experience of their oldest son in 2nd grade at an urban school. The other child is a toddler and not of school age.

Peer interaction - “When discussing his racial identity, he stated that one time another student asked him what percentage Jamaican, white, and Black he was. He said he wasn't sure what to say but that he felt fine with them asking because it was just a question.”

Cultural awareness - “He told me that they did Christmas activities prior to winter break because the teacher said everyone celebrates Christmas. Once they had a homework

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assignment that asked them to write about how their mommy and daddy show love. If they aren't embracing diverse religious backgrounds and family backgrounds, it makes me think that even though the students are from racially diverse backgrounds, that most of the content and instruction is white-centered."

Teacher knowledge and resources - "He was made to feel othered when he wore a dashiki for Black History Month. His then white teachers, white administrators, and white students didn't acknowledge his mixed-race, specifically his Black side. When he was bluntly questioned about what he was wearing and why as a three-year-old, he couldn't respond and ended up wearing his winter jacket the entire day to cover his colorful garment.

Sense of belonging - "L has shared that he feels safe at his elementary school because he has a lot of friends and people are kind to him. He also says the teachers are really kind."

Family involvement - "It was the catalyst for me to talk more openly about race as a mixed family. At home, we began buying and reading as many books on mixed-race individuals as possible."

Sanford family. This family consists of a Black father, a White mother and their two mixed-race children. The family provided shared accounts of their 3rd grade daughter and their 4th grade son who attend suburban public school.

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Peer interaction - “They love the friends that they have made, and they love the fun experiences they have at school.”

Cultural awareness - They have had multiple projects where they have been able to present their family background to their class. My son was so excited to conduct a full presentation about our Cuban heritage. He shared recipes, pictures, and history. He said he felt really proud to talk about where his family comes from.

Teacher knowledge and resources - “The teachers integrate lessons related to racial differences in their classrooms. The guidance counselor conducts lessons on kindness and character once a month that addresses race. There is not a specific curriculum around race, and the school can do a better job of being more explicit with how the lessons of character development translate into supporting racial differences outside of the school building.”

Sense of belonging - “Our children feel safe, welcomed, and absolutely love school. They love their teachers.”

Family involvement - “There must have been 500 parents lined along the outdoor parade route celebrating their children. Parents of all walks of life. The local high school's band was playing music, there was a drill team, and it was a celebration. It was then that I knew we had made the right choice. If families of all cultures thought it was so important

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to take off work to support their kids during a Halloween parade, then I knew they would be supportive of so much more.”

Another step taken to ensure validity and address potential bias was member checking (Rossman & Rallis, 2017). Before including the narratives in this study, I talked with the family participants about the content they submitted. As a final check, I sent emails to each family with the exact wording found in this section and requested feedback and/or confirmation of the information. Additional discussion pertaining to validity will be presented in the following section on triangulation.

Triangulation

Triangulation encourages credibility and validity because of the use of multiple sources or perspectives when answering research questions (Adler, 2022; Curry et al., 2009; Herr & Anderson, 2015). This mixed method research study incorporated five data sources. Quantitative data was collected as pre- and post- survey Likert scales from pre-service students. Qualitative data was collected from pre-service teachers in the form of pre and post survey open-ended responses, observations, and end of semester reflections to answer the research question - how do teacher preparation programs incorporate culturally relevant and sustaining education competencies into courses and field work to effectively prepare pre-service teachers to work with racially diverse learners? An additional data source, narratives collected through interviews with families of mixed-race children, were used to answer the other research question - what do

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anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?

Member checks, critical friends, and intercoder reliability supported dialogic validity for the qualitative data of this study (Herr & Anderson, 2015). Member checks with the family participants and intercoder reliability with a colleague were conducted for the mixed-race learner narratives. Critical friends, which included university colleagues and fellow doctoral students, were called upon for validity and credibility of the qualitative pre-service teacher data. Quantitative data was deemed credible through three meetings with an expert and former statistics professor. Also, multiple rounds of t-tests were conducted to affirm statistical significance and to lessen the potential of type 1 error, incorrectly rejecting the null hypothesis (Liu, 2022).

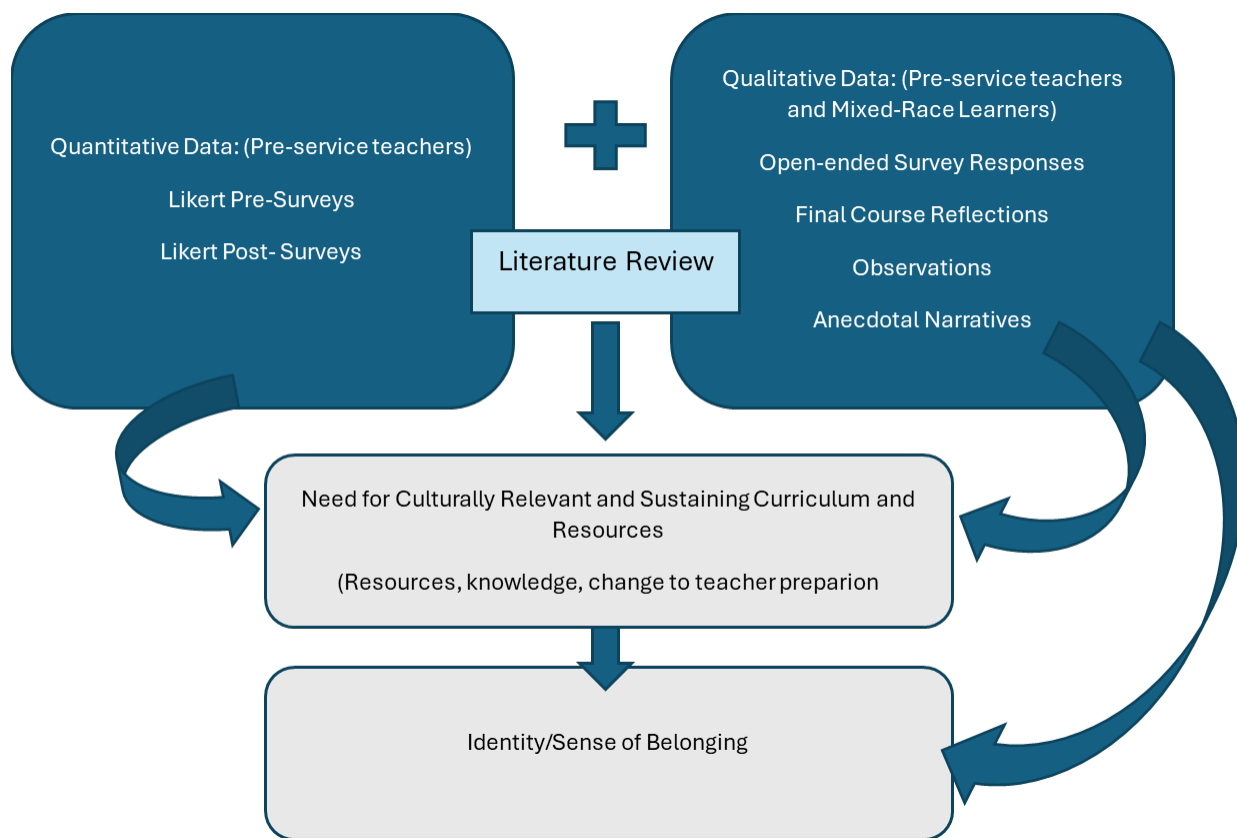
When launching triangulation in a mixed method study, especially in terms of qualitative data, it is important for the researcher to understand it will be messy. It is not a clean cut, linear process. Morse et al. (2002) publication highlights the iterative nature of qualitative research and the back-and-forth dance between design and implementation. This dance is necessary to check for cohesiveness among inquiries, literature, recruitment of participants, data collection methods and the analysis process (Morse et al., 2002).

There aren't direct connections between the quantitative data and the qualitative data. Instead, the quantitative data demonstrates the relevance of this study through statistical

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significance that the treatment (SPU 316) impacted the pre-service teachers. The statistical significance found in the quantitative data supports that the infusion of the competencies into courses benefits pre-service teachers which will ultimately benefit mixed-race learners. The sample sizes for participants differ; the quantitative number is much larger than the qualitative number of participants. However, cohesiveness of themes exists when converging qualitative pre-service teacher data and mixed-race learner data as shown in the figure #. Themes emerged from quantitative and qualitative findings also converged with themes found in the literature review, also depicted in figure #. The ability to witness similar themes evolve in various sources confirms the validity and need for this research.

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Figure 5*Converging the data – main Themes****Conclusion***

As a novice researcher, I labored throughout this chapter. In the end, it was a labor of love that birthed significant quantitative and qualitative evidence that answered my research questions. The narratives suggest that mixed-race learners have unique educational experiences that are both positive and negative. While strong friendships and connections to teachers were

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consistent in the narratives as ways learners felt a sense of belonging, representation and culturally relevant practices were inconsistent. These findings answer my research inquiry, *what do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?*

The quantitative data from pre-service teacher surveys confirmed my hypothesis that SPU 316 would increase pre-service teacher knowledge and comfort implementing the CR-SE competencies in their future classrooms. It provided purpose for this study. The qualitative data from pre-service teacher open-ended survey questions and assignments provided responses to the question, *what happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?* And the sub question, *what components of the course curriculum support culturally relevant and sustaining practices? What gaps exist?*

Through the analysis process, themes evolved from the quantitative and qualitative data from pre-service teachers which overlap with the findings from the qualitative data from the families of mixed-race learners. Merging all the sources of data created an opportunity to compare and draw inferences between the current educational experience of mixed-race learners and the current teacher preparation program. By enacting the convergent method for this study, a holistic view of the data was attained. This holistic view captures the main themes; need for culturally relevant and sustaining pedagogy and identity/sense of belonging, that were fused during the analysis of qualitative and quantitative data. Chapter five contains an in-depth,

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reflective conversation around the results, limitations, implications, and future endeavors associated with this research.

