RUNNING HEAD: THE CULTURALLY RESPONSIVE BEGINNING TEACHER

THE CULTURALLY RESPONSIVE BEGINNING TEACHER: REIMAGINING ONBOARDING THROUGH A LENS OF EQUITY AND SOCIAL JUSTICE

A disquisition presented to the faculty of the Graduate School of Western Carolina University in

partial fulfillment of the Requirements for the degree of Doctor of Education

By

Robert Bales, MSA and Brian Tyson, MSA;

Chair:

Dr. Darrius Stanley, Assistant Professor of Educational Leadership, College of Education and Allied Professions

Committee Members:

Dr. Brandi-Hinnant Crawford, Associate Professor of Educational Research, College of Education and Allied Professions Dr. Charmion Rush, Associate Professor of Inclusive and Special Education, College of Education and Allied Professions Dr. Quincy Williams, Area Superintendent, Winston Salem-Forsyth County Schools

March 8, 2022

Acknowledgments

We would first like to thank Dr. Darrius Stanley, our Disquisition Chair, for his commitment to ensuring our work was meaningful for those who completed the research, those involved, and those who it impacts most, the students. Dr. Stanley pushed us to think introspectively while digging deep for connections in a world where it's much easier to just keep moving forward as white males while unjust systemic barriers continue to be present for students. By pushing us to think differently, we gained knowledge that we will use beyond the disquisition process to better educations systems for all students, and I look forward to that work.

To Dr. Brandi Hinnant Crawford, Dr. Charmion Rush, and Dr. Quincy Williams, thank you for being on this journey with us. It would have been easy to just say no when we reached out to each of you during a pandemic to help us on our journey. Your dedication to us as students just shows how much you are dedicated to improving educational outcomes for all because this is important work that we must get right on day 1 for all students, regardless of experience. A shout out to Dr. Hinnant-Crawford – Data is beautiful and can tell a story better than most.

To Dr. Misti Williams, thank you for being my mentor throughout this process and prior. You could have cut me off after my official superintendent's internship time, but we kept meeting, even as you left for another job. Your mentorship and guidance have made me a better educator, and I'm not sure we can ever stop our weekly meetings. - Robert Bales

To Dr. Quincy Williams, thank you for your guidance and mentorship through one of the most difficult times of my life. You provided the expertise and perspective during my

ii

superintendent internship that proved to be invaluable throughout this process. It has made such a difference in the educational leader I am today. -Brian Tyson

Lastly, a thank you to the entirety of the South-Eastern University City School district for allowing us to work and research with you. A special thank you to the equity coaches in the office of equity and inclusion, as well as the peer assistance and consulting teachers in the office of human resources, for your collaboration. We appreciate your willingness to acknowledge inequities in the education system and be a forward thinker to improve disparities in student outcomes. It inspires us to use this work to continue this work as it can never be accepted as something complete.

Dedications

Robert Bales -

Thank you to my wife, Amanda, for her encouragement throughout this journey. We thought it was crazy to have both of us enter grad school at the same time. Little did we know that a pandemic was coming, and crazy was an understatement. Your love and commitment have meant more than you will ever know, as we have both shown our children you can do amazing things when you put your mind to it. We made it through these past 3 years together, as strong as we ever have been.

To my children, Makayla, and Madison: Thank you for dealing with your parents working on papers during practices, early in the morning, late at night, and all times in between. You two are amazing, and I hope that your mom and I have shown you what happens when you work hard. I love you both more than you know, and I'm so proud of you and excited to see what life brings. Remember that you are both wonderfully kindhearted and intelligent young ladies who can do great things in this world, and I know you will.

To friends and family as a whole. Thank you for helping watch the kids on weekends, talking to them on facetime, and reminding me that I can do this. Your immediate support is something that I will never forget. Even those who are afar, your impact on me didn't stop at birth. Mom, our weekly conversations inspire me to keep making you proud.

iv

Dedications (continued)

Brian Tyson -

Thank you to my person, my lovely wife Lindsay, for helping me get to where I am today. It is with your love, encouragement, and support that I made it through this process. You always believed in me that I should do this, and I wish I had listened to you earlier. Through all the trips to Asheville, the online learning during the pandemic, and long hours writing and writing, you have always been committed to getting through this with me. It's hard to believe we actually did it while working multiple jobs during the emotional rollercoaster of the pandemic. I love you more every day and the example you set for our daughter.

To my daughter Quinn, your smile brightens my life every day. Whether it was bringing me food or just giving me a hug when I was shut up in a room working, you made an impact on this process and made it easier to keep going. I am amazed by how dedicated you are to dance, and your tenacity is inspiring to me as you get on stage and turn on your switch to entertain a crowd. I hope to have the same courage when I lead in front of people, as I advocate for improvement and change. I am so proud of you.

To my parents and brother, who have always been there to support me in the ways that I needed. My dad, who ensured I always had everything, and my mother, who has always told me to shoot for the moon, reflected with me as I capture it piece by piece.

Table of Contents

Acknowledgments	ii
Dedications	. iv
Table of Contents	. vi
List of Figures	viii
List of Tables	. ix
Abstract	X
Introduction and Problem Statement	1
Definitions	3
History and State of the Problem	. 4
Novice Teachers and Students of Color	
Colorblindness	
Causal Analysis	
Literature Review	
Educator Preparation Program	
Blindspots Around Bias	
Self Efficacy	
Teacher-Student Relationships	
Privilege	
Teacher Capacity	
The Problem of Practice Within the Local Context	
Positionality Statements	
Brian	
Robert	
South-Eastern University City Schools	
Theory of Improvement	
Improvement Methodology	
Literature Review of Improvement Initiative	
Critical Race Theory	
Responsive Teaching and Relevant Pedagogy	
Intersectionality	
Implicit Bias	
Deficit Ideology	
White Savior Complex	
Improvement Initiative Methodology	
Improvement Science	
Planned Outcome Measures	
Planned Driver Measures	
Planned Process Measures	
Planned Balancing Measures	
Impacts of COVID-19 Pandemic	
Context of Improvement Initiative	
Professional Development	
•	
Methods of Data Collection for the Improvement Initiative Summative Methods	
	50

Formative Methods	57	
Long Term Outcomes	59	
PDSA Cycle 1	59	
PDSA Cycle 2	62	
Professional Development 2	62	
Professional Development 3		
Summative Data Collection	67	
Data Analysis	68	
Overconfidence with Cultural Empathy and Cultural Responsive Pedagogy	69	
Resistance and Acknowledgement	73	
Embracing Student-Teacher Relationships	75	
Summary		
Culturally Responsive Teacher Preparedness Scale		
Individual Participants Results	81	
Exit Interviews	82	
Balancing Measures	83	
T-Tests	85	
Implications and Next Steps		
Fragility	86	
Overconfidence in Novice Teachers		
Next Steps for Research	87	
Incorporation of the Walkthrough Tool	88	
Intersectionality	89	
Conclusion	89	
References	91	
Appendix A: Culturally Responsive Instruction Walkthrough Tool 1	06	
Appendix B: Teacher Interview Questions Summative		
Appendix C: Culturally Responsive Teaching Preparedness Scale 1	120	
Appendix D: Journaling Questionnaire		
Appendix E: Balancing Measures - Stress Survey 1		
Appendix F: SPSS T-Test Results 1		

List of Figures

1.	Percentage of students, by race and ethnicity, attending	
	schools with more than 20 percent first-year teachers	5
2.	Percentage of students, by race and ethnicity, enrolled in	
	schools with more than 20 percent of teachers not certified	6
3.	Conceptual framework identifying the major factors contributing	
	to disparities in outcomes for students of color in the classroom	8
4.	Analysis of academic gaps in student	
	groups from similar socioeconomic class	.11
5.	Fishbone of the Factors Contributing to the Need for Training	
	for New Teachers in Cultivating Authentic, Nurturing Relationships	.13
6.	Analysis of districts nationwide with academic gaps between	
	student groups based on socioeconomic class	. 25
7.	2020 SEUCS Demographic Percentages by Race	. 26
8.	Theory of Practice Improvement. Driver diagram	
	illustrating influences for an improvement initiative	. 31
9.	Improvement Initiative	. 34
10.	Social Discipline Window	43

List of Tables

1.	Description of all Collections, Frequencies, and Analysis of all Measures	48
2.	Original Design for Research Study, Timeline of Improvement Initiative	49
3.	Actual Design for Research Study, Timeline of Improvement Initiative	50
4.	School Level Information for Participants	53
5.	Long Term Goal Measures for Study	59
6.	PreSurvey Results	. 70
7.	Midpoint Survey Results	72
8.	Post Survey Results	. 76
9.	Summary of the Mean Differences for Survey Questions	78
10.	Individual Average Scale Scores Across the Study	81
11	. Anonymous Stress Survey #1 Results	. 84
12	. Anonymous Stress Survey #2 Results	85

Abstract

What if a district utilized its teacher onboarding program to prioritize the development of a culturally responsive lens to meet the needs of its diverse student population? Public school districts in the United States have long served as a platform that reproduces oppression and marginalization of people of color. These issues are observable by significant gaps in academic achievement and discipline data that remain racially identifiable. The lack of progress in addressing these disparities falls onto the laps of school districts that are experiencing teacher shortages and elevated turnover rates with an increased reliance on novice teachers to fill teaching vacancies. The district asks these unequipped novice teachers to address the disparities due to the lack of training to see intersections of student experiences that may differ from their own while they espouse colorblind ideologies both implicitly and explicitly. South-Eastern University City Schools, a district of 12,000 students from a southern college community in the southeast, has the second-largest academic achievement gap nationwide for a public school district. Each year, they hire 25-30 novice teachers from various educator preparatory programs and alternative licensure pathways that engage a state-required beginning teacher support program. We collaborated with the district's office of equity and inclusion and their beginning teacher support mentors to design an improvement initiative grounded in the colorblindness tenant of Critical Race Theory that uses novice teacher onboarding as a platform to address disparities in student outcomes. Through this onboarding initiative, novice teachers have a deeper understanding of the impact of race on classroom outcomes, increased awareness of how their own biases impact decision making, and the capacity to execute culturally responsive teaching strategies to improve student outcomes. A deeper understanding of how social identity creates privilege and oppression fosters empathy that supports the cultivation of more authentic

Х

classroom relationships that will minimize social barriers between teachers and students. We employed qualitative and quantitative methodologies to track teachers' first 90 days in the profession and gave a fuller picture of the struggles and connections made when one explicitly looks within themselves to be the teacher that all students need, not the students that this teacher may have wanted. An over-arching theme from the participants was overconfidence in their abilities to execute culturally responsive teaching strategies from their preservice training, creating a sense of racial dys consciousness. We discuss the lessons learned and provide recommendations for other individuals or districts considering implementing a culturally responsive teacher onboarding process.

Introduction and Problem Statement

Often novice teachers enter the profession unprepared to address the academic and discipline disparities in public education (Kane & Francis, 2017). Historically, students from racially minoritized backgrounds have been underrepresented at the top of academic achievement distribution and over-represented at the bottom. Inversely, these students are overrepresented at the top of discipline data, creating racially identifiable disproportionalities (Ferguson, 2002).

According to the U.S. Department of Education's Office for Civil Rights, racially minoritized students—namely Black, Latino, and Indigenous—are more likely to have a novice teacher than White students (U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12). We believe that without authentic equity training in teacher education programs and during onboarding processes, the predominantly White teacher workforce is more likely to: adopt a "colorblind" approach to classroom leadership perpetuate opportunity gaps and marginalization in the education system.

The life experiences and social positionality of White teachers can generate biases and blindspots, which inhibit deeper understandings of privilege, race, and intersectionality. It is more evident with novice teachers, unaccustomed to the powerful influence of empathy, who affirm their successes as leaders through the compliance of expectations rather than cultivating student-teacher relationships (Claessens et al., 2016). This can also lead to color blindness, which, as defined by Critical Race Theory (CRT) (Delgado & Stefancic, 2017), fails to acknowledge racism within the classroom constructs and creates views and practices that exacerbate cultural barriers existing between students and teachers. Without the critical

consciousness and empathy to deconstruct these barriers, teachers are less likely to embrace students' cultural identity as an asset (Goldenberg, 2014). As a result, the absence of a classroom community and a sense of belonging for students can prevent social-emotional, cognitive, and academic growth.

Quality relationships are crucial in fostering intrinsic motivation for learning at any age, especially with school-age children (Crow, 2009). Even though students may possess the skills to learn, it will impact their success if they are not motivated to use them. In our experience, novice teachers overlook this connection when acclimating to the profession. We notice that novice teachers tend to have better relationships and connect with students who are successful in their classes. In contrast, veteran teachers often focus more on the students' needs and foster relationships regardless of success levels (Claessens et al., 2016). This perspective creates an environment lacking empathy and impacts novice teachers' ability to meet students' developmental needs and social efficacy as they engage in the learning environment, especially those with differing cultural identities (Hramiak, 2014). A sense of community and cultivated trust with their teachers fosters higher levels of intrinsic motivation, increasing the likelihood of student success (Pitzer & Skinner 2017). Many novice teachers do not recognize the importance of relationships in student outcomes due to their lack of leadership experience (Gholam, 2018). In the absence of formal equity training, they are more likely to operate through a lens of what society has taught them about students' expectations and academic potential.

This study examines a group of novice teachers' perspectives and behaviors from various teacher preparation programs undergoing professional learning during their first teaching semester. A series of surveys and critical reflection exercises will monitor the training effects for initial simulated tolerance versus patterns in changed classroom behaviors. Utilizing the

colorblindness tenant of Critical Race Theory as a guiding framework, we will address disparities in achievement and discipline by disbanding race-neutral ideology to create an onboarding process with a more culturally responsive lens. As a result, novice teachers will deepen racial consciousness and build the capacity to reciprocate empathy that fosters relationship building and pedagogical practices that reflect diversity.

Definitions

We offer the following terms, used interchangeably throughout the disquisition. *Equity*: Takes into consideration the fact that the social identifiers (*race, gender, socioeconomic status*) affect equality. In an equitable environment, an individual or a group would be given what was needed to give them an equal advantage. This would not necessarily be equal to what others were receiving. It could be more or different (Independent School Diversity Network, 2021). When becoming more culturally responsive shifts practices and behaviors, that is equity work.

Culturally relevant pedagogy: A form of teaching that calls for engaging learners whose experiences and cultures are traditionally excluded from mainstream settings (Ladson-Billings, 1995).

Culturally responsive teaching: The cultural knowledge, prior experiences, frame of reference, and performance styles of ethnically diverse students to make learning more relevant to and effective... It teaches to and through the strengths of the students. It is culturally validating and affirming" (Gay, 2010, p. 29).

The terms culturally responsive teaching and culturally relevant pedagogy will be used interchangeably throughout this paper. The terms have evolved from culturally responsive pedagogy throughout the years and have many more similarities than

differences (Howard & Rodriguez-Minkoff, 2017). We will use the term culturally responsive pedagogy unless a previous author has specifically used the term culturally responsive teaching.

Cultural empathy: Cultural empathy is the learned ability of teachers to understand accurately the self-experiences of students from other cultures (Ridley & Lingle, 1996). Being culturally empathetic begins with understanding each student as a unique individual. This means considering the meaning of each person's self-experience, including his or her feelings, attitudes, thoughts, values, motivations, coping style, and behaviors (Ridley & Udipi, 2002).

History and Current State of the Problem

Since the desegregation of public schools, the current teacher workforce has remained predominantly White and, in turn, has perpetuated gaps in power and opportunity through a system designed for some to succeed and others to fail. As a result, students of color are less likely to have experienced school leaders or classroom teachers who look like them. Combined with the colorblind approach to classroom leadership utilized by White teachers, it ensures the simplest form of racial discrimination and bias remains the standard way of doing business in education.

Public education has long served as a platform that reproduces privilege and marginalization in society. From the inequities in school funding to lack of access to highly qualified teachers and curriculum offerings, students of color have historically had fewer opportunities than White students (Darling-Hammond, 1998). This results in disparities in academic achievement and discipline disproportionality. One key factor in educational inequities is the predominantly White, racially unconscious workforce (Diamond, 2013), which

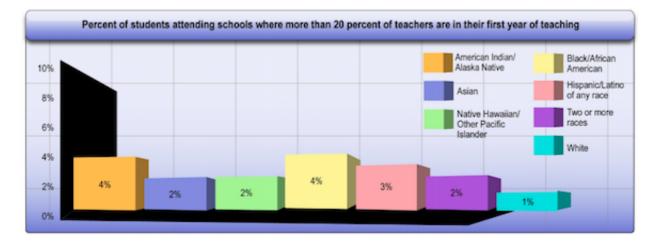
perpetuates the policies, practices, and structures in a system designed for some to succeed and others to fail.

Novice Teachers and Students of Color

According to the 2011-2012 U.S. Department of Education Office for Civil Rights, racially minoritized students (Black, Latino, American Indian, and Native Alaskan) are four times more likely to have a novice teacher than a White student (Figure 2). In addition, nearly 7% of Black students attend schools where more than 20% of the teachers have not yet met all state certification and licensing requirements (Figure 3), compared to almost 2% of White students (Office of Civil Rights, 2014). Many new teachers are cyclically hired in financially insecure schools, lacking support resources, and containing students most impacted by their surroundings (Ladson-Billings, 2001). The racial disparities are apparent; students of color have more exposure to new teachers, prompting more investigation into the practices, strategies, and mindsets that create the classroom environments that produce student outcomes.

Figure 1

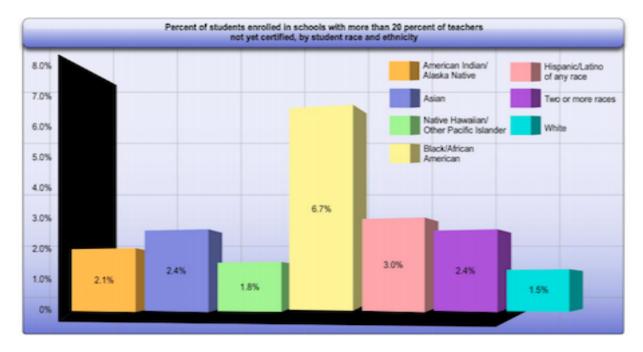
Percentage of students, by race and ethnicity, attending schools with more than 20 percent firstyear teachers



Note: This figure breaks down demographics where students attend schools with 20% or more first-year teachers. (U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12)

Figure 2

Percentage of students, by race and ethnicity, enrolled in schools with more than 20 percent of teachers not certified.



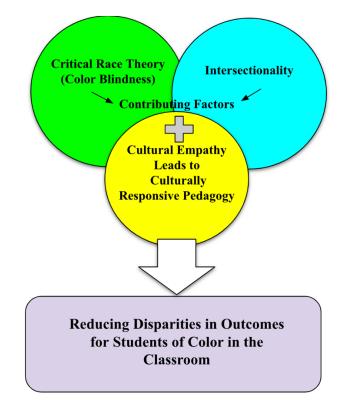
Note: This figure breaks down demographics where students attend schools with 20% or more not yet certified teachers (U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12)

Colorblindness

We approach this work through the lens of Critical Race Theory (CRT), specifically through the tenant of color blindness. CRT bases itself on the idea that race is "not a natural, biologically grounded feature of physically distinct subgroups of human beings but a socially constructed (culturally invented) category that one uses to oppress and exploit people of color" (Britannica, 2021). Colorblindness is addressed as the first feature of Delgado and Stefancie's introduction to CRT, describing racism as the "normal way society does business," that insists on normal treatment across the board (Delgado & Stefancic, 2017). They affirm that racism is an ordinary practice that one cannot address because it is not acknowledged. Colorblind tactics are one of the oldest technologies in racial discrimination dating back to the colonial era, whereby deploying acts of colorblindness would achieve racial effects without declaring racial intent (Crenshaw, 2019). Thereby it continues to flourish in today's educational system as educators who are white remain uncomfortable connecting race to their classrooms (Matias, 2014). Figure 3, shown below, provides an overview of the theoretical framework that informs this problem and the contributing factors.

Figure 3

Conceptual framework identifying the major factors contributing to disparities in outcomes for



students of color in the classroom

Note: Novice White teachers lack cultural responsiveness due to the lack of training to see intersections of student experiences that may differ from their own, while they espouse colorblind ideologies both implicitly and explicitly. However, when partnered with a focus on cultural empathy and, in turn, culturally responsive pedagogy (Rieckhoff et al., 2020), these contributing factors can reduce the inequities in achievement and discipline for students of color in the classroom.

The conceptual framework (Figure 3) for our disquisition aims to examine the factors identified through literature that uniquely contribute to the need for a culturally responsive lens for novice teachers. This framework considers the color blindness tenant of Critical Race Theory Intersectionality as the contributing factors that impact students of color based on teachers' lack

of being culturally responsive. The framework begins with the colorblindness tenant of CRT, which has the most significant impact on novice teachers' lack of a culturally responsive lens. Research shows that most teachers who say they are colorblind enact practices that betray their beliefs around race (Blaisdell, 2005; Crenshaw et al., 2019; Delgado & Stefancic, 2017). Intersectionality examines the advantages and disadvantages of an individual or group of people interconnected by their race, class, or gender to create an identity as a way to diagnose the relational aspects of human connections and society (Agusto & Rowland, 2018; Cho, Crenshaw, & McCall, 2013). These factors come together to help us see a gap in research of impacting the cultural empathy which leads to a culturally responsive lens of novice teachers, which impacts the continual cycle of disproportionate outcomes for students of color in their classrooms. Cultural empathy is a first step in using culturally responsive pedagogy to not just think about their content, but the what, how, and why so individual students feel affirmed by their cultural identities and the idea of building critical thinkers of everything will better our world (Gay, 2011; Gladson-Billings & Tate, 2005; Sleeter, 2011). We use the collective lens from CRT and Race/Class intersectionality to frame our problem with cultural empathy being a precursor to culturally responsive pedagogy as a platform for improvement.

Color blindness prevents accountability for the historical marginalization of People of Color and fails to address the system designed to promote the assimilation of Whiteness. It is a safety net that protects against White fragility and maintains a belief about being good people. Those who operate from a lens of color blindness may view racism as a blatant act of hate, which fails to acknowledge the racism embedded into thought processes and institutions, like education.

Color blindness has perpetuated many of the system's inequities facing people of color. Most, if not all, people have implicit and explicit biases rooted in racial and cultural stereotypes

(Whitford, 2018). Unfortunately, color blindness has long allowed people to stay comfortable with these biases. The idea of "treating everyone equally" puts trust in the system to provide equal outcomes. Assuming that anyone, regardless of race, who works hard enough, can advance in society thus, dismisses differentiated social experiences associated with race (Bergenson, 2003).

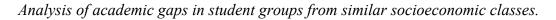
Colorblindness exacerbates gaps in opportunities to learn at the classroom level (Milner, 2015). Milner goes further to discuss the need for reform regarding a specific curriculum that is aimed specifically at emphasizing a deeper analysis of race, and the impacts that it has on individuals in the classroom. The opportunity gaps that persist for those in poverty in particular (who are overrepresented by people of color due to historical, systemic barriers) compound the need to focus on race as it is not an invisible factor in one's access to success. Teachers have good intentions as they enter the workforce, but their level of colorblindness is high as it has historically not impacted them and is often easy to ignore. If we allow educators to continue to ignore race and other intersecting factors, we will continue to move forward with systemic barriers that we will only replicate.

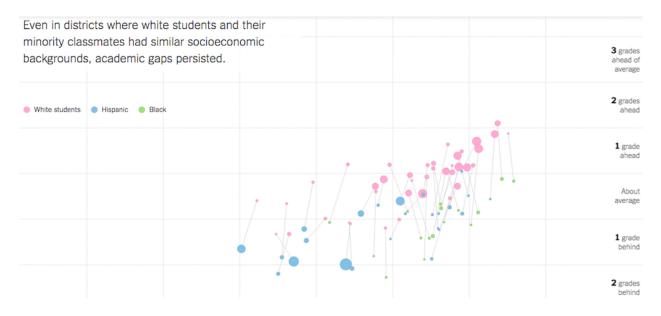
Newer, less experienced teachers (overwhelmingly White, female, and middle class) are more susceptible to bias in decision-making, which limits their capacity to build relationships based on cultural empathy (Pollack, 2012). They are more likely to adopt a colorblind approach to teaching due to their lack of experience and historical context of race and opportunity in education. This level of racial unconsciousness damages their potential to cultivate meaningful relationships with students, build classroom community, and grow capacity for culturally responsive instruction. By disregarding race, teachers fail to address the positionality and social constructs outside the classroom, which often serve as barriers to relationships inside the

classroom. It also prevents the critical self-reflection needed to develop a deeper understanding of privilege and embrace diversity as an asset.

Color blindness impacts other behaviors inside the classroom. Schools perpetuate discipline disproportionality and academic gaps through racial bias. This is seen in staffs' frequency to write discipline referrals for students of color for an unwanted behavior disproportionately to their White classmates (Smolkowski, 2016). Students of color, who often do not feel welcomed in the classroom due to the positionality and social constructs discussed previously, are more likely to dislike school and disengage (Fredricks et al., 2019). Race also continues to be a significant factor in achievement gaps. Figure 4 shows districts with similar socioeconomic levels amongst races; academic achievement gaps still exist.

Figure 4





Note: This figure represents gaps between White Students and their Black and Hispanic counterparts in districts where students had similar socioeconomic backgrounds.

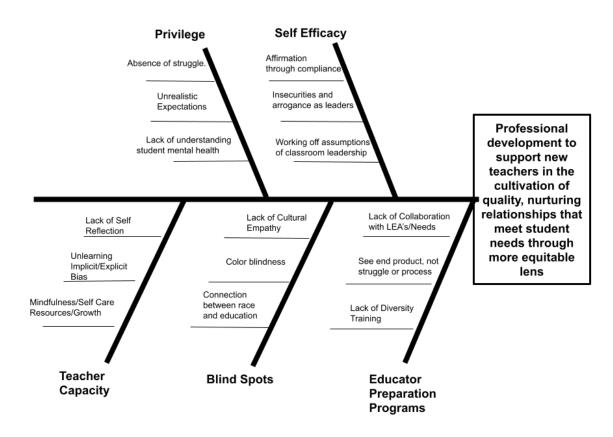
Causal Analysis

This problem of practice explores an ongoing issue through a different lens, viewing new teacher onboarding as one of the mechanisms for the continued marginalization, specifically of students of color in novice White teachers' classrooms. Therefore, a better understanding of the mindset of a new teacher is essential in designing an improvement initiative for induction. This section, compiled from conversations with equity specialists and beginning teachers support personnel, adds context to the specific obstacles that novice teachers encounter regarding race that impact relationships.

We continue to examine this problem through the lens of Critical Race Theory and using the colorblindness tenant as novice teachers acclimate to the profession. The accompanying figure is a fishbone diagram (Byrk, Gomez, Grunow, & LeMahieu, 2015), providing a causal analysis of the struggles that many new teachers have upon entering the workforce and contributing factors that warrant the need for additional professional learning.

Figure 5

Fishbone of the Factors Contributing to the Need for Training for New Teachers in Cultivating Authentic, Nurturing Relationships



Note: This Figure examines the main issues along with their factors in the need for training for new teachers in cultivating authentic, nurturing relationships.

Literature Review of Causal Analysis

Educator Preparation Programs

Teacher education candidates are declining and remain predominantly White; conversely, students are becoming more racially diverse (Clayton, 2011). Many educator preparation programs fail to prepare teacher candidates to do equity work in the classroom (Sleeter, 2017) due to the absence of authentic equity coursework beyond a history of racism and a base of

colorblindness in their curricula. This lack of racial consciousness, combined with the efficacy and potential bias of a new teacher, caused by the "generalized associations of race formed from systematically repetitious or unique and limited experience or exposure" (Smolkowski, p. 179, 2016), only perpetuates societal color blindness and puts novices at a disadvantage to address student disparities upon entering the profession.

New teachers graduate with the false impression that they have completed equity training from their "diversity course," isolated from the rest of the curriculum (Delgado & Stefancic 2017). The absence of the culturally responsive curriculum in their teacher education programs (Sobel et al., 2011) does not decrease White fragility around race (DiAngelo, 2019), nor does it foster a platform for courageous conversations which allow one to confront prejudice and speak truths. The lack of these conversations does not allow teachers to have the opportunity to acknowledge and work towards unlearning biases before entering the classroom. Staying comfortable in their biases, they operate by what society has taught them, providing inequitable services that contribute to a reproducing system. This colorblind approach inhibits their ability to connect with many of their most vulnerable students and contributes to their exit from teaching (Ingersoll & Strong, 2011).