Chapter 5: Discussion of Results

Summary of the Study

This mixed-methods research study began to answer the complex questions posed by the researcher: *What happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners and what do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?* Quantitative data (pre-service teacher pre and post surveys Likert scales) and qualitative data (open-ended survey responses, observations, end of semester reflections, and anecdotes from K-12 families) merged to provide insight towards the research questions. Data analysis uncovered themes connected to literature review findings, and vital implications for pre-service teachers and mixed-race learners. Also, new inquiries evolved that encourage future research.

Quantitative data from pre-service teachers displayed statistical significance between the pre-survey and post-survey. This meant that pre-service teachers were impacted by their participation in SPU 316 and the intentional engagement, and assignments aligned to the CR-SE competencies. Pre-service teacher qualitative data unveiled the benefit of infusing the competencies into discussion and assignments and the need for continued course and field work

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focused on the competencies. Data analysis of pre-service teachers' open-ended responses, observations, and end of semester reflections exposed relations to the themes found in current literature and meaningful implications for teacher preparation programs which will be discussed later in this chapter.

The qualitative data received from mixed-race families was eye-opening and integral in understanding the present educational experiences of K-12 mixed-race learners. Many narratives shared positive stories about their involvement in school settings. This led to questioning what these teachers/schools/districts were doing that can be replicated and integrated into teacher preparation programs. Other narratives disclosed shortcomings that evoked awareness and a call to attention like what was found in the literature review. This information was the most vital outcome of the data collected for this study. Through merging the qualitative and quantitative data from pre-service teachers and mixed-race families, I was able to compare and draw conclusions which brought forth implications for pre-service teachers and mixed-race learners.

In the following sections, I share my evaluation of the results connected to the themes from my literature review, the limitations that impacted the study, the implications for mixed-race learners and pre-service teachers, recommendations, and future research endeavors.

Assessing the Results: Making Connections

Through reflecting on the results of this study, I could see connections between the data and the themes explored in my literature review. Qualitative data analysis of all participants (pre-

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service teachers and families of mixed-race learners) exposed a relationship to the following literature review themes; importance of culturally relevant and sustaining pedagogy, identity/belonging, and invisibility: lack of representation. Pre-service teachers' quantitative and qualitative data connected to the themes – importance of culturally relevant and sustaining pedagogy and changes to teacher preparation programs.

Culturally Relevant and Sustaining Pedagogy

The CR-SE competencies align to the theoretical framework of my study, culturally relevant and sustaining pedagogy. In my literature review, I highlighted examples of why culturally relevant and sustaining pedagogy was essential in teaching diverse classrooms. The nine competencies provide guidance for educators to implement culturally relevant and sustaining educational practices. The data from pre-service teachers and the families of mixed-race learners suggested implementation, training, and resources pertaining to culturally relevant and sustaining education pedagogy. There was a consensus in the research that culturally relevant and sustaining education pedagogy benefits mixed-race learners.

The analysis of the quantitative results from the Likert surveys for both semesters exhibited the most statistically significant changes in three groupings linked to the CR-SE competencies. These groupings include the overview, competency 1 – Reflect on one's cultural lens, and competency 3 – Design and facilitate culturally relevant learning that brings real world experiences into educational settings. Individual questions within these groupings also demonstrated statistical significance. These questions include Q1 – I am familiar with the PA

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Culturally Relevant and Sustaining Competencies, Q12 – I intentionally challenge my own beliefs, attitudes, assumptions, and behaviors regarding the knowledge and backgrounds of dominant and non-dominant social groups, Q13 – I am prepared to provide rigorous learning experiences and relevant projects in culturally supportive spaces that integrate advocacy skills, deep listening and thinking, collaboration, resources gathering, and strategic actions that build their sense of civic responsibility and their capacity to see themselves as agents of change, and Q20 – I engage in critically reflexive practice and have a high-level of self-awareness that enables me to assess a situation and immediately adapt.

These quantitative data results suggest that my SPU 316 course, the treatment, succeeded in effectively utilizing the CR-SE competencies in teacher preparation programs. Pre-service teachers extended their knowledge of the competencies. The aligned assignments gave them tangible opportunities to apply their knowledge to real-life experiences. Pre-service teachers increased their reflexivity, cultural awareness, and cultural competency which overall strengthens their understanding of culturally relevant and sustaining pedagogy.

Belonging/Identity

Extensive research shared in chapter three highlights the importance of a sense of belonging and identity for mixed-race learners. When students don't feel a sense of belonging or endure confusion around identity it directly influences their experiences. Each family that participated in this study attributed a sense of belonging to positive encounters within their children's school experiences. Often this sense of belonging came through acceptance of peers,

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relationships with teachers, and involvement in activities. A sense of belonging was clouded for some children when their identity was questioned, especially by teachers. Competency 1 *Reflect on one's cultural lens* and competency 3 *Design and facilitate culturally relevant learning that brings real world experiences into educational settings* outline ways in which educators can create classrooms that foster a sense of belonging and value all parts of an individual's identity. Sharma (2017) asserts, "When we loosen the stranglehold of exclusive and divisive social identities, we create a vibrant and peaceful future for ourselves, for one another, and for generations to come" (p. 18). In their open-ended survey responses, pre-service teachers identified a sense of belonging as a vital factor in creating inclusive classrooms. Pre-service teachers are preparing to end exclusion and division among social identities in their future settings.

Invisibility – Lack of Representation

A common trend in literature and research shows that there is a push for mixed-race learners to identify as one race or another. This supports the theme invisibility – lack of representation of mixed-race learners in educational settings. Literature and the narratives shared as part of this research imply that a monoracial paradigm (Harris, 2016) is the norm in most school settings which is why mixed-race students feel the need to hide part of their identities. This theme was discussed in chapter three and noted throughout this study due to multiple stakeholders acknowledging the lack of multiracial representation in curriculum, activities, and general knowledge. There has been more attention and improvements in representation of Black

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and Brown individuals and cultures in school curricula. The challenge now is expanding the inclusion of multiracial entities in educational spaces. Utilizing the CR-SE competencies as a framework for teacher preparation programs is one way to encourage representation of all identities in academic settings.

Changes to Teacher Preparation Programs

Changes to teacher preparation programs are inevitable. A lot of the research reviewed for this study suggested shortcomings in teacher preparation programs in relation to teacher educator and pre-service teacher cultural competency. Much of the literature suggested a need for more research in this area. The CR-SE competencies have been the spark that has ignited action research and meaningful change in many educational settings. The PDE amendment to Chapter 49 has made this change more urgent for teacher preparation programs. Based on this study, many pre-service teachers articulated the need for more courses designed to include culturally relevant and sustaining education practices. In this study, pre-service teachers requested more discourse around the competencies and field work that allows them to apply what they learn. The quantitative data findings analyzed in chapter four support that when the competencies are incorporated into a course through discussions and assignments, pre-service teachers feel more prepared to effectively use the competencies as a framework to teach diverse students. It will be intriguing to see what transpires throughout the teacher preparation program after the competencies become a mandatory part of all course syllabi in August 2024.

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Limitations

As with any research study, limitations can arise. This study was not immune to limitations. Three limitations played notable roles in the research. These limitations include positionality, time constraints, and nuances.

Positionality

My positionality as a white mother of two mixed-race children, educator, and insider researcher can easily lead to bias in a study like this. Without appropriate attention, my positionality could be a limitation. Milner (2007) suggests a framework for researchers to sift through seen, unseen, and unforeseen dangers when conducting research involving race and culture. Milner's text explains four components of this framework; researching the self, researching the self in relation to others, engaged reflection and representation, and shifting from self to system. The use of Milner's framework, specifically researching the self and researching the self in relation to others, was indispensable throughout this process. I used the recommended questions to reflect on my own race and culture and on the race and culture of my participants. In doing so, I was able to catch bias and assumptions that influenced my interpretation of the data I collected. I recognized any time my personal agenda would overshadow or misalign with the participants of this study and adapted accordingly. Additionally, I employed critical friends and member checks to tend to my positionality and limit the bias in my analysis of the data.

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Time Constraints

An unexpected limitation occurred when I found out I was pregnant prior to the second year of my doctoral program. Due to higher education schedules and the doctoral program's timeframe, I had already determined that I would collect data during the spring semester of 2023. My due date was April 2023. This created a puzzle since my proposal had to be approved and permission granted from the IRB (Institutional Review Board) to collect data. Thankfully, I was able to defend my proposal and gain IRB approval in early March.

The area impacted by the time constraint leading to this limitation was the retrieval of signed consent forms from my undergraduates. I taught two sections of SPU 316 in spring 2023 which had a total enrollment of 60 students. Consent forms became an afterthought as I entered my third trimester of pregnancy and took a two-week maternity leave. The forms were sent out via email with not much follow up due to caring for a newborn. Fourteen out of sixty consent forms were signed and returned. This led to a much smaller sample size of pre-service teacher qualitative data than I had anticipated. It required me to extend my data collection to the following fall 2023 semester to increase my pre-service teacher qualitative data sample size. In addition to the sample size limitation, the time lapse between the two semesters added variability to the data collected.

Nuances

Mixed-race in the sense of Black and White is very specific and isolates other individuals who identify as mixed-race or multiracial. This can be seen as a limitation of this study.

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Depending on the region of the United States, the prominent mixed racial background may change. The northeast, which is the setting for this research, tends to have a larger population of mixed-race individuals who identify as Black and White unlike the west which tends to have larger populations of mixed-race individuals who identify as Hispanic and other races due to the proximity of the Mexican border. While the relativity of this nuance can pose a limitation, the implications can be inclusive of any mixed-race combination.

Additional nuances such as the location of the mixed-race learner's educational institution will be explored in future studies. Location refers to urban, suburban, and rural areas. During this research study the comparison between urban and suburban schools/districts organically emerged through data analysis. There were findings from this comparison that need more exploration, especially in terms of how to make this study transferrable in urban, suburban, and rural areas. It is also important to note that populations are fluid, complex, and always changing in different locations. This must be addressed too if the study is conducted again.