With the declining enrollment in education programs, states have created alternative licensure pathways to introduce more teachers to the profession during their training. Unfortunately, many of these programs do not employ some of the basic tenets of an education major program (Darling-Hammond et al., 2002), so teachers are essentially learning the knowledge and skills provided in the teacher education while on the job. In addition, these novice teachers are without the basic diversity training or equity curricula offered at an

institution as well as the student teaching experience to connect the knowledge in practical application.

Blindspots Around Bias

Bias is a combination of thoughts and beliefs that one may have gained explicitly along with those built implicitly by their upbringing. Research suggests that novice teachers harbor blindspots related to bias around race and culture (Whitford, 2018) due to their lack of classroom leadership experience. Growing up in White and middle-class privilege, many teachers have a hard time relating to students' life experiences, which are different from their own (Shedrow, 2017). White teachers' blindspots around privilege, the connection between race and opportunity in education, can impact their approach to instruction and management, leading to inequitable classroom practices. Adding in many teachers' inability to have conversations that will allow them to grow due to their White fragility (DiAngelo, 2019), we have a perfect storm that contributes to these blind spots.

Biases are rarely addressed or discussed since they are not part of our social discourse and cause harm (Diamond, 2013). There are three different examples of everyday racial processes:

- Stereotype Threat (Steele, 2010) When race is made clear in a given situation, Black students fear that they will confirm negative stereotypes that are made up about their ethnic group.
- Cultural Expressions (Carter, 2005) The balancing act of behaviors and expressions that are rewarded at the school level pitted against those that are rewarded by peer groups.

 Racial Microaggressions (Solórzano et al., 2000) - "subtle insults (verbal, nonverbal, and/or visual) directed toward people of color, often automatically and unconsciously" (p. 60).

These processes are how external people feel about a person based on their internal feelings, beliefs, "core" values, etc. Due to their privilege, these processes are seen and felt by students of color every day but not seen by white students and teachers. These processes are prevalent in society from the moment a child is born.

White teachers who are not aware of the systems they are working in, in combination with their own implicit and explicit biases, have blind spots visible by those that it impacts most. Students of color must navigate a classroom setting where they have to balance being accepted by their peers or give in to the mainstream beliefs of a successful student makeup (White) and deal with microaggressions daily. Unfortunately, when students attempt to address the microaggressions, they are looked at as the problem, and it builds more negative stereotypes into a potentially unknowing novice teacher. Novice white teachers need to have a mechanism to reflect to see their blind spots or be open enough to allow others to bring them to light to make a change and create true relationships in the classroom.

Self-Efficacy

Teacher efficacy refers to an educator's confidence in promoting students' learning (Hoy, 2005). Teacher efficacy rises with completing an educational preparatory program and student teaching, but falls when teachers enter the classroom for the first time as head of the classroom (Whitford & Emerson, 2019). Teachers who experience an internship during their preparatory program come into the classroom with a better understanding of the reality of a classroom versus those who come in without that experience (Hong 2010). However, even those who engage in an

internship do not often experience the productive struggle that comes with being a new teacher. Student teachers do not experience the stress, exhaustion, and anxiety of acclimating to the profession, as their cooperating teachers are often accomplished veterans. These experiences can significantly impact efficacy and a novice teacher's ability to be vulnerable professionally (Hammond, 2015).

As student-teachers move from theory to practice, there are often gaps in the expectations of classroom leadership put in place by a lack of training. Novices come into the field with assumptions of "saving the world" through education without knowing how to meet student needs or address the existing disparities in public education (Schaefer, 2013). This sense of arrogance quickly turns into insecurities when teachers' pedagogical practices and classroom management strategies are not successful with all students (Kelchtermans 2017). Without the previous experience of productive struggle, this insecurity causes individuals to feel unsuccessful for possibly the first time in their lives, which has a negative impact on their psychological state (DeNeve & Denos, 2017) and contributes to many teachers leaving the profession. Onboarding programs provide the opportunity for teachers to engage in professional learning that improves self-efficacy around classroom leadership.

Teacher-Student Relationships

In establishing themselves as leaders, novice teachers fail to realize the importance of relationships and community as a necessary platform for executing instruction. These relationships have a significant impact on the effectiveness of a classroom teacher. Novice teachers base their perceptions of positive relationships on compliance (Classens, 2016), the idea of students affirming the teacher's expectations. When they do not meet those expectations, the resulting frustrations can lead to reactions influenced by biases that contribute to disparities such

as discipline disproportionalities. A colorblind approach can only exacerbate the effect of biases, as one builds these teacher-student relationships upon the students fulfilling teacher needs due to the teacher's insecurities and low self-efficacy instead of prioritizing student needs. It may be different for veteran teachers, as they are more likely to increase their self-efficacy through the experience of decision-making and furthering their instructional practices (Tschannen-Moran et al., 2007). As teachers progress in the profession, confidence naturally increases over time; and, as insecurities decline, so does the need to affirm their success through compliance.

Teachers are much more willing to talk about poverty and socioeconomics than race. Milner (2010) showed that teachers are more comfortable working with students below the poverty line than Black and Brown Students. White teachers who feel uncomfortable teaching students will show that in their classroom practices, instruction, and engagement. Milner & Laughter (2014) found that teachers commonly had one of five mindsets around their relationships with students of color:

- Mindset 1: If I acknowledge the racial background of my students or myself, then I may be considered racist.
- Mindset 2: I treat all my students the same regardless of their racial or ethnic backgrounds.
- Mindset 3: I focus on teaching *children* and ignore the race of my students because race is irrelevant.
- Mindset 4: Race does not matter in my teaching because racism has ended.
- Mindset 5: We live in a post-racial society and my classroom practices are, will be, and should be post-racial (p. 343-344).

These mindsets contribute to the colorblindness used ineffectively to form student-teacher relationships. White teachers and students of color possess different racialized and cultural experiences and different forms of knowledge both in and out of the classroom, making it difficult to build social and academic relationships (Milnor & Tenore 2010; Irvine, 2003).

Claessens (2016) also focused on problematic behaviors and how they relate to the teacher-student relationship. Teachers — experienced and novice — rarely talk about themselves in terms of traits that may impact relationships. Instead, teachers frequently talk about their actions in the situation, through the environment, not through personal characteristics. Classens (2006) questions the approach that teachers take with this by stating, "How would you describe this student?" versus, "How would you describe yourself as a teacher of this student?" This difference in mindset changes the dynamic of who is impacted and changes how classroom leadership looks.

Privilege

The Cambridge Dictionary defines *privilege* as "an advantage that a person or group of people have because of their position" (2021); however, the term "White Privilege" is more complex. Many would describe White privilege as an inherent power and comfort that White people have in their social positionality in today's systems. Discussing privilege as a White person can have the opposite effect by creating discomfort and defensiveness (Dillard, 2018). One can see their privilege in their own definition of what racism looks like. DiAngelo (2019) discusses how it is much easier to limit racism to that which is blatant. White people are socialized to see racism as individual acts of discrimination or prejudice, unaware of their own racial identity and how it contributes to the systems that perpetuate marginalization (DiAngelo, 2019). These factors contribute to colorblindness approaches in classroom leadership because

without acknowledging race, people cannot see themselves or their actions towards students as racist.

When one looks deeper at the structural privileges that elevate White people as a group, White supremacy, one can unpack the advantages that make it hard to deny the privilege given to one group over another. For example, looking at historical US government representation (Congress, Governors, Military Advisors, Presidents, Presidential Cabinets), those in charge of deciding what citizens we watch, read, or listen to, as well as those who are the wealthiest, each area has over a 90% majority-White representation (DiAngelo, 2019). This does not happen by chance and is unknown to many who push its agenda unknowingly. It is a power-play move to keep privilege with one race by any means necessary in all aspects of life.

As educators, White teachers have an additional layer of privilege, with the influence to lead classrooms of students. Many individuals enter education because of their positive experiences as students and the joy they find in helping others, unaware of their privilege's impact on their experience. Darling-Hammond (2000) looks at the disconnect between viewing students as individuals attending school to gain knowledge and seeing them as individuals with developmental needs, considering the factors that decide their needs and how educators can help meet them. Coming to work and battling racial inequity is hard, exhausting work that many teachers embark on to start a career (Hancock & Warren, 2016). However, many White educators find it easier to focus energy elsewhere and not become overwhelmed in the work since they do not have to discuss race as a factor each day in their individual lives.

Novice teachers have little understanding of the impact, positive or negative, that they have on students every day that they interact with them (Nuthall, 2004). As teachers learn to appreciate the understandings and experiences of their students and learn about how their own

racial identity influences their interactions, they develop a deeper understanding of the connection between learning and teaching and how to meet students' needs better (Darling-Hammond, 2000, p.171).

Teacher Capacity

Capacity is most commonly used to describe the ability of an individual to accomplish something specific (Capacity, 2013), and in the context of this research, we are defining it as a teacher's leadership potential in making racially conscious decisions. Novice teachers enter the profession with a multitude of gaps around instruction, management, mental health, and the importance of relationships in student learning (Ingersoll & Strong, 2011). Without an authentic equity curriculum in teacher education programs, they also have little understanding of the impact of race and culturally responsive strategies that benefit all students.

As novice teachers acclimate themselves to the profession, they struggle to cultivate and prioritize relationships. As inexperienced leaders, they tend to have a better rapport with compliant students (Claessens et al., 2016) and fail to connect the importance of relationship building to successful classroom management strategies. These teachers are also more susceptible to racial bias in decision making and student-teacher interactions, which can hinder any attempt at building quality relationships and perpetuate the disparities in discipline outcomes (Statts, 2016).

The Problem of Practice Within the Local Context

The South-Eastern University City School District receives accolades for its high levels of academic success, while the achievement gap remains one of the largest in the country. In addition, the racial division of the community was exacerbated with the desegregation of public schools and continues to impact the system's decision-making. Viewing these historical facts

alongside the revolving door of central office leadership means equity issues continually are discussed yet not put into action.

Positionality Statements

As two White males with over 35 years of combined experience in education, this is work that resonates with our personal and professional journeys with race. We have spent the vast majority of our careers in South-Eastern University City Schools. It is a unique district with a storied history of marginalization and racism. We feel this district is ideal for our work, and the following positionality statements provide an account of our perspectives.

Brian

As someone born and raised in the Southeast, I was taught from a young age to treat everyone with the kindness and respect that I desired. I have always grounded myself in relationships, and the majority of my friends throughout my life have been of color, which allowed me to ignore my biases. At the start of my career, race was something I never considered as a factor in my success, or that of my students, for that matter. I was comfortable teaching and creating relationships with my students, families, and colleagues based on my beliefs, and my mask of colorblindness. Through 15 years in the classroom as a teacher and mentor, my perspective shifted through courageous conversations and critical self-reflection. I lead our district's beginning teacher program for the five years, and every day I wish I had had more of an equity lens as a novice teacher. So many of the struggles novice teachers face can be supported if they know how to connect with their most vulnerable populations; and in this district, their students need them more than ever. My journey is evolving every day, and I wish to support others in theirs.

Robert

I was born into poverty to young parents who worked hard to get what they could for me. We struggled throughout my upbringing, but regardless of the situation thrown at me in school, I always made it. In the moment, it seemed like it was just hard work and dedication. However, reflecting years later, as my equity lens has developed, I genuinely wonder if I would be where I am today without being White. I saw classmates who were just as talented, if not more so, then I was, not to make it out of poverty, go to college, or create a life for themselves that was better than their surroundings growing up. I wonder if my young self knew of the advantage I had, if I would have spoken out on it? Would I call out inequities? I had years of bias soak into me over the years. Some of it explicit, much of it implicit. As a child, you are a sponge to your surroundings. Full of just a sense of my path into the field of education, I thought I had a pretty good idea of what "teaching" looked like. I had always been able to form relationships with others. I would just continue to lean on that, and a good joke, to ignore others' struggles and strengths as I walked into the classroom to teach with a mask of color blindness. In my 17 years in the South-Eastern University City Schools, I have grown tremendously. Still, I look back on my first years, and wish I could have sped up my discovery of an equity lens. It has taken a while to get that lens to be one of the first ones to pull out, just like an optometrist does on their phoropter instrument to diagnose vision issues.

Relationships are great, but you can really get somewhere if you have a proper understanding of who someone else is. My role as a beginning teacher was to have a personality that others would like, rather than actively seeking out to know students. It was very surface level and helped me in the short term, but upon reflection, it did not help the students. In my role now as a principal, I have the opportunity to impact beginning teachers (and veterans) by not

only building an equity lens, but also by teaching the brain to utilize it first. Our children are amazingly aware of this switch and the fact that you care. I learn something new every year that helps me become a better, socially just leader. The key is to use it, build awareness of self, and admit when we fall. I enjoy being a part of others' journeys and finding ways to do what is right for all kids, not just those that may look or act like me.

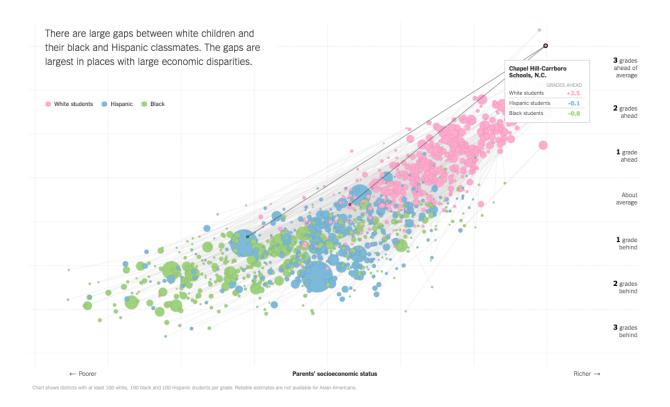
South-Eastern University City Schools

South-Eastern University City Schools (SEUCS) has two distinguishing features: the highest overall achievement rate in the state on standardized tests and the resulting achievement gap, the second-highest in the country scores in the same metrics (Reardon, 2016). White students in the South-Eastern University City School District, on average, are 3.5 grades ahead of average, while Hispanic students are -0.1 grade levels behind average, and Black students are -0.8 grade levels behind average, as seen in Figure 6.

Figure 6

Analysis of districts nationwide with academic gaps between student groups based on

socioeconomic class



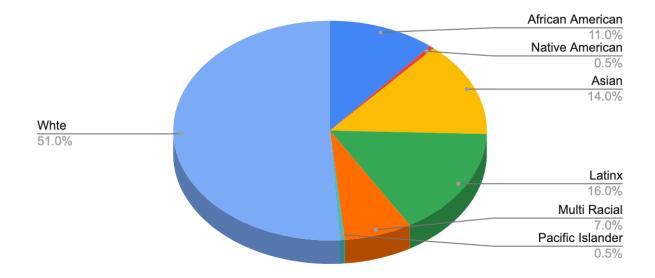
Note: This figure focuses on the academic gaps between White students and their Hispanic and Black classmates, specific to the South-Eastern University City School District.

South-Eastern state has overlapping tax jurisdictions, resulting in South-Eastern University City residents paying state taxes, the state's largest county and city taxes, and a specialized school tax that feeds directly into the district's budget. The tax crisis has created a revolving door, forcing the middle class out of the community, and paving the way for a sizable societal gap representative of those who are able to provide better for their families and those who are not. The gap is visible in every school building and eventually creates identifiable trends between

achievement levels in student groups in late elementary and middle school, impacting high school success rates. South-Eastern University City Schools graduate 90.2 percent of their students, with 88.9 percent of their schools receiving either A or B grades on school performance (South-Eastern State Department of Public Instruction, 2019). One can link student groups not meeting growth, proficiency, or eventually, standards for graduation to the societal gap in the community. Student demographics by race in the South-Eastern University City School System are listed below (Morris, 2020).

Figure 7

2020 SEUCS Demographic Percentages by Race



Demographic Percentages

Note: The figure shows the demographic breakdown of K-12 students in the South-Eastern University City Schools in the 2019-2020 school year.

The South-Eastern University City Schools community has a storied history of deeprooted systemic racism that impacts our district today. The community once had two segregated secondary schools, South-Eastern University City High School, attended by White students, and the exemplary Lincoln High School, attended by students of color. When schools were desegregated in 1966, the all black high School was forced to close, and students of color integrated into South-Eastern University City High. According to Rebecca Clark (Nielsen, 2016), the administration did not expect Black students to leave all-black Lincoln High and was surprised when no students were at Lincoln High at the start of the school year. Many of the artifacts of Lincoln High were discarded, and many employees lost their jobs or were reassigned to lesser positions (Waugh, 2012). Items were discarded, thrown away, etc. The predominantly White community utilized Lincoln High as a central office in an attempt to be seen as progressive in a racist South (Waugh, 2012).

Through the creation of a course at the South-Eastern University, Jacquelyn Hall uncovered the oral histories of the new South-Eastern University City High School. White students spoke of friendships, while Black students shared community loss, as they no longer had the connections with the staff and community that supported them at Lincoln High School (Waugh, 2012). Rebecca Clark, a former Lincoln and South-Eastern University City High student explained the surprise by the new South-Eastern University City High staff when Black students arrived, as they believed that they would stay at the segregated Lincoln High. Burnis Hackney, a former SEUCS student, discussed the differences in expectations and disciplinary actions as a Black student. Everything was largely overlooked as long as one was White. Double standards in disciplinary actions were easy to see and not addressed by the majority White administrative staff (Nielsen, 2016).

As referenced in The Campaign for Racial Equity in Our Schools (2015), there is a history of racial advantage and disadvantage that continues today, exemplified by resource, access, and power differentials between white families, staff/faculty, and students, and those of color (particularly Black) shared by students, teachers, and staff. Racial stereotyping plays a role in lowered academic expectations, fewer advanced academic and other non-academic opportunities, and disproportionately harsh discipline for students of color.

The current district rewards advantage, as students from privileged student groups enter and remain at high performing levels, with opportunities for advancement with elite collegiate aspirations. Students from family backgrounds characterized by societal disadvantage find themselves in lower-achieving student groups with esteem and efficacy concerns as they measure themselves against their counterparts.

While professional development is and has been ongoing, it remains superficial and barely scratches the surface of acknowledging existing White privilege and implicit biases that impact classrooms throughout our community. As a result, one may see efforts being put in but question the results and wonder if the outcomes are impacted by those who wish to stay in power without explicitly stating their desires.

Many academic initiatives have unintended consequences that expand the opportunity gap and cater to the privileged, directly contributing to the continuation of the advantaged groups. The expansion of acceleration programs such as enhanced academically gifted services, advanced middle school curriculums, and extended access to advanced high school courses creates highly accomplished student groups partially responsible for expanding the achievement gap. Standard-based grading, aimed at curriculum mastery, creates an opportunity gap to highquality instruction, resulting in lower achievement scores for students who cannot advance with

the pace of the intended learning. The privileged community is also spearheading the district's investment in expanding Dual Language programs designed to acclimate non-native speakers to a new language. Resources that would benefit other programs and areas become allocated to this program and programs like it, further widening this achievement gap.

District leadership is unsettled, with most central office positions—including the superintendent—experiencing turnover multiple times in the past seven years. Consistent solutionism blankets new leadership, who are eager to rebrand older initiatives and put their mark on the district with new packaged programs that lose focus on the exact problem and consequently provide expanded opportunities for the privileged White and Asian student groups. The frequency of change has resulted in more inequities that contribute to the reproduction of existing societal gaps. The ever-changing landscape causes exhaustion and stress, which feeds the inability of teachers and administrators to practice self-care, mindfulness, and work-life balance needed to increase professional vulnerability for new learning.

South-Eastern University City Schools recognizes the disparities in academic achievement and has prioritized initiatives to reduce classroom inequities, including recruiting efforts for diversification of the workforce, developing a more equitable student code of conduct, and expanding the district's office of equity and inclusion. With an average of 40 novices per year in a staff of 1,300, the beginning teacher support program has adopted a more strategic equity focus, seeking to provide a more accurate context of race in education and culturally responsive pedagogy. The overwhelming presence of privilege and the acceleration of programs that increase inequities presents challenges in creating more equitable outcomes for students; however, decreasing the achievement gap remains a strategic focus for funding and planning.

Theory of Improvement

Working from our causal analysis, in alignment with our lens from Critical Race Theory, we approach this initiative by confronting colorblindness and building capacity for making racially conscious decisions. To cultivate relationships, one must understand the barriers that exist and acknowledge the everyday biases that impact them to build empathy. As we discussed in our conceptual framework (Figure 3), an important first step of culturally responsive pedagogy is being culturally empathetic. Being that we are working with teachers in their first 90 days, our theory does begin with a focus on empathy to move forward with that as a consistent tool.

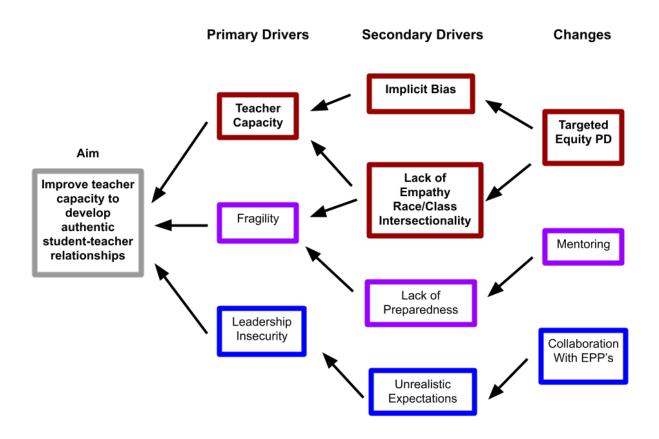
There is sufficient evidence that establishes a critical link between student achievement and relationships. With a lack of authentic equity training, first-year beginning teachers lack cultural empathy, and therefore, have a higher chance of neglecting the importance of classroom culture that satisfies student needs through nurturing relationships. By addressing colorblindness and factors that influence student-teacher interactions during their initial onboarding as a component of their beginning teacher support program, it establishes the lens for how they build their skillset. It keeps cultural responsiveness at the forefront of instructional planning, classroom management, assessment, and community engagement. We aim to flourish an understanding of bias and cultural empathy and their role in developing authentic student-teacher relationships. Creating the space for empathy and building teacher capacity at the ground-level from a more equitable lens may minimize the effect of implicit and explicit biases that hinder the cultivation of relationships.

These improvements require effective professional learning to expand teachers' knowledge, skills, practices, and dispositions around race. Figure 8 represents a driver diagram (Byrk, Gomez, Grunow, & LeMahieu, 2015), a theory of improvement illustrated by a roadmap

of primary and secondary drivers leading to the aim of increasing teacher capacity for developing more authentic student relationships.

Figure 8

Theory of Practice Improvement. Driver diagram illustrating influences for an improvement initiative



Note: This figure highlights the changes, drivers, and secondary drivers that improve teacher capacity to develop authentic student-teacher relationships.

For this improvement initiative, we will focus on pathways highlighted in red, those pertaining to building novice teacher capacity, by addressing implicit bias and the lack of empathy for racial identity and socioeconomic intersectionality. Our theory of improvement holds that: providing

novice teachers with authentic equity training during the beginning stages of their careers, utilizing empathy-based interventions, will improve their ability to make racially conscious decisions, reducing the impact of implicit and explicit biases that hinder the cultivation of nurturing relationships, translating into improved classroom culture and student outcomes.

There are strong links in using mindfulness interventions to increase the effectiveness of professional development (Hammond, 2014), especially in the field of equity and social justice. Courageous conversations about sensitive issues such as racism or classism bring about the discomfort that keeps teacher groups us guarded in fear of an emotional or physical attack. This guarding keeps people from fostering any personal vulnerability in conversations that push one's comfort zone and keeps them in a safe place surrounded by unconscious, implicit biases Hammond (2015). Hammond also claims that there is no way to dismantle implicit bias without controlling the defense mechanism that puts up our walls. Neuroscience proves that relaxation and mindfulness techniques can reduce the flight or fight hormones released when our brains sense a social or physical threat. The strategy improves overall resilience and increases the likelihood that professional development emphasizing culturally responsive pedagogy will be helpful. Understanding that the brain is the first step in unlearning deep-rooted implicit bias that can influence decision-making and reactions associated with student discipline. We will be measuring stress levels as a balancing measure in the research study.

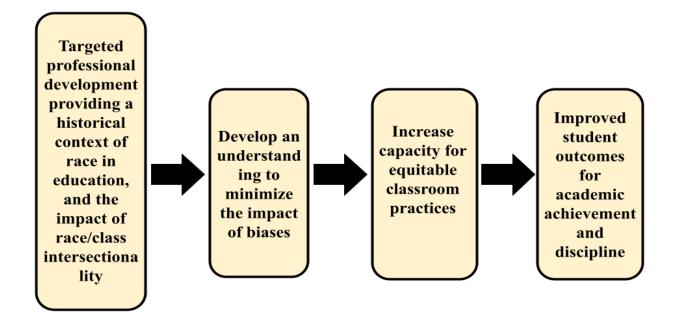
Improvement Methodology

After analyzing the contributing factors that serve as barriers to relationships and considering the obstacles that beginning teachers encounter in acclimating to the profession, we have determined that building teacher capacity to make more racially conscious decisions would significantly impact the aim. Addressing this primary driver would also have a trickle down

effect, improving the impact of the other two remaining primary drivers: fragility and leadership insecurity. White beginning teachers' impact on racially minoritized students is imperative, as they are more likely to experience having a novice teacher than White students (US Department of Education, 2014). Through targeted professional development, beginning teachers will become knowledgeable of the critical link between relationships and student achievement and the barriers that exist between different people from different races brought forth by historical and systemic marginalization. The professional development will help teachers build their awareness of the intersections between racial identity and socioeconomic conditions by acknowledging bias to unlearn behaviors that hinder the cultivation of student-teacher relationships. These interventions will create space for cultural empathy and increased teacher efficacy, translating into more student vulnerability and improved outcomes for achievement and discipline. The graphic below, Figure 9, summarizes the improvement initiative.

Figure 9

Improvement Initiative



Note: The figure shows the proposed Improvement Initiative with intended outcomes.

Offering targeted, empathy-based interventions will support beginning teachers in developing an authentic equity lens for providing culturally responsive instruction and creating a platform for cultivating relationships. The successful implementation of each initiative component will provide a foundation for its successor, strengthening the likelihood of each intermediate outcome. Gaining an understanding of the connection between race and the structural lack of opportunity in the education system should foster more vulnerability for courageous conversations, allowing for action to occur by those that gain awareness of the systemic inequities of an unjust system. Building beginning teachers' capacity to design culturally responsive instruction will be more productive after a thorough understanding of the impact of bias.

Literature Review of Improvement Initiative

Critical Race Theory

Critical Race Theory (CRT) comes about as a recognition that the Civil Rights Movement was losing momentum and, in some cases, being rolled back from the 1960s to the 1970s. Derrick Bell, Alan Freeman, and Richard Delgado (amongst others) were vital in the emergence of thinking around CRT in their initial position papers and in work since—including conferences in the late 1980s. Crenshaw (2010) notes that CRT is a verb rather than a noun. CRT is a critique of the social construct of race and the caste system created by those in power to keep the White race in power and relegate people of color to lower tiers regarding economics and politics, amongst other levels of power. Delgado & Stefancic (2012) share that critical legal studies and radical feminism (in addition to others) are used as theories to build on.

Although not all critical race theorists have the same beliefs around all tenants, Delgado & Stefancic (2012) believe that the following are shared:

- A core premise of CRT is that racism is endemic, institutional, and systemic; racism is not an aberration, but rather a fundamental way of organizing society (Bell, 1987; Solórzano & Delgado Bernal, 2001, Sleeter, 2017). Racism is ordinary and part of the way we do business.
- Racism is something that is not acknowledged unless it is blatant and egregious.
 Everyone should be equal; the White community can only relate to and see something when it is outlandish and makes a person appear bad, a racist, and not the racist things that people of color endure every day.
- Racism will not go away because White society does not have a need to eradicate it.
 When reviewing some of the more significant "wins" against racial discrimination, if

you take a critical lens to it, you can see that the White community gained something out of the "win." For example, Brown v. Board (1954) was passed for world and domestic considerations. This improved the United States' world image.