Implications

Pre-service teachers and mixed-race learners were the main stakeholders of this study. The implications for these two groups overlap. While the implications could exist in isolation of each other, that wasn't the goal of this mixed-methods study. The analysis in chapter four of the quantitative and qualitative data converges to validate the need for changes to teacher preparation programs and utilizes the mixed-race learner narratives to inform the types of changes needed. In

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the following section, I highlight two compelling findings and then from those implications I share recommendations for parents of mixed-race kids, policy and administration, and higher institutions with teacher preparation programs.

Take Away 1: Teachers' cultural competence knowledge matters

Pre-service teachers are aware that schools are diverse and that there is a growing number of multiracial students in educational spaces. When looking at the raw quantitative data from pre-service teacher pre- and post-surveys, most pre-service teachers had limited knowledge of the CR-SE competencies prior to my course. Even if they began the semester with knowledge of the competencies many of them exhibited inconsistencies in their ability to execute instruction aligned to the competencies. By the end of my course, most pre-service teachers increased their knowledge of and ability to execute the competencies in future classrooms.

When comparing and drawing conclusions from the themes that arose from the mixed-race families and the pre-service teachers, one major implication stood out. According to mixed-race families, teacher knowledge and resources surrounding culturally relevant and sustaining education was a key factor in the success of their mixed-race child in a school setting. Similar themes were identified in pre-service teachers' open-ended responses when asked what improvements can be made to their teacher preparation program to better prepare them to teach diverse populations. This included a theme centered around increasing diversity development (discussions, defining terms, and increasing comfort) and a theme focused on changes to teacher

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preparation programs which included the CR-SE competencies, expanding courses, adding additional activities centered around CR-SE, and real-world application.

The implication to increase diversity development and change teacher preparation programs by incorporating the competencies, expanding courses, adding CR-SE aligned activities, and real-world application directly correlates to what we learned positively impacts mixed-race learners' educational experiences; teacher knowledge and resources surrounding culturally relevant and sustaining education.

Take Away 2: Creating inclusive and meaningful learning for mixed-race students matters

According to the Cambridge Dictionary (n.d.), lived experience is the “things that someone has experienced themselves, especially when these give the person a knowledge or understanding that people who have only heard about such experiences do not have” (Cambridge Dictionary, n.d.). The sharing of narratives from mixed-race families has provided significant implications for what works and what doesn't work when creating inclusive and productive educational spaces for mixed-race students. Peer interaction, cultural awareness, teacher knowledge and resources, sense of belonging, and family involvement are the key themes to consider when designing educational environments for mixed-race learners. Understanding the lived experiences of mixed-race learners and comparing their narratives to the qualitative and quantitative data collected from pre-service teachers informs necessary changes to teacher preparation programs.

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Recommendations

Critical Race Theory (CRT) influenced my theoretical framework for this study. Researching CRT led me to discover Multiracial Theory which coincides better with my specific research. One common tenet between CRT and Multiracial, experiential knowledge, includes narratives from marginalized populations (Harris, 2016; Crenshaw et al., 1995, 2010 Delgado & Stefancic, 2001, 2012, 2017). Many CRT advocates and researchers credit narratives and counter-narratives as contributions to policy, research, and theory (Ladson-Billings, 2004; Ladson-Billings, 1995; Parker, 1998; Solorzano & Yosso, 2001). The narratives provided by the families of mixed-race learners largely influence the following recommendations for parents of mixed-race students, policy and administration, and higher education institutions and teacher preparation programs.

Parents of Mixed-Race Students

According to a study conducted by Pew Research Center (2015), about a third (32%) of multiracial adults reported that their parents sometimes talked to them about being mixed-race when growing up and about 16% of parents of mixed-race children at some point someone assumed they were not their child's parent. An informal takeaway from his study included an appreciation from parents for the ability to discuss with their children their experiences as mixed-race learners. For some parents in the study, this was the first time they truly engaged with their kids in discourse about this topic.

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Based on the statistics mentioned above and the informal takeaway, there is a lack of discussion between children and parents of mixed-race children. If parents aren't engaging in conversation around these topics, they may be unaware of what their learner is experiencing at school. Their students may be experiencing racial misreadings by teachers or peers, racial exclusions by peers, or having to choose identification to satisfy others' confusion (Joseph & Briscoe-Smith, 2021). Dealing with any of those issues can be a struggle for mixed-race learners and impact their educational performance.

In their text, Joseph and Briscoe-Smith (2021) offer radical listening as a theory and means to make change. Radical listening is defined as, "consciously value others by attempting to hear what the speaker is saying for the meaning he or she intends, rather than the meaning the listener interprets through his/her own view of the world" (Witchell et al., 2016, p. 101). This is not an easy task and requires skill and practice. It's recommended that families be an active member of their child's educational experience. Radical listening is the tool to use to increase their discussion and awareness.

Policy and Administration

Over the past decade or so, there has been an increased focus on representation of monoracial groups in curriculum. The rhetoric that education is "woke" or "Black lives matter" (Black Lives Matter, n.d) has enhanced the educational experiences of diverse learners fails to include one of the fastest growing populations, those who identify as multiracial. The absence of

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mixed-race or multiracial individuals in curriculum and content prolongs race in isolation (Black, Brown, or White) and often forces mixed-race students to choose one identity over another.

Individuals who exhibit a racial duality or multiple racial identities are often overlooked when creating school policy changes or implementing culturally relevant pedagogy to respond to racial inclusivity. Nuances of the lived experiences of multiracial students need to be identified and addressed by educators, leaders, and society to provide better inclusivity in educational settings. Policy makers and school administration must understand the societal pressure placed on multiracial individuals to identify as one race or the other to make it easier for others to classify them and assign characteristics based on their skin hue. This leads multiracial individuals to ignore part of their identity or code-switch in certain situations. How society often pushes mixed-race individuals to ignore part of their identity or choose their identity for them leads to issues with belonging and sense of self. Students who struggle with belonging and acceptance often feel unsafe or unseen. Feeling unseen and unsafe will not lead to optimal learning. This is an area that educators must address through representation and movement away from monoracial practices.

If the intent is to recognize and celebrate dual or multiple identities of mixed-race individuals, it is recommended that adjustments are made at the policy or administration levels. There is a need to differentiate and address the uniqueness of mixed-race experiences. As individuals who identify as more than one race, the complexity of their identity directly impacts how they experience education. Additional pedagogy or modifications to what already exists in

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culturally relevant practices must include the narratives and lived experiences of this fast-growing, unique, complex group of multiracial learners.

Given the focus on the CR-SE competencies in the Pennsylvania Department of Education, policy makers and administration are at a transformational time and have an opportunity to bring this work into action. While the competencies aren't just specific to mixed-race students, they already align with culturally relevant and sustaining pedagogy and the tenets from multiracial critical theory (Harris, 2016). The Pennsylvania Department of Education's amendments to Chapter 49 requires the integration of the competencies in professional development, teacher education programs, and teacher induction (PDE, 2022). If policy makers and school administration abide by these mandates in K-12 and higher education settings, tangible training and resources will be provided for educators to create inclusive classrooms not only for mixed-race learners but for all diverse learners.

Higher education institutions and teacher preparation programs

Beyond the upcoming mandate of the CR-SE competencies into syllabi and assignment alignment, a focus on incorporating the Multicultural Education Series into a course or multiple courses would strengthen teacher preparation programs. James A. Banks is the editor of this series published through the Teachers College Press. Banks (2004) created the dimensions of multicultural education which provide the foundation for this book series. These dimensions include content integration, the knowledge construction process, prejudice reduction, equity pedagogy, and an empowering institutional culture and social structure (Banks, 2004). Banks

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elaborates on these dimensions in the *Handbook of Research on Multicultural Education* and in the *Encyclopedia of Diversity in Education* (Banks, 2012), these two resources alone can add value to a teacher preparation program in the form of required texts.

There are 89 texts in Multicultural Education series with publication years from 1996 – 2023. Topics cover many areas including comparative and global education, society, curriculum, educational leadership, administration, policy, and politics. The topics extend to comprise educational studies, higher education, language and literacy, social justice, special education, gifted, teacher education, and professional development.

The Teachers College Press also has a Culturally Sustaining Pedagogy series which currently includes four publications from 2021 to 2022. This series' editor is Django Paris, co-author of *Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World*. Both series are intended for pre-service educators, in-service educators, graduate students, scholars, and policymakers as summaries and analyses of vital research, theory, and application related to the education of ethnic, racial, cultural, and linguistic groups (Banks, 2021). Utilizing either of these series in a course would expand the knowledge of pre-service teachers to more effectively teach diverse populations.

As learned in my research, observations and application of skills must be a requirement for pre-service teachers to develop a culturally relevant and sustaining pedagogy in their future classrooms. Courses must adopt a syllabus that focuses on turning theory into practice. That

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theory being culturally relevant and sustaining pedagogy and the tool to bridge theory to practice can be the CR-SE competencies. It is one thing for students to think they are ready to teach in diverse settings and another for students to experience teaching in diverse settings. Teacher educators should provide constructive feedback on pre-service teachers' applications of these skills in actual classrooms with actual learners.

Future Research Endeavors

With PDE's amendment to Chapter 49 to incorporate the competencies into teacher preparation programs, the development of the CR-SE competencies rubric and the repository of resources developed by the CR-SE community of practice, there is an increased level of guidance and accountability. These developments, as well as the competencies, are still in the infancy phase. There is much to be researched now and in the future surrounding integration of the competencies into teacher preparation programs and current in-service teacher implementation of the competencies. Research should include identifying best practices for incorporating competencies into syllabi, course work, and field work to prepare pre-service teachers for diverse populations. Pre-service teacher data codes that suggested fear, colorblindness, and other potential roadblocks warrant additional research on how to eliminate these roadblocks in teacher preparation programs. It should also include investigating in-service teachers and schools who utilize the competencies to determine effectiveness and what can be replicated to ensure culturally relevant and sustaining education for all diverse student populations. It would be

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helpful to identify in-service teachers that do this well to assign as mentor/cooperative teachers for pre-service teachers.

There is more to be discovered through the lens of mixed-race learners in K-12 settings. Future research that permits interviews, surveys, and observations of students as opposed to their family members will provide a more authentic perspective of their educational experiences. This will require IRB approval to conduct research with minors, those under eighteen. Once approval is granted, a potential endeavor could include case studies of mixed-race learners in elementary, middle, and high school. Another potential endeavor could include comparing experiences of mixed-race participants in suburban, urban, and rural schools.

Parents who participated in this study revealed personal truths that I would like to explore more extensively. Monoracial parents of mixed-race children also have distinctive stories to tell. As many parents shared, they will never fully understand the experiences of their children. My husband and I often discuss writing a book about parenting mixed-race kids as monoracial adults. While we have many of the same conversations as other parents, there are nuanced topics that also exist such as how society will perceive our children based on if they are white presenting or not. As a future research opportunity, I would hold focus groups and interviews to gather as much qualitative information as possible to begin weaving together the stories of parents of mixed-race kids.

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Conclusion

Through converging quantitative and qualitative data from a variety of sources (pre-service teacher surveys – Likert scale questions and open-ended questions, pre-service teacher observations, pre-service teacher final course reflections, and mixed-race family narratives) in chapter four, I was able to answer my research questions: *what happens when teacher preparation programs incorporate culturally relevant and sustaining education competencies into a course and fieldwork to prepare teachers to work with racially diverse learners?* And the sub question, *what components of the course curriculum support culturally relevant and sustaining practices? What gaps exist? And what do anecdotes from families of mixed-race children (Black and White) reveal about their learners' experiences in K-12 educational settings?* In this chapter, the results were discussed in depth, connections were made, and limitations, implications and recommendations were presented. The following excerpt expresses the culmination of this study.

We therefore think in terms of a two-part inquiry agenda. We need to listen closely to teachers and other learners and to the stories of their lives in and out of classrooms. We also need to tell our own stories as we live our own collaborative researcher/teacher lives. Our own work then becomes one of learning to tell and live a new mutually constructed account of inquiry in teaching and learning. What emerges from this mutual relationship are new stories of teachers and learners as curriculum makers, stories that hold new

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possibilities for both researchers and teachers and for those who read their stories
(Connelly & Clandinin, 1990, p.12)

My original quest to elevate the lived experiences of mixed-race K-12 learners turned into so much more on this research journey. What I've learned as a researcher/participant is invaluable to me professionally and personally. Pre-service teachers, the families of mixed-race learners, and myself as a teacher educator and parent of mixed-race learners became "curriculum makers" (Connelly & Clandinin, 1990) throughout this process. The stories (data) of these three stakeholders intertwined to provide common themes and insight on culturally relevant and sustaining education and the impact of the PA CR-SE competencies. The most common theme and implication from both pre-service teachers and families of mixed-race learners was the need for culturally relevant curriculum and resources aligned to the competencies. It is important to note that the sentiments from the data express that it's not just access to this curriculum and resources but explicit training and practice for effective implementation in diverse classrooms.

The CR-SE competencies and perspectives from pre-service teachers and families of mixed-race learners also provide new possibilities for researchers and in-service teachers to rethink or redesign current culturally relevant and sustaining education practices and curriculum. As implied in the research, the curriculum should encourage inclusivity through a sense of belonging and representation of monoracial and multiracial individuals. New possibilities in the realm of teacher preparation programs include infusing course and field work components that

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align to the CR-SE competencies and provide students opportunities to get direct feedback from teacher educators around the competencies.

I will close in the same way I opened this literature, with a narrative. It was the night before our campus Human Diversity Conference, and I was finalizing my presentation. My inquisitive second grader asked what I was working on. I briefly explained that I was going to share my research at a conference. He is aware that he is represented in the narratives of my research and asked if he could attend the conference. After telling him no, I could see the disappointment in his face. Then I had an idea. He couldn't physically attend because he had school, but I thought wouldn't it be neat if I audio recorded him reading his narrative. Of course, he was pumped to participate and excited to show off his reading skills. He read his narrative with prosody and confidence. Once he was satisfied with the recording, he asked if he could add something. I hesitated to say yes knowing that the addition could be anything from a YouTube reference to slang that I wasn't cool enough to know the meaning of. With hesitation, I granted his request. He added, "Thank you for letting me share my experience with you." In that moment, I knew the tireless hours of research, data analysis, and writing were worth it. As a mixed-race learner, he felt seen, he knew his experience was meaningful. That is the heart of culturally relevant and sustaining education pedagogy.

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Resource List:

- Adler, R. H. (2022). Trustworthiness in qualitative research. *Journal of Human Lactation*, 38(4), 598–602. <https://doi.org/10.1177/08903344221116620>
- Anderson, C. R. (2015). What are you? A CRT perspective on the experiences of mixed race persons in ‘post-racial’ America, *Race Ethnicity and Education*, 18(2), 1-19.
- Banks, J. A., (2004). Multicultural education: Historical development, dimensions, and practice. In J.A. Banks & C.A.M. Banks (Eds.) *Handbook of research on multicultural education* (2nd ed., pp 3-29). Jossey-Bass.
- Banks, J.A. (2012). Multicultural education: Dimensions of. In J.A. Banks (Ed.) *Encyclopedia of diversity in education* (vol.3. pp. 1538 – 1547). Sage Publications.
- Bingham, A. J., & Witkowsky, P. (2021). Deductive and inductive approaches to qualitative data analysis. *Analyzing and interpreting qualitative data: After the interview*, 133–146.
- Black Lives Matter. (n.d.) Herstory - Black Lives matter. Retrieved April 1, 2024, from <https://blacklivesmatter.com/herstory/>
- Cambridge Dictionary. (n.d.). *Lived experience*. LIVED EXPERIENCE definition | Cambridge English Dictionary. <https://dictionary.cambridge.org/us/dictionary/english/lived-experience>
- Castano, T. (2017). Multiracial representation in contemporary art. Academia. Edu. Retrieved https://www.academia.edu/30984471/multiracial_representation_in_contemporary_art
- Chamion, C., Haynes, J., & Leon Tikly, L. (2007) Researching mixed race in education: perceptions, policies and practices, *Race Ethnicity and Education*, (10)3, 345-362.

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

Chang, A. (2014). Multiracial matters- disrupting and reinforcing the racial rubric in educational discourse. *Race Ethnicity and Education*, 19(4), 706 – 730

Chang, W.-C., & Viesca, K. M. (2022). Preparing teachers for culturally responsive/relevant pedagogy (CRP): A critical review of research. *Teachers College Record*, 124(2), 197–224. <https://doi.org/10.1177/01614681221086676>

Chang-Bacon, C. K. (2021). “We sort of dance around the race thing”: Race-evasiveness in teacher education. *Journal of Teacher Education*, 73(1), 8–22.
<https://doi.org/10.1177/00224871211023042>

Cofie, N., Braund, H., & Dalgarno, N. (2022). Eight ways to get a grip on intercoder reliability using qualitative-based measures. *Canadian Medical Education Journal*.
<https://doi.org/10.36834/cmej.72504>

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2–14. <https://doi.org/10.2307/1176100>

Cole-Malott, D.-M., Jeter-Iies, P., Brasof, M., Whitaker, R., Roy, L., McLaurin, T., Peterson-Ansari, R., Parker Thompson, K., Glah Mabry, M., Sniad, T., Keiser, L., Monk, D., Mattson, B., & Turner, T. (2022). *Culturally-relevant and sustaining education (CR-SE) program framework ...* Retrieved December 13, 2022, from
<https://www.education.pa.gov/Documents/Teachers-Administrators/Certification%20Preparation%20Programs/Framework%20Guidelines%20>

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

[and%20Rubrics/Culturally-Relevant%20and%20Sustaining%20Education%20Program%20Framework%20Guidelines.pdf](#)

Commonwealth of Pennsylvania. (n.d.). *Section one - Definition of Terms*. Pennsylvania Department of Education. <https://www.education.pa.gov/K-12/Alternative%20Education%20for%20Disruptive%20Youth/AEDYGuidelines/SectionOne/Pages/default.aspx>

Crenshaw, K. W., Gotanda, N., Peller, G., & Thomas, K. (1995) *Critical Race Theory: The Key Writings That Formed the Movement*. Faculty Books

Creswell, J. W. (2022). *A concise introduction to mixed methods research*. SAGE.

Creswell, J.W. & Poth, C.N. (2018). *Qualitative inquiry and research design: choosing among five approaches*. SAGE.

Culturally sustaining pedagogy series. Teachers College Press. (n.d.-a).

<https://www.tpress.com/csps>

Culturally-Relevant and Sustaining Education (CR-SE) Program Framework Guidelines, 22 Pa.

Code § 49.14(4)(i). (2022). <https://www.education.pa.gov/Documents/Teachers-Administrators/Certification%20Preparation%20Programs/Framework%20Guidelines%20and%20RubricsCulturallyRelevant%20and%20Sustaining%20Education%20Program%20Framework%20Guidelines.pdf>

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

- Curry, L. A., Nembhard, I. M., & Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation, 119*(10), 1442–1452
- Delgado, R., & Stefancic, J. (2001). *Critical race theory: An introduction*. New York: New York University Press.
- Delgado, R. & Stefancic, J. (2017). *Critical race theory: An introduction*. (3rd ed.) NYU Press.
- Freire, P. (1973). *Education for critical consciousness*. Seabury Press.
- Freire, P., & Ramos, M. B. (1970). *Pedagogy of the oppressed*. Seabury Press.
- Freire, P. (1978). *Pedagogy in process: The letters to Guinea-Bissau*. Writers and Readers Publishing Co-Op.
- Freire, P., & Ramos, M. B. (1983). *Pedagogy of the oppressed*. Continuum.
- Freire, P., & Ramos, M. B. (2000). *Pedagogy of the oppressed: 30th Anniversary*. Continuum.
- Freire, P. (2005). *Teachers as cultural workers: Letters to those who dare teach*. Routledge.
- Ginsberg, R. (2017). Finding comfort in the discomfort of being multiracial: lessons from my schooling. *Multicultural Perspectives, 19*(2), 103-108.
- Goodwin, A.L., Smith, L., Souto-Manning, M., Cheruvu, R., Tan, M.Y., Reed, R., & Taveras, L., (2014). What should teacher educators know and be able to do? Perspectives from practicing teacher educators. *Journal of Teacher Education, 65*(4), 284-302.
- Harris, J.C. (2016). Toward a critical multiracial theory in education. *International Journal of Qualitative Studies in Education, 29*(6). 795-813

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

Herr, K. & Anderson, G. (2015). *The action research dissertation: A guide for students and faculty* (2nd ed.). Sage.