4. Race is a social construct. Race is not biological or inherently implied at birth, but something that is created to cause a divide. The color of your skin or the texture of your hair does not make you more or less of a person. Society created races and then created stereotypes that go with them to develop subsections of humankind, placing a value on things as they see fit in the time to further their race. "No person has a single, easily stated, unitary identity" (Delgado & Stefancic, 2012, p.10).

Intersectionality is critical, and each person is just that, an individual person.

Race can be misunderstood and misinterpreted, especially for those who claim not to see color in a classroom and feel they live in a post-racist society. A teacher's beliefs and opinions, fed by social stereotypes, are grounded by their upbringing. When a person has certain expectations and preconceptions around race, it is observable in student-teacher interactions with implicit behaviors that impact student outcomes. For a Student of Color, this often results in consequences that prevent students from achieving their maximum potential and sets in motion events that result in achievement gaps, discipline disproportionality, and the eventual continuation of classism. Teachers with a false sense of racial consciousness fail to acknowledge race by treating everyone equally. CRT defines *color blindness* as a catalyst for classroom inequities.

Responsive Teaching and Relevant Pedagogy

There are three fundamental pillars that culturally relevant pedagogy revolves around (Ladson-Billings, 1994). The first is academic achievement, which discusses holding high or

transparent academic expectations for students while meeting them where they are. Teachers think deeply about the what, why, and how of teaching based on their students. The second pillar is cultural competence, which requires teachers to understand the culture and its role in education. Students should be able to see themselves in the classroom. The last pillar is around sociopolitical consciousness, in which teachers have to educate themselves and their students on the issues that impact students and their communities. Teachers should teach students to question why things are the way they are and challenge places where they see injustice. We want all teachers to empower themselves and their students to learn the content in the class and use it for good outside of it.

Culturally responsive teaching practices validate and affirm cultural identity by teaching through the strengths of students and making their learning experience more relevant and effective (Gay, 2010). Through studies around cultural responsiveness in schools (Sleeter, 2011), one can see that when a school focuses on well-designed programs that are grounded in CRP and supported by a thought-out, professional development plan, teachers' practices and understandings change in their classrooms. These changes lead to reduced achievement gaps in racially minoritized students. Young (2010) studied a small sample of teachers in a small elementary school in a large metropolitan area. She was able to see small changes in a short period with "evidence of progress toward the application of culturally relevant pedagogy that went beyond celebrating holidays and highlighting minority students' origins of birth but instead touched on addressing social and racial inequalities" (p.59). We hope to continue this work with a specific emphasis on novice teachers.

Many teachers feel they are culturally responsive in their pedagogy based on their feelings of how they interact with others. Such feelings create a false sense of security (Sleeter,

2012) due to teachers not truly understanding what exactly culturally responsive pedagogy means. Research with more extensive case studies (Sleeter, 2011) discuss the need for further research around pedagogy and its connection with academic achievement as a measurable outcome. Without an easy way to measure the teacher's effectiveness around culturally relevant pedagogy (Ladson-Billings, 1995), one must use a qualitative measure to measure its efficiency level. Discussing race does not have to be confrontational. Sti II, no outcomes will change if teachers and students are unwilling to have courageous conversations. One must be ready to be culturally responsive in their pedagogy (Gay, 2002), ensuring that students feel connected to the class and accepted as who they are, not whom they try to pretend to be. While culturally responsive teaching strategies may be observed in qualitative and quantitative systems of measurement, one must also acknowledge the process of resistance as a multileveled learning problem that accompanies change in attitudes and beliefs. (Neri, Lorazano, and Gomez, 2019). **Intersectionality**

As novice teachers build their capacities to lead classrooms, they must deepen their understanding of social identity and how multiple forms of social stratification, such as race, class, and gender, interact to produce oppression and privilege in schools' non-academic outcomes. *Intersectionality* which describes "how systems of oppression overlap to create distinct experiences for people with multiple identity categories" (Crenshaw, 2010). The stereotyping of any socioeconomic indicator, such as free or reduced school lunch, can influence a teacher's efficacy of potential academic performance and classroom management issues (Becares & Preist, 2015). That, coupled with systemic racial and gender biases, create implicit lenses for inexperienced teachers that hinder their ability to value diversity as an asset.

Society creates social constructs to divide individuals or groups to create social order. The intersectionality of these constructs may determine connections and access points based on the created social order (Winker & Degele, 2011); people from similar backgrounds have an innate sense of belonging. The privileges and oppression created by social structures raise barriers and power struggles between people from dissimilar backgrounds (Winker & Degele, 2011), which may play a significant role in diagnosing why certain people struggle with forming relationships. Beginning teachers with different backgrounds as their students may not have the ability to reciprocate the empathy and natural rapport needed to build connections, so nurturing relationships remains a priority as teachers need to develop and strategically use intersectional knowledge about their students' backgrounds for instructional purposes (Grant & Zwier, 2011; Grant & Sleeter, 2007).

An important aspect of teacher education and beginning teachers' onboarding is leveraging intersectionality to support teaching and learning opportunities. Recent studies suggest that because socially constructed categories of identity influence student outcomes (Grant & Zwier, 2011; Chapman, Lamborn & Epps, 2010), preservice and novice teachers must consider students' multiple intersecting identities in creating pedagogy aimed at improving student achievement. Creating a classroom reflective of their students, where they can identify culture and voice, serves as catalysts for social efficacy, an essential building block for intrinsic motivation. Social efficacy demonstrates empathy and respect for the dignity of each student as well as their right to be heard and learn in a safe environment. The concept of leveraging intersectionality for beginning teachers contradicts what society and previous experience as a student have taught them as the norm—supporting the reproduction of Whiteness and

conformity. In a typical classroom of a preservice or novice teacher, the affirmation of success is based on student compliance and merit; however, as DiAngelo and Sensoy (2010) state:

They [preservice teachers] are beginning to realize that contrary to what they have always believed, socially-constructed categories of difference (such as gender, race, ability) rather than merit alone, do matter and contribute significantly to students' experiences, outcomes for success, and future life opportunities (p. 97).

The achievement gap continues to be the primary driver of change and reform (Reardon, 2016) in the education landscape. We have to address interventions to eliminate achievement gaps that cannot fully succeed as long as social stratification causing gender and racial discrimination (Becares & Preist, 2015). It creates a dire need to lay a foundation with professional development that seeks to build empathy and deepen understanding of intersectionality to eliminate barriers that prevent developing relationships that build classroom culture, minimizing classroom inequities. By creating awareness for intersectionality, teachers can better acknowledge the differences that exist as assets and develop platforms for cogenerative dialogue that provide students with a stakeholder perspective, thus strengthening the cultivation of relationships.

Implicit Bias

Many beginning teachers enter the field with a great deal of theoretical knowledge on how they feel a classroom should run (Valli et al., 2001) and how students may interact with them and with one another. With that limited experience, professional development, and understanding, there can be a disconnect regarding the relationships between students, especially those who may look different or have a more diverse background than the teacher. One learns core beliefs from those around them. Others see underlying values and beliefs come to light

when confronted with new situations. One's implicit bias can come to light when they have had limited time—and limited success—in interacting with those of another background, therefore creating an invisible boundary (Statts, 2016) between students and teachers regarding their ability to form a nurturing relationship.

Teacher preparatory programs give teachers limited exposure to what real world experience in the classroom will be like and offers many safeguards that one does not have in one's first year of teaching. Researchers (Mahatmya et al., 2016) discuss the need to expose new (and preservice) teachers to different learning environments to see what is needed in various settings, giving teachers a glimpse into the differences of style, flow, and relationships built in multiple contexts. If teachers do not have these experiences, they will default to their implicit thoughts and biases and make assumptions about the students in their classrooms. A recent study by Halberstadt et al. discussed students' facial expressions and the implied emotional recognition by beginning teachers (2020). The study found that teachers overwhelmingly viewed Black students' expressions as being that of anger, even though this was not the case. These are the types of biases that many beginning teachers are unaware of and should address so they may recognize it in themselves or reflect on student feedback to do so.

Deficit Ideology

Studies show that students will frequently rise or fall to the level of expectations presented to them, and that novice teachers are quick to make judgments to determine instructional levels (Gershenson & Papageorge, 2018). If a student whose expectations are initially lower succeeds, the teacher takes credit for defying the odds, not crediting the student for overcoming the expectation gap. The same studies (Gershenson & Papageorge, 2018) show that White students do not have expectation gaps from teachers because of their race. White

teachers frequently did have expectation gaps with their Black students. Interestingly, this did not often occur in elementary school, and younger teachers often started with higher expectations for all students but lowered their expectations as they became veteran teachers. There seems to be a lack of training and understanding of bias that impedes the thought process of a teacher as they move into their teaching career. Professional development could provide success in maintaining—and growing—expectations as teachers gain more and more skills over the years.

Schools tend to be deficit-based in their ideology around students of color (Sharma, 2018), and this, in return, profoundly impacts the ability to have meaningful, nurturing relationships with students. However, there are exceptions to this that revolve around administrators who work to build a culture in the school that shifts the expectation gap to the teachers and away from the student (Diamond, 2004). Administrators who work with teachers to find ways to build relationships, change instructional strategies, and classroom environment build a positive culture about how teachers feel about students. Administrators can build rather than undermine a student's potential. One study focused on the community that one school built when they actively recruited and changed instructional practices and the environment to best meet the needs of students of color (Liou & Rotheram-Fuller, 2019). They had high expectations, and students rose to the challenge of meeting them. The cycle created at this school viewed students on an asset-based ideology, and they took the time to build relationships with students to work with them to meet their potential.

White Savior Complex

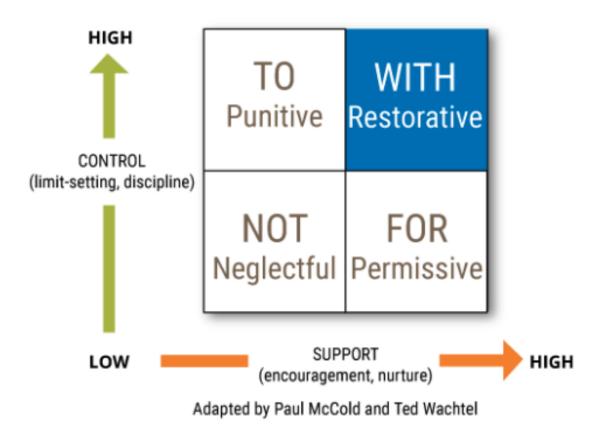
The White Savior Industrial Complex (Cole, 2012) refers to the "confluence of practices, processes, and institutions that reify historical inequities to ultimately validate White privilege" (Anderson, 2013, p. 39). Cole (2012) coined the phrase after seeing how the film "Kony 2012"

exemplified White emotion and their sense of saving someone when they were the ones who accepted/supported the policies that maintained systems of oppression. Teachers seeing themselves as "saviors," or people who will "fix" their students, enter situations with preconceived notions about them and how they may behave due to their appearance, their socioeconomic background, or where they may come from (Cortes, 2018.) This deficit ideology brings stereotypes and biases into the environment which provide barriers to the cultivation of authentic relationships.

The key to finding ways to build nurturing, caring, and meaningful relationships is to ensure that you are working with other individuals towards a common goal. When looking at the social discipline window (Figure 10), it is essential to work within the "with" windowpane (Costello et al., 2009).

Figure 10

Social Discipline Window



Note: The figure shows the relationship between levels of support and control to reach a "with".

We have discussed the "to" pane, which operates in a deficit-based mentality. Having lower expectations, one will simply make students do the work they can and then move on. The savior complex falls in the "for" pane, which is very high on support but low on limit-setting and discipline. This area can be a dangerous place to fall because it promotes the idea that privileged teachers have some sort of unique ability or power to help those less privileged because they cannot help themselves within our defined hierarchies (Gorski, 2008). Teachers who struggle to leverage relationships built through working in the "with" pane become frustrated with students' unwillingness to assimilate to the teachers' thought process (Emdin, 2016).

One must understand that we do not live in a post-racial society (Carter-Andrews & Tuitt, 2013). Aronson (2017) discusses that teachers are taught through the media and their upbringing that they are in their profession because of their hard work, enthusiasm, and dedication, not the privilege provided by the color of their skin. It takes time and patience to understand the privilege ingrained in one's being, but in doing so, one realizes that one can make a difference through nurturing impactful relationships. It will take longer for some than others, but the sooner it can be uncovered, one can decide to make a change. Civitillo (2019) shared that the level of self-reflection of teachers had a high correlation with their level of culturally responsive teaching, which in turn has a high return in the quality of relationships with students. Without that documented and studied self-reflection, one may be stuck in a savior mode without even realizing it.

Improvement Initiative Methodology

Improvement Science

We base the improvement initiative on improvement science, a methodological framework that assists scholar-practitioners in defining problems, implementing changes, and tracking progress to determine if the change is actually improving outcomes (Crow, Hinnant-Crawford & Spaulding, 2019). Byrk et al. (2015) describes the essential core principles of improvement science that define parameters for successful implementation:

- Make the work problem-specific and user-centered.
- Focus on variation in performance.
- See the system that produces the current outcomes.
- We cannot improve at scale what we cannot measure.

- Use disciplined inquiry to drive improvement.
- Accelerate learning through networked communities.

This form of inquiry provided a disciplined approach, using tools to define the exact problem to be solved as well as research cycles that investigate the problem and use practical measurement to guide improvement. Root cause analysis is a process that solicits stakeholder feedback to organize and categorize potential causes of a problem. It provides insight into what occurred and how it occurred, but most importantly, why things have occurred in the current state of the problem. Once an identifiable problem is determined, process mapping creates a theory of improvement in the form of a driver diagram, with an aim and drivers that frame Plan-Do-Study-Act (PDSA) cycles. Practical measurement, in improvement science, advised multiple PDSA cycles, using hypotheses to guide improvement and gathering data to analyze the effectiveness of interventions and inform next steps (Crow, Hinnant-Crawford & Spaulding, 2019). To determine that an implemented change results in improvement, our planned design utilized practical measurement of outcome, driver, process, and balancing measures.