Howard, J. (2018). That's not something we have to discuss: Interrupting silences about multiracial students in teacher work. *The Urban Review*, 50(4), 693–712.
<https://doi.org/10.1007/s11256-018-0462-0>

Howard, T. (2010). *Why race and culture matter in schools: closing the achievement gap in america's classrooms*. Teachers College Press.

Hurtado, S. Ruiz, Alvarado, a., & Guillermo-Wann, C. (2015). Thinking about race: The salience of racial identity at two- and four-year colleges and the climate for diversity. *The Journal of Higher Education*, 86, 127–155.

Jones, N., Marks, R., Ramirez, R., & Rios-Vargas, M. (2021, August 12). *2020 census illuminates racial and ethnic composition of the country*. Census.gov. Retrieved December 13, 2022, from <https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-reveal-united-states-population-much-more-multiracial.html>

Joseph, R. L., & Briscoe-Smith, A. (2021). *Generation mixed goes to school: Radically listening to Multiracial Kids*. Teachers College Press.

Kumagai, A. K., & Lyson, M. L. (2009). Beyond Cultural Competence: Critical Consciousness, Social Justice, and Multicultural Education. *Academic Medicine*, 84(6), 782–787.
<https://doi.org/10.1097/acm.0b013e3181a42398>

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491.
- Ladson-Billings, G. (1995b). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into practice*, 34(3), 159–165.
- Ladson-Billings, G. (2021). *Culturally relevant pedagogy: Asking a different question*. Teachers College Press.
- Ladson-Billings, G. (2004). New directions in multicultural education: Complexities, boundaries, and critical race theory. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., pp. 50–65). San Francisco: Jossey-Bass.
- Liu, R. (2022). Statistical Guideline #7 Adjust Type 1 Error in Multiple Testing. *International Journal of Behavioral Medicine*, 29(2), 137–140. <https://doi.org/10.1007/s12529-022-10070-0>
- Manen, M. V. (2016). *Researching lived experiences: Human science for an action sensitive pedagogy* (2nd ed.). Routledge.
- Merriam-Webster. (n.d.). Invisible. In the Merriam-Webster.com dictionary. Retrieved from <https://www.merriam-webster.com/dictionary/invisibility>
- Milner IV, H. R. (2007). Race, culture, and researcher positionality: Working through dangers seen, unseen, and unforeseen. *Educational researcher*, 36(7), 388-400.

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2), 13-22. <https://doi.org/10.1177/160940690200100202>

Multicultural education series. Teachers College Press. (n.d.-a). <https://www.tcpress.com/MCE>

Nelson Laird, T., & Niskodé-Dossett, a. S. (2010). How gender and race moderate the effect of interactions across difference on student perceptions of the campus environment. *The Review of Higher Education*, 33, 333–356.

Obama, B.H. (1995). *Dreams of my father: A story of race and inheritance*. Three Rivers Press

Paris, D., & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, 84(1), 85–100. <https://doi.org/10.17763/haer.84.1.9821873k2ht16m77>

Paris, D., & Alim, H. S. (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.

Parker, L. (1998). “Race is . . . race ain’t”: An exploration of the utility of critical race theory in qualitative research in education. *Qualitative Studies in Education*, 11(1), 45–55.

Parker, K., Horowitz, J., Morin, R., & Lopez, M. (2015). *Multiracial in america: Proud, diverse, and growing in numbers*. Pew Research Center. <https://www.pewresearch.org/social-trends/2015/06/11/multiracial-in-america/>

Peoples, K. (2021). *How to write a phenomenological dissertation: A step-by-step guide*. SAGE.

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

Piper, A. (1973). *Self-Portrait: Exaggerating My Negroid Features*. (Drawing and Watercolor)
New York, New York.

Piper, A. (1981). *The Mythic Being*. (Performance and Photographs). New York, New York.

Piper, A. (1992). Passing for white, passing for black. *Transition*, 58(4).

<https://doi.org/10.2307/2934966>

Renn, K. a. (2004). *Mixed race students in college: The ecology of race, identity, and community on campus*. Albany, NY: State University of New York Press.

Rockquemore, K., & Brunnsma, D. L. (2008). *Beyond black: Biracial identity in America (2nd ed.)*. Thousand Oaks, Ca: Sage

Rockquemore, K. A., Brunnsma, D. L., & Delgado, D. J. (2009). Racing to theory or retheorizing race? understanding the struggle to build a multiracial identity theory. *Journal of Social Issues*, 65(1), 13-34.

Rossman, G.B. & Rallis, S.F. (2017). *An introduction to qualitative research: Learning in the field*. Sage Publications.

Rozek, C.S. & Gaither, S.E. (2021). Not quite white or black: Biracial students' perceptions of threat and belonging across school contexts. *Journal of Early Adolescence*, 41(9), 1308 – 1337.

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

Safir, S., Dugan, J., & Wilson, C. (2021). *Street data: A next-generation model for equity, pedagogy, and School Transformation*. Corwin.

Saldana, J. (2021). *The coding manual for qualitative researchers*. Sage.

Seale, C. (2022). *Tangible equity: A guide for leveraging student identity, culture, and power to unlock excellence in and beyond the classroom*. Routledge.

Sharma, M. (2017). *Radical transformational leadership: Strategic action for change agents*. North Atlantic Books.

Strauss, A.L. (1987). *Qualitative analysis for social scientists*. Cambridge University Press.

Solorzano, D. G., & Yosso, T. J. (2001). From racial stereotyping and deficit discourse toward a critical race theory in teacher education. *Multicultural Education*, 9(1), 2–8

The conscious kid. (n.d.). *Racial literacy: Key terms*. <https://www.theconsciouskid.org/racial-literacy-key-terms>

Williams, M. T. (2011, December 27). *Colorblind ideology is a form of racism*. Psychology Today. <https://www.psychologytoday.com/us/blog/culturally-speaking/201112/colorblind-ideology-is-form-racism>

Witchell, M., Kress, T.M., & Tobin, K. (2016). Teaching/learning radical listening: Joe's legacy among three generations of practitioners. In M.F. Agnello & W.M Reynolds (Eds.), *Practicing critical pedagogy: The influence of Joe L. Kincheloe* (pp. 99-112). Springer International Publishing.

CONNECTING CULTURALLY RELEVANT AND SUSTAINING EDUCATION COMPETENCIES

White, M. (2020). *Identifying the difference between rural, urban & suburban*. YourDictionary.

<https://www.yourdictionary.com/articles/rural-urban-suburban-difference>

Umutlu, D & Kim, C. (2020) Design guidelines for scaffolding pre-service teachers' reflection-in-action toward culturally responsive teaching, *Reflective Practice*, 21(5), 587-603.

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Appendix

Appendix A. SPU 316 Syllabus (Spring 2023 sample)

KUTZTOWN UNIVERSITY

Department of Special Education

SPU 316 Literacy Development and Instruction in Core & Intervention Areas

Fall 2023 TTh 9:30 am – 10:45 am

Room: Beekey 101

Instructor Information:

Professor Marissa Wallace, M.Ed.

Office: Beekey 104

Mwallace@kutztown.edu

person and zoom) Zoom link: <https://kutztown.zoom.us/j/3975786650>

Office Hours:

M – 11am – 1pm

T – 12pm – 1pm & 3pm – 4pm

Th - 12pm - 1pm (In-

Required Texts: (Inclusive Access on D2L)

Beck, I. L., & Beck, M. E. (2013). *Making sense of phonics the hows and whys*. Guilford Press.

Beck, I. L., McKeown, M. G., & Sandora, C. (2021). *Robust comprehension instruction with questioning the author: 15 Years smarter*. The Guilford Press.

Deeney, T.A. (2009). *Improving literacy instruction with classroom research*. Thousand Oaks, CA: Corwin Press.

Other required reading texts are provided on D2L.

I. Description:

An in-depth study in the teaching of literacy for special education and general education majors. The course will present the foundations of literacy through

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evidence- and research-based core curricula and interventions. Literacy curriculum, assessment, and instruction for students with disabilities will be explored as a sequence of developmental skills, with emphasis on teaching students from preschool through secondary education. 3 s.h. 3 c.h. **Prerequisite:** SPU 201.

II. Course Rationale:

This course is significantly important to the professional development of pre-service special education teachers in order for them to provide literacy instruction for struggling readers and students in special education. Pre-service teachers must be cognizant of emergent reading skills, assessments, and instructional and corrective methods used within current special education classroom settings. Additionally, teacher candidates must understand the importance of building content reading, expressive and handwriting skills, and spelling skills in students with various disabilities.

III. Course Objectives:

A. Relationship to Standards

By the end of this course, the student will achieve the following:	PDE	CEC	INTASC
<ul style="list-style-type: none"> Demonstrate an understanding of factors that affect families' literacy opportunities, how they view literacy and ways in which schools/educators may be responsive to their needs 	I.B	1.1 2.1	2(a) 2(c) 2(e) 2(j) 2(k)
<ul style="list-style-type: none"> Articulate the patterns of typical and atypical development, birth through adulthood, in communication (i.e. language, listening, speaking, and reading) 	I.C IV.C	1.1 1.2	1(a) 1(b) 1(f) 1(g)
<ul style="list-style-type: none"> Select, design, and administer assessments to measure student literacy skills for purposes of screening, evaluation, and progress monitoring 	III.A – III.T	4.1 – 4.4	6(a) – 6(i)

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<ul style="list-style-type: none"> • Demonstrate a conceptual and practical understanding of literacy development and instruction in core and intervention areas 	IV.D	3.1 – 3.3	4(j) – 4(n)
<ul style="list-style-type: none"> • Design, implement, and modify effective instructional plans that incorporate evidence- and research-based strategies and methods to promote literacy skills of students with disabilities 	IV.A IV.D	3.1 - 3.3 5.1- 5.2 5.4 - 5.7	4(a) – 4(n) 7(g) – 7(m) 8(j) – 8(o)

A. Relationship to Conceptual Framework: This course is congruent with the conceptual framework of the College of Education. Teacher as Lifelong Learner, and relates specifically to:

Knowledge:	Conceptual Framework Elements
Communication	The candidate will demonstrate college-level written and verbal communication skills during in-class participation and through course assessments, including articulation, expressive language, voice quality, usage, and grammar.
Interpersonal skills	The candidate will gain an understanding of the challenges faced by struggling readers, and the sometimes lifelong difficulties students with disabilities deal with when learning to speak, listen, read, write, and speak.

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Critical skills	Through the use of case studies, candidates will use the knowledge gained in this course to make strategic teaching decisions using progress monitoring data.
Skills:	
Scholarly inquiry	The candidate will understand the trends and issues related to teaching reading and other language arts to children with disabilities.
Reflective wisdom	The candidate will reflect on the knowledge gained through this course in order to transition towards reflective teaching of reading skills for students with disabilities.
Integration of discipline	Using the knowledge gained in this course, the candidate will integrate the content into real teaching experiences.
Technology Integration	
Organization and Classroom management	The candidate will adopt a proactive organizational and managerial style in the design of teaching reading and other language arts to students with disabilities.
Dispositions:	
Cultural awareness and acceptance	The candidate will articulate the benefits of using culturally relevant literature and books to promote reading skills among culturally diverse learners.

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IV. Teaching Philosophy Statement:

Our classroom is an inclusive environment. My teaching philosophy is student-centered and collaborative. I embrace and encourage the universal values of dignity, equity, and compassion in all educational settings (Sharma, 2017). I expect all students to actively engage in all aspects of course discussions, activities, and assignments. Self-reflection and reflexivity are key to development as students, teachers, and leaders and will be practiced throughout the semester. Critical thinking and application skills will guide the content of this course. Community building activities will occur weekly to strengthen relationships and teamwork. Coursework will be grounded in the Pennsylvania Culturally Relevant and Sustaining Education (CR-SE) competencies.

[Link to CR-SE Competencies](#)

V. Land Acknowledgement Statement

Kutztown University resides on Lenapehoking (leh-NA-pe-ho-king), the traditional home of the Lenni Lenape. We acknowledge this territory once also served as a hunting ground, trade exchange point, and migration route for the Munsee (MUHN-see), Susquehannock (suh-skguh-HA-naak), Haudenosaunee (ho-den-no-SHOW-nee), and many other Indigenous peoples. We recognize, support, and advocate for Indigenous peoples who live here now, and for those who were forcibly removed. We acknowledge, honor, and respect the past, present, and future of the diverse Indigenous peoples connected to this land, whose presence continues in the region due to their resilience in the face of colonization. This acknowledgement aligns with our University's commitment to cultivating a diverse and inclusive community. [Land Acknowledgement Link](#)

VI. Course Policies:**Attendance Policy**

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In accordance with the University Attendance Policy, you are expected to attend all classes unless excused. (See University Attendance Policy for acceptable reasons.) You must contact me by email prior to the absence (unless physically unable) and will be asked to provide documentation (e.g., doctor's note for illness, obituary for death in the family) for extended absences. If you have any potential COVID-19 symptoms, please stay home and email me that you have symptoms. Please do NOT come to class sick. I will be understanding and will not lower your grade or take off points if you email me and let me know that you are experiencing symptoms of illness. Please take the time to get well before returning to class. I post all class materials on D2L so you should still be able to keep caught up.

You are allowed 3 (THREE) excused absences before your grade will begin to be impacted. Unexcused absences (no show/no communication) will ALWAYS impact your grade

Disability Disclosure Statement

If you have already disclosed a disability to the Disability Services Office (215 Stratton Administration Building) and are seeking accommodation, please feel free to speak to me privately so that I may assist you. If you have an injury sustained during military service including PTSD or TBI, you are also eligible for accommodations under ADA and should contact the Disability Services Office.

Academic Honesty

Any form of academic dishonesty, which includes but is not limited to plagiarism, cheating on exams, asking another person to complete an assignment for you/completing another person's assignment, or attempting to get credit for attendance when you did not attend class, has serious consequences that can range from a reduced or "0" grade on an assignment to more severe consequences as outlined in the Kutztown University policy (pp. 45 – 49 of The Key - <http://thekey.kutztown.edu>).

Dispositions

It is the Department's expectations that students abide by the standards identified in

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the Dispositions Rubric. This guideline for professional behavior can be found in the department's student handbook.

University Writing Center

The University Writing Center is a free service for students, offering advice and assistance with writing assignments from any course or subject. Tutors can assist you in improving your composing process, as well as with difficulties with development, organization, style and mechanics. The UWC opens in the third week of the semester. Hours are Mon-Fri 8-4 and Mon and Tues evenings 7-9. Call 610-683-4733: Email wrcenter@kutztown.edu:

Gender- Based Crimes

Educators must report incidents of gender-based crimes, including sexual assault, sexual harassment, stalking, dating violence, and domestic violence. If a student discloses such incidents to me during class or in a course assignment, I am not required to report the disclosure, unless the student was a minor at the time the incident occurred. Regardless of the student's age, if the incident is disclosed to me outside the classroom setting or a course assignment, I am required by law to report the disclosure, including relevant details, such as the names of those involved in the incident, to Public Safety and Police Services and to Mr. Jesus Peña, Title IX Coordinator.

VII. Assessment:

The following course requirements are designed to assess student mastery of the material, including knowledge, comprehension, application, analysis, synthesis, and evaluation.

This is an intensive writing course and therefore there are numerous in-depth written projects as part of this course. The expectations are high for reading, writing, feedback, and revision you will produce this semester.

A. Course Assignments:

Literacy Website Critique (10 Points)

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DUE: Sunday 9/24 by 11:59 pm on D2L

Find a literacy website and analyze it across the following dimensions:

1. Culturally responsive/sustaining practices
2. Holistic intervention and instruction
3. Practices that have a research base supporting them
4. Acknowledgment of and support for different learning needs
5. User-friendly for other educators

Teacher Interview on Developing a Culturally Responsive and Sustaining Pedagogical Practice (30 Points)

DUE: Sunday 10/22 by 11:59 pm on D2L

Can be any grade/age level from K-12; with a focus on literacy

Part I: Review the Pennsylvania Culturally Relevant and Sustaining Education Competencies and, based on the competencies, develop an interview protocol (8-10 questions) to interview a teacher about how they are enacting /plan to enact the competencies regarding literacy. Share the Competencies document with teacher several days prior to interview so the teacher has the chance to review them if unfamiliar.

*In-class feedback opportunity: bring draft questions to class, peer feedback in small groups to refine questions

Part II: Interview teacher; record responses

Part III: Reflect on teacher interview and implications for your own future practice

Observation Requirement – Literacy Classroom (10 points)

DUE: Sunday 11/26 by 11:59 pm on D2L

5 hours observation requirement – Observing real time instruction is pivotal in developing pre-service teachers. **The program requires these observation hours to pass this course.**

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- Observations must take place in a literacy-based classroom in a K-12 setting
- All forms completed with teacher signature, date, time, and teacher contact information
- All necessary forms are on D2L [Observation Form](#)
- **Prior experience does not count, this must be a new experience completed during this Fall 2023 semester**

Core Project: Student Interview and Support Plan (50 points)

DUE: Sunday 12/10 by 11:59 pm in D2L

I. Interview a student about their literacy experiences. **(12 points)** You will need to design 5 -8 open-ended developmentally-appropriate questions that elicit from a student the following information: (1) interest and engagement with reading, (2) perspective on literacy – what they see as the purpose of reading and writing, (3) what they do to help themselves both decode and understand what they read, (4) what they find easy and difficult about reading, and (5) their views on what it means to be a good reader. The questions should elicit enough information about the student’s perspective on reading for you to write 2-3 pages on the student’s perspective on literacy. Do a deep analysis of their statements: What are their views on reading? What do they feel confident about? Where do they find difficulty? What misconceptions might they have about literacy (e.g., that being a strong reader means reading fast, mistakes word identification for comprehension or vocabulary, etc.)?

II. Analyze artifacts or have the student engage in some informal assessment activities. **(12 points)** You can either analyze previously completed literacy assessments, written papers/responses to literature, and other literacy-related assignments (if available) OR you may conduct your own informal assessments which may include such activities as having the student read a text aloud to you, engaging in a discussion with the student about a text they have read independently, or using any of the assessment materials we explore in class or that you find independently. Analyze the results of the assessments/artifacts and write a

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2–3-page analysis of what the student can do and what they still seem to be in the process of learning.

III. Choose a peer-reviewed journal article with an approach that you think will help the student; explain the approach and how it will meet the student's needs. **(20 points)**

Select a peer-reviewed journal article that has an approach you think would be a good fit for the student's needs. Write a summary of the approach including: (a) what the approach is and how it is carried out, (b) what skills it is designed to develop, (c) populations of students for whom this approach is a good approach, and (d) evidence of the approach being effective. Your summary should be 1-2 pages long. Make sure you include an APA (7th edition) citation for the article. Then, write a 2–3-page reflection on how the student's needs would be met by this approach. Make sure you are directly linking your reflection to the ideas that emerged in the student interview and to the analysis of the student's artifacts/assessment results. Discuss how you would monitor the student's progress with the approach and what skills you would hope the student might develop as a result.

Writing (6 points): Make sure your writing is clear and concise. I recommend bringing your paper to the writing center. You will be required to receive peer feedback (in-class activity) and you will need to have a conference with the professor about the substance of your paper. Grammar, spelling, and mechanics should be checked by the writing center.