Planned Outcome Measures

In improvement science, the outcome measure assesses the overall aim of the improvement initiative, which provides evidence on whether or not the theory of improvement is working. The ultimate aim of this study was to increase a first-year teacher's capacity to cultivate relationships with students, observable through classroom interactions with a viable walkthrough tool (Appendix A). This interval measure examined the observable behaviors of participants in two separate PDSA cycles to increase the overall percentage of visible strategies directly linked to interventions in professional learning. We concluded the study with a

summative interview with each participant (Appendix B) to ensure the data we collected represented their outcomes throughout the intervention.

Planned Driver Measures

The driver measure assesses change and can predict the outcome measures. In this study, participants developed a deeper understanding of intersectionality and the effects of biased behaviors to foster a platform for cultural empathy, resulting in a more equitable lens. Surveys (Appendix C) were sent out before beginning the study, at the midpoint, and then again at the conclusion. We tracked participants' progress using a paired t test, from their teacher preparatory program (pre) to the beginning of the training (mid) and the end of the study. In addition, we show levels of self-reported improvement using a Likert scale, as their equity lens changed throughout the study. This driver measure applies to gauge their capacity for a culturally responsive mindset that results in favorable behavior for cultivating relationships.

Planned Process Measures

The process measure intermittently determines if the change is working as planned. Journaling (Appendix D) served as a platform for participants to self-reflect on each stage of professional learning in three stages. The day following the professional learning, participants described the initial reaction, followed three days later by an interpretation of the meaning and how it applies to practice. The journaling exercise concluded two weeks later to reflect how the learning is prevalent in their practice. This measures whether professional learning reflects in changed behaviors.

Planned Balancing Measures

Balancing measures account for unintended consequences by measuring other components of complex systems. It was essential to confirm that the initiative is not disrupting

other system components, in this case, the participants' mental health. It was also vital to ensure that external factors did not impact our study. The balancing measure, in this case, was monitoring stress levels during journaling, as self-reflection is a standard method of deescalating stress (Browning & Romer, 2020). The introduction of two Likert scale self-care questions to inquire about stress and anxiety gauged participants and the two open-ended questions to allowed us to track impacts outside of our intervention (Appendix E). We wanted to ensure that professional development was not exacerbating stress levels but improving anxiety around race conversations, increasing vulnerability. Table 1 provides a summary of all planned measures, the frequency at which they were to be collected, and the method of analyzing data. *Table 1*

	Measure	Collection Frequency	Analysis
Outcome	<u>Culturally Responsive</u> <u>Instruction Walkthrough</u> <u>Tool</u> (Appendix A)	9 (weekly during the 90-day study)	Quantitative Interval Measure (Paired sample T- test)
	Teacher Interviews (Appendix B)	Conclusion of study	Qualitative (coding)
Driver	Pre, Mid-point, and Post- survey assessments (Appendix C) (Skepple, 2011)	3 (prior to start, mid, and end)	Quantitative Interval Measure (Paired T-test)
Process	Teacher Journaling (Appendix D)	9 (3 times for each PD)	Qualitative (values, attitudes, and beliefs coding)
Balancing	Likert scale questions to inquire about self-care and stress levels (Appendix E)	9 (3 times for each PD)	Data Comparison

Description of all Collections, Frequencies, and Analysis of all Measures.

Impacts of the COVID-19 Pandemic

Launching an improvement initiative during the COVID-19 global pandemic placed limitations on our original design visible in the timeline, seen in Table 2 below, beginning with our collaboration with our design team. Our design team met virtually to construct the professional development and review our data between PDSA cycles. There were difficulties tracking some of the deeper conversations around race in designing the professional development, bouncing ideas off each other, and tracking them on a whiteboard for all to see (and in a place where we could focus our attention 100% on the work, and not other distractions that may have been present in a home office).

Table 2

Step	Description	Timeline
1	Creation of design team for stakeholder group analysis of the problem. Creation of professional development and resources for the research study, including walkthrough tools, questions for interviews and surveys. Ongoing monthly face to face meetings.	
2	Invite and gain permission from qualifying participants. Initial survey with participants for baseline data (Pre-Assessment)	Summer 2021
3	PDSA Cycle 1 (DRIVER- Lack of Empathy) 60 days Professional Development (in person): 1) Color Blindness, examining race and opportunity through education 2) Implicit and Explicit Bias Data Collection 1) Observation walkthrough tool weekly observing student-teacher interactions 2) Teacher journals 3) Mid-point Assessment Survey Analysis of data, implementation of changes. Seeking trends in strategies that are persistent and growing vs. strategies visible immediately after PD for (Changed behavior vs. compliance)	August- October 2021
4	PDSA Cycle 2 (DRIVER- Implicit Bias) 30 days Professional Development (in person): Culturally Responsive Pedagogy Data Collection	October- November 2021

Original Design for Research Study, Timeline of Improvement Initiative

	/	Observation walkthrough tool weekly observing student-teacher interactions Teacher journals Post- Assessment Survey with Participants Face to face interviews with individual teachers	
Analysis of data and report of findings			

District mandated COVID restrictions placed barriers on larger group meetings and observations. All professional development would ideally be presented in a face-to-face environment to maximize engagement and the potential for cultivating relationships. Two out of the three professional development sessions were virtual. We also had to eliminate one of our outcome measures, classroom walkthroughs. We planned on utilizing a Culturally Responsive Walkthrough (Powell et al. 2017) that would have provided another piece of qualitative data that tracked teachers as they implemented some of their new learnings into their classroom practice. The shift was mainly due to the district's limitations on non-evaluative observations and walkthroughs from non-school personnel. These choices had to be made in advance while preparing for future COVID-related regulations and how we could mitigate them while still gaining valuable data to utilize. Below, Table 3, outlines the timeline of the initiative considering the limitations of the COVID-19 pandemic.

Table 3

Actual Design for Research Study, Timeline of Improvement Initiative

Step	Description	Timeline
1	Creation of design team for stakeholder group analysis of the problem. Creation of professional development and resources for the research study, including walkthrough tools, questions for interviews and surveys, as well as PD takeaway tasks. Ongoing monthly virtual meetings.	Spring 2021
2	Invite and gain permission from qualifying participants. Initial survey with participants for baseline data (Pre-Assessment)	Summer 2021
3	PDSA Cycle 1 (DRIVER- Lack of Empathy) 60 days	August- October

October- November 2021
]

Context of Improvement Initiative

The improvement initiative targeted a group of novice teachers as they arrived for their first day of Novice Teacher Orientation. There may have been inconsistencies in equity coursework from their educator preparation programs (Sleeter, 2017), so their initial onboarding presented an opportunity to address any possible discrepancies in their training. Using their Novice Teacher Orientation as a platform, participants began a series of professional development to provide a deeper understanding of how race impacts their work as educators. The initial orientation capitalized on the inquisitiveness and ambition of the novice teachers as they were eager to begin their new careers. The beginning teachers engaged as a cohort, which was significant because the collaboration supported the cultivation of interpersonal relationships that improved their efficacy and self-esteem (Gates, 2018) as they processed and reflected in their learning.

We intentionally designed the improvement initiative in collaboration with the district's Office of Equity and Inclusion and the leaders of the district's Beginning Teacher Support Program, whose expertise of the content and the targeted audience were essential to the initiative's effectiveness. Our team was composed of four equity coaches who serve our district, working hands-on with staff in elementary and secondary schools, designing professional development, and providing racial equity resources and tools. They were former teachers and people of color who can empathize with the challenges of acclimating to the teaching profession and can draw from their personal experience of the biased educational system as a student and teacher. Two beginning teacher mentors were also on the design team, coordinating the district's Beginning Teacher Support Program at the elementary and secondary levels. Each of them are former teachers, where one is a person of color, and the other is White, bringing various lenses and perspectives to this work. The team assisted in the content design, facilitated professional development, and assisted with collecting the assessment tools utilized during the study.

We purposefully selected individuals for our design team who would give various viewpoints of the importance of professional development and the usefulness of its implementation in the classroom. In addition, we worked within the restrictions of the Institutional Review Board (IRB) guidelines to ensure that the study was both ethical and research-based. Collaborating with our design team created a more straightforward process, with the large chunks of the research-based design accepted with the initial application.

The design team acknowledged the likelihood of resistance and defensive behaviors in race conversations. Our team needed to design relevant professional development and collect authentic data from the participants on internalizing and processing conversations around race. Acknowledging the impact of race on outcomes and confronting one's biases can be difficult or

something that one may not want to do, increasing potential fragility (DiAngelo, 2019), which has historically impeded progress around race conversations. Hammond and Jackson (2018) describe how our "lizard brains take control" in difficult conversations, putting up walls and barriers when people feel threatened about their deeply rooted beliefs and biases. They also add that stressful environments and exhaustion only exacerbate these barriers (Hammond & Jackson, 2018), lowering the effectiveness of professional development or learning opportunities. It was essential to increase the personal vulnerability of the participants and create a low-risk, collaborative platform within the cohort so they felt safer within a group. We also wanted participants to process their learning through individual reflective journaling, which provided a minimal risk environment and increased the likelihood of capturing more authentic data. We had to be cognizant of the fragility of the participants to create an optimal environment for learning.

We faced a challenge attracting participants to sign up for the study. We did not create a separate professional development series just for those who had opted into the study. Instead, we planned to work with the equity department to create an onboarding process for all of the district's novice teachers, but we only collected data from those who had agreed to be part of the study. As teachers entered the district, we received their email addresses, and we sent them a recorded presentation on the study. The virtual aspect made the process very informal and made it difficult to get participants to sign up as it was up to them to read, listen, and watch the information. As a result, our numbers were deficient (2), leading into the first professional development session. Robert, a veteran principal in the district, was a guest speaker at the initial onboarding, sharing support given to new teachers by building leaders. He also described the study in more detail and answered individual questions, which helped to increase our sample. This intervention helped us mitigate key issues like low participation in the study. Table 4

shows a list of individuals who agreed to participate in the study along with the grade level at which they teach (although not all participated or fully participated throughout the study).

Table 4

Participant	Grade Level	Ethnicity/Race (As entered into PowerSchool)
А	High School	White
В	Middle School	Black
С	Elementary School	Latinx
D	Middle School	White
Е	Elementary School	White
F	Elementary School	White
G	Elementary School	White
Н	Elementary School	Multi-Racial
Ι	Elementary School	White
J	High School	White
K	Elementary School	Latinx
L	Middle School	Latinx
М	Elementary School	White
N	High School	Black

School Level Information for Participants

Note: We did not collect information beyond email addresses and what level participants worked at to ensure that we kept anonymity for all participants. We were able to pull ethnicity through onboarding records.

Professional Development

The framework for the professional development sessions provided a three-pronged approach to the improvement initiative, thereby creating a more culturally responsive lens for novice teachers. The sequence design followed a what/why/how method of capacity building, where we clearly state the problem, inquire about why it exists, and discuss how to address it. This approach aligned with many of the best practices the team utilized as teachers in the classroom. It also leveraged current principles of adult learning theory, such as pulling from past experiences to add greater context to learning and defining how these learning needs apply to their aspirations (Merriam, 2001) of serving children as an educator. There was immediate value in this learning.

The learning targets of the three professional development sessions were as follows:

- We define and provide historical context to the problem related to the participant's role. In this case, we were building awareness of the connection between race and the disproportionate outcomes produced by the education system.
- 2. Why does this problem continue to exist and perpetuate the education system? Dive deeper into the implicit and explicit biases that create blindspots around race and social identity. Why does this impact decision-making in the classroom?
- 3. How can the problem be improved through practice? Building capacity in novice teachers to create more culturally responsive practices that respond to classroom inequities.

This professional development sequence addresses the colorblindness tenant of CRT as a critical contributing factor to classroom disparities for students of color identified in the conceptual framework (Figure 3) of the disquisition. It also sought to build a deeper understanding of intersectionality, the social stratification of race, class, and gender, to reduce the natural barriers that prevent the development of meaningful student-teacher relationships. We chose an instructional approach that was structured, sequenced, and led by those with the perspective and empathy lens to eliminate any misinterpretation and increase the effectiveness of the content. Since blindspots around race are an issue from the causal analysis that warrants the need for professional development (Figure 5), one must acknowledge race as a direct link to disproportionate outcomes throughout the education system. Explicitly teaching the participants this connection and the extenuating circumstances that continue to perpetuate these outcomes clearly defined the purpose for the professional development. With a topic as sensitive as race and a group of participants (White/female) that typically avoids the discomfort of conversations (DiAngelo, 2019), the sequence of professional development had to be direct, succinct, and impactful.

Methods of Data Collection for the Improvement Initiative

Our team needed to collect authentic data that was not influenced by what one may want their beliefs systems to look like since race conversations can be difficult. It may be easier to talk about what others may deem acceptable and confronting one's bias can be difficult or something that one may not want to do. The team ultimately decided that even if it restricted our ability to track and follow up with participants when they did not respond on a one-to-one basis, we needed the data to be authentic and unfiltered if we wanted to use it, even though it may be limited.

Summative Methods

It was essential to have a solid quantitative piece to our mixed-methods approach as it was the most significantly affected by the COVID accommodations we had to adjust to make by limiting our access to the participants. We created a pre, mid, and post study survey using the Culturally Responsive Teaching Preparedness Scale (Skepple, 2011), where participants used a Likert scale to rate their confidence level with executing Culturally Responsive Teaching Strategies. This data would allow us to see trends at the study's beginning, middle, and end. We fully anticipated fluctuations in these measures as participants began integrating real-life teaching experience during their initial months versus what they may have experienced during their internships where they did not have complete control of the classroom. This data is valuable in seeing the effects of our research through the professional development created with our design team.

Formative Methods

Much of the data collected was designed to be qualitative when describing research that revolves around heart changes and practice changes. This type of data gave us glimpses into the research results as we were conducting it. Being able to check-in and view the impacts and changes occurring in the classrooms was key to a proper PDSA cycle. We could see impacts of the professional development and modify future sessions, find areas of weakness, and determine the best path forward to get the most accurate data using the best methods. The formative data pieces were the most difficult to fine-tune prior to the research study to get approval by the IRB. Working with the IRB team, we were able to craft our question set to give us data we would need but not force participants to answer questions that may make them feel judged.

Our qualitative data came in the form of reflective journaling. Participants responded to three sets of questions following each professional development session (Appendix D). We used In Vivo coding (Saldaña, 2015) after participants' responses were complete and assessed trend data. Participants were asked in the first set of questions 12-36 hours after the session to reflect on the session and how they thought they might change practices in the classroom. The second set of questions came 3-5 days after the session and asked participants to reflect a little deeper and describe some of the changes they were working on in their classes. Finally, the last set of questions were to be answered within two weeks of the session, and asked participants to reflect a little further, asking about what things they may have implemented and how they believe students have responded to the changes.

We used our balancing measure (stress test, Appendix E) and added an open-ended component to the pre/mid/post survey to gather intermittent data. Collecting the data allowed us to see specifics where the quantitative data may have left us guessing. The open-endedness of the questions was beneficial to get more detailed information to help with our study and better see trends in order to adjust what we were doing, all while seeing in real-time what was impacting (or what did impact) participants to make them think or do something a certain way. The stress test measured the participants' personal, student, parent, administrative, and planning impacts. The pre/mid/post questions were open-ended and were optional for participants to share more information if they wanted to explain more.

We ended our study with a qualitative summative interview. The anonymity nature of our study made this part a little tricky, but we could still commit to it and gain valuable data. The interviews were more of a reflective opportunity for participants to share their feedback on how they felt they had changed. Participants also shared if they felt their responses fairly shared

their experiences throughout the professional development sessions. We ended with asking what their biggest takeaways were, what they felt they still needed to become a culturally relevant teacher and finishing with how things may have done things differently if they could restart the year (hoping they may keep that information to use the following year). Again, these questions were very open-ended, hoping to gather the critical information for their development, allowing the participants to share information that will help us understand how the study can improve in future iterations.

Long Term Outcomes

After completing the professional development sessions, we needed to review to ensure we had the correct data to analyze. Referring to Table 5, we reviewed the long-term outcomes we hoped to take from the study and implement in all novice teachers' classrooms.

Table 5

Long Term	Goal Data	Measures	for Study
-----------	-----------	----------	-----------

Improvement Goals	Quantitative Measures	Qualitative Measures
Outcomes: • Improved Student Outcomes for Academic Achievement • Decreased Discipline Disproportionality	 Pre/Mid/Post Beliefs Survey Stress Surveys 	 Teacher Journaling from each session Teacher Interviews Open-ended responses to Quantitative questions

We hoped that our data measures would show a starting point for novice teachers to provide opportunities for improved student outcomes based on the practices learned and utilized in the classroom. We also hoped to see that the reflective journaling and emphasis on student-teacher relationships were more robust, building more intentional relationships and decreasing discipline disproportionality.

PDSA Cycle 1

The first PDSA cycle focused on bringing awareness to the existing problem by engaging participants in professional development and monitoring their reactions as they processed their learning. We worked with our design team to ensure that we were accurately portraying the historical context of how race and disproportionate outcomes in the education system were interconnected. We wanted to ensure that participants knew the structures built and embraced by those in dominant positions to maintain the status quo. It was essential to discuss color blindness and the impact that ignoring issues of race can have on educational outcomes. There was also a particular emphasis on how this problem was apparent in their new district, South-Eastern University City Schools. As a Southern college community, it historically demonstrated deep racial segregation within their public schools, housing, and the state university system that called itself home there. Without having a proper understanding of the environment that one will be entering, one may not truly understand the setting in which they are working. The design team decided it was better to be very strategic in revealing the racist concerns of the district by instead choosing to integrate them slowly into the initial training to allow the participants the ability to understand the systems already in place.

The first professional development (PD) session was part of the new teacher orientation in which all novice teachers participated. , Professional development day one is the official first day of work in the district, and for many, it is their first "real" day in a profession. Participants were incredibly nervous and did not know what to expect since they met everyone for the first time. Therefore, we needed to set the stage for them to loosen up and get them ready to hear and discuss sensitive topics that can be difficult for people to talk about if they do not have experience. We anchored the session with five core questions:

- What we are missing from education in general?
- Why haven't we been able to make a change?
- What is absent from curriculum standards and frameworks?
- How can we use different approaches (i.e., Black Excellence) to refashion instruction?
- Why are we still doing things the way we are if we know we are not getting the results we want (or are we?).

The professional development revolves around cultural responsiveness (Historical contexts of critical consciousness, academic achievement, and cultural competence) and instructional core (student experiences, learning content, and teacher moves). We shared the historical impact educators have in providing opportunities for students to develop an in-depth view of the world around them. Culturally responsive teachers can create opportunities to promote high academic achievement for marginalized students and create classroom spaces appreciate one's culture while promoting positive outcomes. For the instructional core, we shared how learning independence has influenced promising students to regulate their learning process. We also shared how powerful teachers' impact is on building an environment where students can regularly engage in high thinking content that allows them to use their school and personal knowledge. Teachers can impact this by creating habits of the mind through classroom rituals and routines that value and embrace student identity as a part of the classroom culture and how historically that has been a huge missing piece of the equation.

Prior to our first professional development survey, we sent out a video describing the study; a PowerPoint presentation describing the steps; and a signup for participants. When participants signed up, they received instructions on how to keep their responses anonymous by coding their responses consistently so we could track the progress but not have any idea who was

answering each survey. After completing the first PD session, we found out quickly that responses were going to be limited. While we had 13 participants who said they would participate in the study, we only had two responses after the first 24 hours, post PD. We went back to thinking about the issues and how to mitigate them best as we move forward. Our design team discussed that this might be an issue because our participants were in their first week of getting their classrooms ready, meeting new staff, and battling nervousness about their students coming the following week. We sent out several emails during each of the survey cycles throughout the process to gain feedback concerning the teachers' thought processes throughout their implementation of pieces of the professional development. We also decided it would be valuable at the end of the surveys to remind all participants one final time to fill out the stress survey to figure out what may impact their ability to participate so we could track that data. We started to wonder if participants were afraid of answering questions about race in their first few weeks in the classroom, which would also be valuable data for us to review. We discovered it was necessary to send continual reminders to participants in future sessions to clarify why we needed the feedback when we needed it and to reiterate the anonymous nature of the survey as a whole.

PDSA Cycle 2

The second PDSA cycle focused on addressing biases as a prevalent cause for perpetuating the problem and improving the capacity for more culturally responsive practices. By acknowledging and working to unlearn biases, practices can create a culturally conscious classroom for all students. Participants now had a solid foundation on the history of inequities in education and understood their impact as classroom teachers; they were ready to start looking more into their thought processes to create a more socially just classroom. Upon looking at

implicit and explicit biases, we would allow novice teachers to build skills to reflect upon and meet the needs of their students, especially those whose race and backgrounds may be different from their own.

Professional Development 2

When planning for our second professional development, we wanted to build a session where participants dove into biases and understood how blindspots around race and social identity impacted students in their classes. Many novice teachers are unaware of their impact on students, in both positive and negative ways. With our design team, we wanted to build understanding around how a teacher's decision-making in the classroom impacts one's relationships with their students and, ultimately, the student's academic success based on their connection to their teacher. A critical first step for our team was to make sure we had a clear understanding of the vocabulary, specifically implicit (confirmation, beauty, conformity, racial, and so forth) and explicit bias. We also wanted to reiterate that they were working in a district that had a clear focus on anti-racist work and were part of the work that we did there together. We also wanted to make sure that the session allowed for more interactive/spoken feedback time for participants than in the previous session after having been in the classroom and had some personal and professional experience from which to work. We also made sure to share the Harvard Implicit Association Test (Xu et al., 2014) so participants could take part in it during their own time and be honest in their responses and take in the results.

The session closed out with the next steps for teachers to check their bias around four questions and create an action plan to counter them (Anti-Defamation League, 2012).

- 1. What is my bias?
- 2. Where is my bias rooted?

- 3. What impact does my bias have?
- 4. Who can help keep me accountable?

To get participants started on their action plan, we asked them to reflect on one bias they had found in their behavior and share if they felt comfortable. Next, we asked them to share how that bias had negatively impacted themselves and others, and what actions they could take to interrupt those biases moving forward. We discussed how it was essential to hold others accountable and have someone hold them accountable. Building those trusting relationships means that when something like the scenario shared happens, one can feel comfortable enough to share how they feel, and those who had harmed can constructively take the feedback and build upon it. These are the types of interactions needed in a classroom, where students feel comfortable bringing up situations that make them feel uncomfortable, and teachers build a classroom environment where others call each other out and help build character in one another.

Following the professional development, we sent out our first of the three surveys to all participants who opted into the study. After the first three days, we did not have any responses. Again, our design team discussed this ahead of time and surmised that we would have some issues, especially with this PD, since it involved self-reflection at the end. Even though it is an anonymous survey, it was difficult to discuss any negative feelings one may have uncovered regarding any bias they may have had. We continued to send reminders, but we also enlisted the help of a few members of our design team, who were also beginning teacher mentors. In their trips to schools to visit with all parties, they reminded people to fill out the surveys as a reflection tool. They did not know who exactly was a participant or not, but having that face-to-face interaction did help accumulate additional completed surveys. After the three surveys, we again sent out a stress survey to see what may have impacted participants to give us an idea of

why they may not have filled out the other surveys. Again, we had more responses to the stress survey as it did not address race. The stress survey again gave an entry point to anyone who did not fill out the previous surveys to know that they could jump back in and participate if they have not completed all the surveys to date. In addition to the PD and stress surveys, we sent out the midpoint survey to gain access to where participants were at in their ratings now that they were in the classroom, teaching for the first time.

Professional Development 3

Since parent-teacher conferences were on the horizon, we wanted to tie everything together and understand participants' needs for our culminating professional development. We wanted to share some examples of what effective practices could look like and how they positively impact the students in the class. At this point, it became necessary to talk about situations that may have arisen or may arise and how to navigate them. We approached what steps others have made that may have been inappropriate. We spoke in-depth about how biases, if unchecked, could cause some severe problems with the output of students in class. Our design team discussed how this is the time of the year when one knows if a teacher can make it or not. One sees those pieces in class that show change and reflection are taking place, or if they are going to struggle and stick with how their background has guided them to teach without considering those in the classroom. We wanted participants to leave with two big takeaways after the session. The first of which is being a reflective practitioner and using a culturally responsive lens as one to use first to ensure everyone feels that they are valued and welcomed in the classroom. The second is to build partnerships with parents during conferences, rather than using them as a "tell on" session and understanding what parents may take out of their comments, even

if they did not mean to imply anything. To be successful, one must have a partnership in and out of school.

The first part of the session discussed creating an atmosphere in one's classroom where students feel welcomed and excited to learn. We set up practices to hold both students and teachers accountable for relationships and learning. Students work well when they have a relationship with their teacher and feel they need to do the work as much for them as for themselves. We shared a video clip of a student and how he received a second chance by going to a new school. In the new school, Rahil was able to work collaboratively with others, and he thrived in that environment. It is crucial to find that environment for all students to set them up for success. Suppose teachers simply plan for all students without individual student needs in mind. In that case, one will always lose some students, and historically, the White female workforce usually has left behind students of color, and our focus in the district is to counter this. Rahil took his learning beyond the classroom and a greater understanding because he could incorporate his own experiences/knowledge into what he was working on. He was able to internalize his learning, making it more meaningful to him and allowing him to remember it better and grow from it. Hearing his story is the epitome of what educators want to hear about their classrooms and is the goal for which all teachers should strive. We broke out into groups and discussed the small things that his teachers did to help foster this learning environment for Rahil and what they can do to replicate these practices in a culturally responsive way in their setting.

To end our session, we wanted to make sure that participants were ready for their upcoming parent conferences and knew about the impact these short interactions could have on the relationship between parents and between the students by way of the parent. We focused on

the CARE acronym because parents want to know that one cares about their child/children. The C stands for Connect. Be flexible in when one is available to have the conference. Spend time getting to know them and what they value/care about. Make sure to meet their need for the conference by asking them and make sure you communicate in a method that best serves them. The A stands for achievement. Ask what their life goals for their child are. Explain the curriculum and how it works. Share school vocabulary so they can be a part of the process. Make sure to ask about what is successful at home to replicate that to the best of your abilities in class. The R stands for re, meaning to do again.. Talk about how each day is a restart. Restate one's commitment to their students' education. Reshare the best way to contact the teacher to update them with information—request suggestions to serve the student better and follow through with it. Lastly, the E stands for empowerment. Share how parents can be part of the student's learning. Ask how they can share family culture/norms with the class. Inquire how the teacher and the school can support the student. We ended the session by having groups run through a parent conference script and pausing at times to see what the teacher may have said, how it landed, and how we could change the wording to be a CARE quality.

Since we struggled with responses from each of the session two surveys, we stuck around for the end of the session to deliver the final survey right away to participants in the Google Meet session. We had previously done this through email, and we thought sending it right then and there with us reminding them may improve the number of responses. As expected, we were correct. However, we again saw low response rates as we moved through with the second and third surveys. On the other hand, we did see an increase in our post-study quantitative numbers compared to the mid, in part we think because we met with them virtually and reminded them of the importance.

Summative Data Collection

We knew that we would not see the participants again since this was the last session. However, we needed a solid plan to continue gathering summative interview data. We worked with our beginning teacher mentors from the district, who met with novice teachers monthly. They felt that they would benefit from the feedback, so they agreed to collect the data and share any participants' responses (coded for anonymity). This process yielded more results because the mentor teachers could meet in person, rather than virtually, with each novice teacher and talk through the questions. Scheduling and absences still yielded less than 100% completion, but we could gather more qualitative data than before with this method.

Data Analysis

We created an analysis to organize the survey results and reflections from participant journaling activities to identify trends and patterns aligned with the goals of the improvement initiative. The culturally responsive teaching preparedness scale (Appendix C) was the survey instrument used as the pre, midpoint, and post survey. We designed this to provide information from novice teachers regarding their self-efficacy to engage in culturally relevant teaching practices based on their teacher education programs. This survey was provided to all voluntary participants regardless of their teaching credentials, meaning participants may have a standard license after graduating from teacher education programs, may be currently attending teacher education programs, or may be intending to apply to a teacher education program on an alternative licensure pathway. We did not disclose their status as a part of this study.

This survey consisting of 21 Likert scale type questions, attest to the novice teachers' confidence with culturally responsive teaching practices on a scale from zero to ten. We reference the following survey questions from the scale in the subsequent data charts.

We also provided participants three opportunities to process their learning in reflection journals following each professional development session. We used this data to track how teachers were internalizing this knowledge in relation to the responses on the culturally responsive teaching preparedness scale. In Vivo coding strategies (Saldana, 2015) were used with each journaling opportunity to seek identifiable trends and patterns. Refer to Appendix D: Journaling Questionnaire to view the complete lists of prompts provided to the teachers.