Final Exam – Course Reflection on D2L (15 points)

Tuesday 12/12 at 8:00 am (Reflection and Post-Survey)

VIII. Course Outline

(Dates and topics are subject to change depending on the needs of the class and the course of events over the semester.)

Week of:	Class/Topics	Assignments Due
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Week 1 – 8/28	<ul style="list-style-type: none"> • Intro to course – Review Syllabus • Where I Am from Poem • Five Areas of Literacy 	Where I Am from Poem Due in D2L by Thursday 8/31
Week 2 – 9/5	<ul style="list-style-type: none"> • Finish 5 areas of literacy • Website Critique Assignment Overview • RTI(I) • Culturally Relevant-Sustaining Education Competencies • Pre-Survey 	Read CR-SE competencies in D2L
Week 3 – 9/11	<ul style="list-style-type: none"> • CR-SE cont'd • Equity and Bias • Intro to Assessment • Progress Monitoring 	
Week 4 – 9/18	<ul style="list-style-type: none"> • Assessment Across 5 Areas of Literacy • Teacher Interview Assignment Overview 	Literacy Website Critique DUE in D2L by 11:59 pm on 9/24
Week 5 – 9/25	<ul style="list-style-type: none"> • Assessment Continued 	

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	<ul style="list-style-type: none"> • Teacher Interview Questions - in-class 	
Week 6 – 10/2	<ul style="list-style-type: none"> • Achievement Gap • Intro to Research • Intro to Evidence-Based Interventions 	Read uploaded chapter from “Rethinking the Achievement Gap” in D2L
Week 7 – 10/9 NO Class Tuesday (Monday schedule)	<ul style="list-style-type: none"> • Midterm • Core Project & Observation Hours Overview • Fluency 	Read Deeney Chapter 8 before class.
Week 8 – 10/16	<ul style="list-style-type: none"> • Finish fluency • Science of Reading Debate 	Teacher Interview DUE in D2L by 11:59 pm on 10/22
Week 9 – 10/23	<ul style="list-style-type: none"> • IES Guides • Comprehension – Reading for Meaning 	Read: Either IES Guide “Improving Reading Comprehension in Kindergarten Through Third Grade” <u>OR</u> “Improving Adolescent Literacy: Effective Classroom and Intervention Practices” prior to class.
Week 10 – 10/30	<ul style="list-style-type: none"> • Comprehension Strategies • Questioning the Author 	Read <i>Robust comprehension instruction with questioning the author:</i>

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	<ul style="list-style-type: none"> • Text Talk 	<i>15 Years smarter</i> (skim)
Week 11 – 11/6	<ul style="list-style-type: none"> • Vocabulary • In-Class Time for Core Project Peer Review 	Read Deeney Chapter 7 prior to class.
Week 12 – 11/13	<ul style="list-style-type: none"> • Finish Vocabulary • Word Analysis 	Read Deeney Chapter 10
Week 13 – 11/20 NO Class Thursday – Thanksgiving Break	<ul style="list-style-type: none"> • Word Study • Intro to Word Study Activity 	Read Deeney Chapter 6 Read <i>Making sense of phonics the hows and whys</i> (skim) Observation Hours and Reflection DUE in D2L by 11:59 pm on 11/26
Week 14 – 11/27	<ul style="list-style-type: none"> • Finish Word Study • Submit Word Study Activity 	Read Deeney Chapter 9
Week 15 – 12/4	<ul style="list-style-type: none"> • Writing Process • Semester Wrap Up 	Core Project DUE in D2L by 11:59 pm on 12/10

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Finals Week – 12/11	D2L Final and Survey	Final Reflection and Survey – Tuesday 12/12 @ 8:00 am – 10:00 am
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IX. Instructional Resources

- Al Otaiba, S. & Lake, V. (2007). Preparing special educators to teach reading and use curriculum-based assessments. *Reading & Writing, 20*(6), 591-617.
- Al Otaiba, S. & Hosp, M. K. (2004). Providing effective literacy instruction to students with down syndrome. *Teaching Exceptional Children, 36*(4). 28-35.
- Bursuck, W. D. & Damer, M. (2015). *Teaching reading instruction for students who are at risk or have disabilities: A multi-tier, RTI approach*. Upper Saddle River, NJ: Prentice Hall.
- Carnine, D. W., Silbert, J., Kameenui, E. J., Slocum, T. A., & Travers, P. A. (2017). *Direct instruction reading*. Upper Saddle River, NJ: Prentice Hall.
- Cole-Malott, D.-M., Jeter-Iies, P., Brasof, M., Whitaker, R., Roy, L., McLaurin, T., Peterson-Ansari, R., Parker Thompson, K., Glah Mabry, M., Sniad, T., Keiser, L., Monk, D., Mattson, B., & Turner, T. (2022, November). *Culturally-relevant and sustaining education (CR-SE) program framework ...* Retrieved December 13, 2022, from <https://www.education.pa.gov/Documents/Teachers-Administrators/Certification%20Preparation%20Programs/Framework%20Guidelines%20and%20Rubrics/Culturally-Relevant%20and%20Sustaining%20Education%20Program%20Framework%20Guidelines.pdf>
- Ehri, L. C., Dreyer, L. G., Flugman, B., & Gross, A. (2007). Reading rescue: An effective tutoring intervention model for language-minority students who are struggling readers in first grade. *American Educational Research Journal, 44*(2), 414-448.

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- Gillet, J. W., Temple, C. A., Temple, C. N., Crawford, A. N. (2017). *Understanding reading problems: Assessment and instruction*. Upper Saddle River, NJ: Prentice Hall.
- Gunning, T. G. (2006). *Assessing and correcting reading and writing difficulties*. Allyn and Bacon: Boston, MA.
- Howard, T. C., & Gay, G. (2010). *Why race and culture matter in schools: Closing the achievement gap in America's classrooms*. Teachers College Press.
- Lienemann, T. O., Graham, S., Leader-Janssen B. & Reid, R. (2006). Improving the writing performance of struggling writers in second grade. *The Journal of Special Education, 40*(2), 66–78.
- Mason, L. H., Meadan, H. Hedin, L., & Corso (2006). Self-regulated strategy development instruction for expository text comprehension. *Teaching Exceptional Children, 38*(4), 47-52.
- Moore-Brown, B. J., Montgomery, J. K., Bielinski, J., & Shubin, J. (2005). Responsiveness to intervention: Teaching before testing helps avoid labeling. *Topics in Language Disorders, 25*(2), 148-167.
- Pullen, P. C., Lane, H. B., Lloyd, J.W., Nowak, R., & Ryals, J. (2005). Effects of explicit instruction on decoding of struggling first grade students: A data-based case study. *Education and Treatment of Children, 28*(1), 63–76.
- Romain, M., Millner, K., Moss, V., & Held, M. (2007). The effectiveness of classroom-based instructional assessments for progress monitoring purposes in Texas Reading First Schools. *Reading & Writing, 20*(6), 619-641.
- Reutzel, D. R. & Cooter, Jr., R. B. (2016). *Strategies for reading assessment and instruction in an era of common core standards: Helping every child succeed*. Upper Saddle River, NJ: Prentice Hall.
- Sharma, M. (2017). *Radical transformational leadership: Strategic action for change agents*. North Atlantic Books

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Therrien, W. J., Gormley, S., & Kubina, R. M. (2006). Boosting fluency and comprehension to improve reading achievement. *Teaching Exceptional Children, 38*(3), 22-26.

Todd Brown, L. (2004). Teaching students with autistic spectrum disorders to read: A visual approach. *Teaching Exceptional Children, 36*(4), 36–40.

Vaughn, S., Mathes, P. G., Linan-Thompson, S., & Francis, D. J (2005). Teaching English language learners at risk for reading disabilities to read: Putting research into practice. *Learning Disabilities Research & Practice, 20*(1), 58-67

Project MAX Resources on D2L:

- Blank SAUPP
- Annotated SAUPP
- ELA Unit Plan Example
- Alignment of Learning Targets (ELA 1.2 Across Grades)
- Aligning Vocabulary & Ideas PPT Narrated
 - Alice Excerpt
 - Key Vocab Graphic Organizer
 - Pixon Board
 - Completed/Vocab Example
 - Collaboration Questions
 - Vocab Worksheet
- Effective Instructional Practices – PPT Narrated
- Planning Instructional Engagement – PPT Narrated
 - UDL Guidelines
 - SAUPP Step 3: Alice No Barrier
 - SAUPP Step 3: Alice Sample Completed

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Appendix B. Pre and Post Survey Questions

SPU 316 Culturally Relevant and Sustaining Education Competencies Survey - Beginning

* Required

1. Optional - Provide your race/ethnicity (Can be more than one)

Enter your answer


2. What is your major? *

Enter your answer


3. Culturally Relevant and Sustaining Education Overview *

	Strongly Disagree	Disagree	Unsure	Agree	Strongly agree
I am familiar with the PA Culturally Relevant and Sustaining Education Competencies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have or currently discuss culturally relevant and sustaining education practices in other courses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, my courses are preparing me to teach diverse learners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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4. Competency 1 - Reflect on one's cultural lens. * 

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
I reflect on my own life experiences and membership to various identity groups (i.e. race, skin color, ethnicity, gender, age, nationality, language, class, ability, religion, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I engage in critical and difficult conversations with others to deepen my awareness of my own conscious/unconscious biases, stereotypes, and prejudices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect, acknowledge, and affirm learners' diverse identities, histories, cultures, and value systems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Competency 2 - Identify, deepen understanding of, and take steps to address bias in the system. * 

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
I know and acknowledge that biases exist in the educational system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the importance of social markers, such as race, ethnicity, gender, age, language, class, ability, sexual orientation, and religion and how these markers impact the ability for individuals to access a wide range of opportunities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am prepared to identify and make efforts to remove bias in my teaching materials, and assignments, curriculum, and the allocation of resources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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6. Competency 3 - Design and facilitate culturally relevant learning that brings real world experiences into educational settings. * 

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
I respect the real-world experiences of learners, educators, educational leaders, and families and the diverse funds of knowledge they bring into educational spaces.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable integrating multiple perspectives into learning experiences and interactions by capitalizing on learners' real-world experiences, identities, and heritage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intentionally challenge my own beliefs, attitudes, assumptions, and behaviors regarding the knowledge and backgrounds of dominant and non-dominant social groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am prepared to provide rigorous learning experiences and relevant projects in culturally supportive spaces that integrate advocacy skills, deep listening and thinking, collaboration, resource gathering, and strategic actions that build their sense of civic responsibility and their capacity to see themselves as agents of change.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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7. Competency 4 - Provide all learners with equitable and differentiated opportunities to learn and succeed. *

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
I am prepared to create an equitable learning environment by challenging and debunking stereotypes and biases about the intelligence, academic ability, and behavior of BIPOC and other marginalized learners, educators, educational leaders, and families.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am prepared to provide multiple pathways and opportunities for students to achieve academic and social success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Competency 5 - Promote asset- based perspectives about differences. *

	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
I recognize diversity to be an asset to the entire learning community and treat it as such. I nurture environments that are respectful and inclusive of every BIPOC learner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am prepared to help learners value their own and others' cultures by helping them develop a sense of responsibility for recognizing, responding to, and addressing bias, discrimination, and bullying when they encounter it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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9. Competency 9 - Educate oneself about microaggressions, their impact on diverse learners, educators, and families and actively disrupt the practice by naming and challenging its use. *



	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe and acknowledge that microaggressions are real, and I take steps to educate myself about the subtle and obvious ways in which they are used to harm and invalidate existence of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am prepared to create learning communities and spaces that are inclusive and free of destructive and harmful microaggressions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I engage in critically reflexive practice and have a high-level of self-awareness that enables me to assess a situation and immediately adapt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Optional - What improvements can be made to your teacher preparation program to prepare you better to teach diverse populations?

Enter your answer

11. Optional - Multiracial individuals make up the majority of the population. What challenges do you foresee teaching students who identify as both Black and White? How could you ensure they feel a sense of belonging with both groups?

Enter your answer

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Appendix C. Consent Form for Pre-Service Teachers**CONSENT FORM**

You are invited to participate in a research study being conducted through Kutztown University. We ask that you read this form and ask any questions before you decide if you want your assignments used as data in the study. The University requires that you give your signed agreement if you choose to allow your data to be used for research purposes. Your decision will not impact your grade in this course and if you choose to allow your data to be used, it will be done anonymously.

This study is being conducted by Marissa Wallace, M.Ed.

Title of the Study:

Connecting Culturally Relevant and Sustaining Education Competencies in Teacher Preparation Programs to the Experiences of Mixed-Race Learners in K-12 Settings: A Mixed Methods Study

Purpose of the Study:

The purpose of this research study is to uncover themes pertaining to educational experiences of mixed-race individuals and to identify ways to enhance pre-service teacher preparation programs to include knowledge on how to best teach and support this growing population. Also, the study will explore how the integration of the Pennsylvania Culturally Relevant and Sustaining Education competencies supports pre-service teacher preparation programs.

Procedures:

If you agree to participate in this study, we would ask permission to include the following course assignments as part of the research data:

Undergraduates: (The following assignments are included in the course syllabus)

- Complete pre- survey aligned to the Culturally Relevant and Sustaining Education competencies at the beginning of the semester (approximately 15 minutes)
- Complete assignment reflections for their observation hours in a literacy-based, diverse classroom and the course due at the end of the semester (approximately one-two hours)
- Complete post- survey aligned to the Culturally Relevant and Sustaining Education competencies at the end of the semester (approximately 15 minutes)

Risks or Discomforts, and Benefits of Being in the Study:

There are no physical, financial, social/economic or legal risks involved in this study. The study has the following risks and/or discomforts: Minimal risks or harm may result from breaches of confidentiality due to the sharing and reflection of lived experiences during this study. Unease

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and discomfort may arise during student reflections (undergraduates). It is necessary to work through any discomfort or unease to develop understanding and self-awareness. Through understanding and self-awareness, educators and individuals gain power over their situations and grow as better educators and/or advocates.

The benefits to participation include a potential positive shift in mindsets and practices in teacher preparation programs through the infusion of the CR-SE competencies into coursework and fieldwork experiences. The opportunity for pre-service teachers to apply culturally relevant and sustaining education pedagogy in the field will strengthen their ability to teach diverse populations. Another potential benefit includes illuminating mixed-race learners' experiences and using their experiences to influence changes to current course curriculum and fieldwork experiences of pre-service teachers.

Confidentiality and Anonymity:

Records will be kept private and handled confidentially to the extent provided by law. In any report or presentation, we will not include any information that will make it possible to identify a research study participant. You will remain anonymous. Pseudonyms will be provided to all participants in the study for reporting purposes

Voluntary Participation:

Your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled.

Contacts and Questions:

The researcher conducting this study is:

Marissa Wallace, M.Ed.

Email: mwallace@kutztown.edu

Phone: 610-428-6385

Advisor:

Dr. Amy Pfeiler-Wunder

Email: wunder@kutztown.edu

Phone: 610-683-4521

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You may ask any questions you have now. If you have questions regarding the research study, you may contact the researcher listed above. If you have any questions or concerns about the rights of research participants, please contact the IRB Committee at Kutztown University at 484-646-4167.

Future Research Studies:

Your information collected as part of the research, even if identifiers are removed, will not be used, or distributed for future research studies.

Statement of Consent:

I have read the information described above and have received a copy of this information. I have asked questions I had regarding the research study and have received answers to my satisfaction. I am 18 years of age or older and voluntarily consent to participate and have my course assignments used in this study.

Signature of Participant

Date

Thank you for your participation.

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Appendix D. Consent Form for Families**CONSENT FORM**

Your narrative as expressed through the context you (the parent or legal guardian) provided is being requested as part of a research study being conducted through Kutztown University. We ask that you read this form and ask any questions you may have before you decide whether you want your narrative to be part of the study. The University requires that you give your signed agreement if you choose to have this narrative shared in the study.

This study is being conducted by Marissa Wallace, M.Ed.

Title of the Study:

Connecting Culturally Relevant and Sustaining Education Competencies in Teacher Preparation Programs to the Experiences of Mixed-Race Learners in K-12 Settings: A Mixed Methods Study

Purpose of the Study:

The purpose of this research study is to uncover themes pertaining to educational experiences of mixed-race individuals and to identify ways to enhance pre-service teacher preparation programs to include knowledge on how to best teach and support this growing population. Also, the study will explore how the integration of the Pennsylvania Culturally Relevant and Sustaining Education competencies supports pre-service teacher preparation programs.

Procedures:

If you agree to have your family's narrative in this study, we would ask you to provide the following:

Qualitative data that may evolve from unstructured interviews that you conduct with your learners or your personal reflection as a parent/legal guardian related to their educational experiences. As the parent/legal guardian you have autonomy over how and what you share for this research study. If you need support engaging in discourse with your children or thinking of information that will benefit this study, the following questions/prompts are provided:

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- How would you describe the school your child(ren) attend? What do they like best? What do they like least?
- Do you think your child(ren) feel a sense of belonging at your school? For the younger kids, do you feel like they fit in at your school? Do they feel safe and included? Why or why not?
- Talk about times your child(ren) have been asked about their racial identity in school. Who asked you? How did it make he/she/they feel?
- Has your child(ren) felt left out at school because of your mixed identity? Describe what happened and how he/she/they felt.
- What types of activities/lessons address race at your child(ren)'s school?
- How have you learned to support your mixed-race child(ren) in schools?
- Have you read or provided books with mixed-race characters to your child(ren)?

Risks or Discomforts, and Benefits of Being in the Study:

There are no physical, financial, social/economic, or legal risks involved. Psychological risk may result due to the sharing and reflecting on lived experiences during this study. Unease and discomfort may arise when sharing narratives of lived educational experiences (mixed-race K-12 parents and guardians).

You have full control over what you share. All responses are voluntary and confidential. Anecdotes collected will be reviewed by the researchers and you before inclusion in the final research study. You have the final say in what can be included and the wording in which it is included in the study.

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The benefits to participation include illuminating mixed-race learners' experiences and using their experiences to influence changes to current course curriculum and fieldwork experiences of pre-service teachers. Including the anecdotes of mixed-race learners allows educators and researchers to reflect on the narratives of voices that are unique and often silenced in education. These benefits outweigh the minimal potential risks by providing an opportunity to enhance teacher preparation programs through the intentional use of the CR-SE competencies in connection with the anecdotes from the fast-growing (understudied) population of mixed-race K-12 learners.

Confidentiality and Anonymity:

Records will be kept private and handled confidentially to the extent provided by law. In any report or presentation, we will not include any information that will make it possible to identify a research study participant. All members of your family will remain anonymous.

Voluntary Participation:

The use of your educational narrative is voluntary, refusal to participate will involve no penalty or loss of benefits to which they are otherwise entitled, and you may discontinue your participation at any time without penalty or loss of benefits to which they are otherwise entitled.

Contacts and Questions:

The researcher conducting this study is:

Marissa Wallace, M.Ed.

Email: mwallace@kutztown.edu

Phone: 610-428-6385

Advisor:

Dr. Amy Pfeiler-Wunder

Email: wunder@kutztown.edu

Phone: 610-683-4521

You may ask any questions you have now. If you have questions regarding the research study, you may contact the researcher listed above. If you have any questions or concerns about the rights of research participants, please contact the IRB Committee at Kutztown University at 484-646-4167.

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Future Research Studies:

Your narrative collected as part of the research, even if identifiers are removed, will not be used or distributed for future research studies.

Statement of Consent:

I have read the information described above and have received a copy of this information. I have asked questions I had regarding the research study and have received answers to my satisfaction. I am 18 years of age or older and voluntarily consent to allow the educational narrative to be included in this study.

Signature

Date

Thank you for your participation.