We provided each of the district's 25 novice teachers with an opportunity to engage in the study prior to their first day of Novice Teacher Orientation by completing a pre-assessment survey. Their continued participation in the midpoint survey and post survey, along with three journaling submissions following each professional development session, was strictly voluntary. Only five teachers completed each of the requested surveys and at least two of the three journaling opportunities, while there were three additional participants who completed the majority of the surveys and journaling. The following organization of quantitative and qualitative data presents their trends and shifts in perspectives as they progressed through the three sessions of professional development.

Overconfidence with Cultural Empathy and Culturally Responsive Pedagogy

We designed the survey instrument utilized in this study to gauge confidence levels in teachers to use Culturally Responsive Teaching Strategies in their classrooms. The following chart, Table 6, displays survey responses from participants in a pre-survey prior to attending Novice Teacher Orientation and the first designed professional development session.

Table 6

Pre Survey Results

Summary of Question, Participant Number	1	2	3	4	5	6	7	AVERAGE
Stands Against Prejudice	10	8	8	9	9	5	5	7.71428571
Stands for Social Justice	9	8	8	10	7	8	5	7.85714286
Addresses Intersectionality Regarding Achievement	9	7	8	10	7	8	5	7.71428571
Need for Professional Development	9	7	9	7	6	8	5	7.28571429
Experience Diversity	9	9	10	9	6	5	5	7.57142857
Provide Opportunities of Different Values	9	9	10	6	5	9	5	7.57142857
Knowledge of Cultural Awareness	9	9	8	9	5	8	5	7.57142857
Utilize Student Culture	9	8	8	9	4	8	5	7.28571429
Creates Diverse Groups	9	7	8	9	6	5	5	7
Volunteer in Diverse Opportunities	9	8	9	5	6	4	5	6.57142857
Observe Diverse Students	9	9	6	6	8	8	2	6.85714286
Communication of Skills with Others	9	7	7	8	8	6	2	6.71428571
Talk About Intersectionality	9	8	9	9	8	8	2	7.57142857
Leadership Role Around Diversity	9	8	5	5	9	9	2	6.71428571
Avoid Categorizing Groups	9	9	10	6	9	8	5	8
Collaboration with Diverse Populations	9	7	9	8	9	8	5	7.85714286
Prepared to Teach Diverse Students	9	8	9	8	5	8	5	7.42857143
Different Learning Styles exist within Diverse Groups	9	9	10	7	3	8	5	7.28571429
Incorporate Multiculturalism			9	10	7	5	5	7.71428571
Effective Parent Communication with Diverse Group	9	8	9	8	3	5	5	6.71428571
Appreciation of Global Education Issues	9	6	10	9	4	8	5	7.28571429
Average	9.04	8	8.52	7.95	6.38	7.09	4.42	

As shown in Table 6, question 10, "my teacher education program has encouraged me to engage in volunteer experiences that allow me to work in diverse settings," has the lowest initial

mean score according to the Likert scale, averaging 6.57 out of 10. Question 15, "my teacher education program stressed the need to avoid categorizing individuals based on their race," had the highest initial mean score between the participants, averaging 8 out of 10.

The overall confidence level in this survey varied based on the participant. Participants engaged in professional development directly addressing many of the indicators from the presurvey by providing a deeper understanding of the need for Culturally Responsive Teaching Practices. The initial session during Novice Teacher Orientation, before teachers had the opportunity to engage with students in their classrooms, sought to build awareness of the connection between race and the disproportionate outcomes produced by the educational system. Following the session, they engaged in a sequence of reflections through journaling to process this learning and expound on it.

The journal entries for participants were coded using an In Vivo coding strategy, examining the language, terminology, and mood used to describe how they were processing their learning related to their confidence level. The first journaling exercises indicated deteriorating confidence levels visible by the continual use of the following terms: overwhelming, nervous, not sure, and unprepared. The shock value was apparent in many participants' responses. One participant wrote:

I am a little overwhelmed and feeling like I do not know what I am doing. Where do I start? What should I be doing now? I am feeling like I have too many questions and don't want the team to get tired of answering them.

Additional journal exercises were completed during the first weeks of school, as participants were able to conceptualize and apply the learning from the first professional development in their new classrooms. In examining their entries using the same coding method, there was an

intentional focus around forming a community with students. It was evident by the use of phrases such as "building mutual trust and respect," "focusing on learning their needs," and "forming fireside chats to get to know them outside of the classroom." Participants felt that they were incorporating positive changes into the environment in which students were responding well.

There was also an opportunity for them to reflect on the pieces of training they had received thus far in the journaling exercises, during which many reiterated the lack of knowledge acquired from their teacher education programs. One participant wrote, "I feel like colleges do not teach you all the skills they should teach, and because of COVID, a lot of this stuff was not taught during student teaching. Now we are here learning as we go." These thoughts coincide with the feelings of frustration and deteriorating confidence noted from the first set of journaling reflections.

Participants were provided the same preparedness survey at the end of their first PDSA cycle to reflect how their learning from professional development had impacted their application of culturally responsive teaching strategies. Table 7 illustrates the shift in their confidence levels according to the same Likert scale used in Table 6.

Table 7

Summary of Question, Participant Number	1	2	3	4	5	6	7	AVERAGE
Stands Against Prejudice	5	8	8	8	8	8	4	7
Stands for Social Justice	4	8	8	8	7	6	4	6.42857143
Addresses Intersectionality Regarding Achievement	3	9	8	8	6	6	5	6.42857143
Need for Professional Development	4	9	9	8	6	9	4	7
Experience Diversity	4	9	8	8	5	5	4	6.14285714

Midpoint Survey Results

Provide Opportunities of Different Values	5	7	8	9	6	0	5	5.71428571
Knowledge of Cultural Awareness	5	9	9	9	7	8	4	7.28571429
Utilize Student Culture	5	8	9	9	5	7	3	6.57142857
Creates Diverse Groups	5	6	8	6	5	0	3	4.71428571
Volunteer in Diverse Opportunities	5	0	10	5	3	0	4	3.85714286
Observe Diverse Students	5	0	10	6	2	0	3	3.71428571
Communication of Skills with Others	4	7	8	7	3	8	4	5.85714286
Talk About Intersectionality	3	8	8	8	4	9	2	6
Leadership Role Around Diversity	5	7	8	8	3	8	1	5.71428571
Avoid Categorizing Groups	5	9	10	7	4	9	4	6.85714286
Collaboration with Diverse Populations	4	7	10	8	4	8	6	6.71428571
Prepared to Teach Diverse Students	5	7	8	8	3	8	6	6.42857143
Different Learning Styles exist within Diverse Groups	5	9	10	6	2	8	4	6.28571429
Incorporate Multiculturalism	6	8	10	8	4	8	5	7
Effective Parent Communication with Diverse Group	4	7	10	8	4	8	5	6.57142857
Appreciation of Global Education Issues	3	6	10	8	6	2	5	5.71428571
Average	4.48	7.05	8.90	7.62	4.62	5.95	4.04	

The midpoint survey data shown in Table 7 depicts an overall decrease in confidence levels from the presurvey. Question 11, concerning opportunities within teacher education programs to observe students from diverse backgrounds, had the lowest mean of 3.71 out of 10 on the Likert scale. The question with the highest overall mean was question number 7, which dealt with preparedness to demonstrate basic knowledge and understanding of cultural awareness, with a 7.28 out of 10. Regarding individual participant averages, participant number three had the highest average at 8.90, while participant number seven came in with the lowest average.

Even though we designed the survey instrument to measure efficacy to execute culturally responsive teaching strategies based on their individual educator preparatory programs, we encouraged participants to reflect at the midpoint survey based on their current level of understanding and their confidence based on what they learned during the first PDSA cycle.

Resistance and Acknowledgement

Participants were asked to attend a second professional learning session after one month of teaching students. This session specifically targeted implicit and explicit bias as a catalyst for creating blind spots around race and social identity that impact decision-making in the classroom. It confronted biases and their impact on classroom interactions, leading to disproportionate student outcomes. We provided participants the same sequence of journaling activities to reflect on this professional development, and we used an In Vivo coding strategy to monitor how participants processed their new learning as acknowledgment or resistance. We chose to examine indicators of acknowledgment or resistance to gain a better understanding of the participants' level of vulnerability in regard to race conversations, which, based on previous research on White fragility (DiAngelo, 2019), can be difficult to accept. We also understood that resistance is a multileveled learning problem based on a misalignment of the participants' attitudes and beliefs to any proposed change. Any new learning impacting the physiological makeup and personality of the individual can also contribute to a level of resistance (Neri, Lorazano, and Gomez, 2019).

Several participants used phrases that would lean towards acknowledgment as they reflected, such as "being more aware of my actions," "being intentional on treating others equitably," and "looking at my own behaviors, such as calling on students and my tone of voice." One participant was inspired to research additional bias testing, saying,"I am taking the different

bias test and get a refreshed look into my biases." Another participant wanted to create space to listen to student concerns and give them more of a platform for voice as a result of the professional development.

While many grasped the opportunity for personal reflection around biases, others showed resistant behaviors. One participant commented that this professional learning made no difference in how they saw themselves as teachers. They also added that they did not intend on making any changes since "I only have one black student in one of my classes," and they were good at building relationships. One participant was quite deflective, stating, "This is very academic, so not sure how applicable or relevant to my day-to-day," while another participant stated that they did not need any of the content presented in the professional development session and that they "do not plan on making any changes." These comments in the journaling exercise may indicate for some participants that the decreased confidence levels and self-efficacy observed in the survey data can lead to increased fragility and reluctance to engage in reflections around race conversations.

Embracing Student-Teacher Relationships

Participants engaged in a third and final professional development session to build teacher capacity to execute Culturally Responsive Teaching strategies in their classrooms. It responded to many of the classroom inequities perpetuated by bias with strategies that novice teachers can utilize to cultivate more equity-centered classrooms. Following the professional development, participants were provided with a final opportunity to reflect in the journals with the same prompts and timeline, in addition to a final survey using the culturally responsive preparedness scale.

We coded the journal entries using a similar In Vivo coding strategy, examining the language, terminology, and mood used to describe how they were processing their learning related to their confidence level since the mid-point survey showed an evident decline from the pretest. We wanted to monitor whether explicit teaching around strategies could rebuild confidence around implementation. We looked for evidence of these strategies in their reflections plus any resistant behaviors that were still present from the previous journaling opportunities.

Novice teachers had been leading in their classrooms for two months and were approaching the end of the first quarter at the time of the third journaling sequence. In examining their entries, there was a clear focus on removing barriers and building authentic relationships. Some examples of phrases used were:

- "making the classroom inviting to make students feel comfortable"
- "making sure students see themselves in my classroom"
- "focusing on more of the positives"
- "increasing communication with students who barely speak."

There was also clear evidence of reflecting around depersonalization and seeking to understand student behaviors as a participant wrote, "*I am thinking about how a student's actions might not be malicious or intentionally disruptive, even when they seem like they are to me.*" Another participant showed signs of building more empathy for students as they wrote, "*I thought children had an easier time adapting to different settings, but now I think they struggle as much as adults.*" There were signs of the capacity building amongst many participants for more culturally responsive teacher behaviors focused on relationship building, as they used phrases indicating they were more confident and prepared to address student needs.

Participants were also provided the culturally responsive teaching preparedness scale in the form of a post-survey following their journaling exercises. Their responses are demonstrated below in Table 8.

Table 8

Post Survey Results

Summary of Question, Participant Number	1	2	3	4	5	AVERAGE
Stands Against Prejudice	7	9	5	5	8	6.8
Stands for Social Justice	8	8	6	5	8	7
Addresses Intersectionality Regarding Achievement	8	7	6	5	8	6.8
Need for Professional Development	8	8	7	7	8	7.6
Experience Diversity	8	8	6	5	5	6.4
Provide Opportunities of Different Values	8	8	7	5	5	6.6
Knowledge of Cultural Awareness	7	9	6	5	8	7
Utilize Student Culture	7	8	7	5	7	6.8
Creates Diverse Groups	5	7	4	5	5	5.2
Volunteer in Diverse Opportunities	5	8	5	6	5	5.8
Observe Diverse Students	5	7	7	4	8	6.2
Communication of Skills with Others	5	7	5	5	8	6
Talk About Intersectionality	5	8	6	5	8	6.4
Leadership Role Around Diversity	5	7	6	6	5	5.8
Avoid Categorizing Groups	7	9	5	5	9	7
Collaboration with Diverse Populations	7	7	7	5	7	6.6
Prepared to Teach Diverse Students	7	9	9	5	8	7.6
Different Learning Styles exist within Diverse Groups	5	10	6	5	8	6.8
Incorporate Multiculturalism	5	9	7	5	7	6.6
Effective Parent Communication with Diverse Group	5	9	5	5	5	5.8

Appreciation of Global Education Issues	7	8	7	7	7	7.2
Average	6.38	8.09		5.2 3	7	

Even though the response rate on the survey decreased from seven participants to only five, the post-survey data in Table 8 illustrates a positive trend in responses from the midpoint survey, indicating an increase in confidence levels following their final professional development session. Two questions had an identical highest average score on the Likert scale with a 7.6 out of 10. These were number four and question number seventeen, both dealing with preparation and the need for continual learning on the part of the teachers. Question number nine, which touched on the intention behind teacher education programs and the preparation for the challenges teachers would face in a diverse classroom, had the lowest overall mean of 5.2 out of 10. Participant number two had the highest average rating of 8.09 out of 10, while participant number five had the lowest average. The overall increase in scores shows a positive correlation between intentional skill-building around culturally responsive teaching strategies and self-efficacy.

Summary

Many factors contributed to changes in participants' thoughts throughout the study. Mixed methods research allows us to look at the quantitative changes and give a deeper meaning to the numbers by analyzing the journaling feedback that matches the trends in survey ratings (McKim, 2017). For this study, we analyze trends between the qualitative and quantitative data collected and how they worked together.

Culturally Responsiveness Teacher Preparedness Scale

Participants had a dramatic shift in their perspective as they moved through the study. A comparison of survey ratings is presented in Table 9, comparing the difference in results from

the pre-survey to post-survey, the pre-survey to the midpoint in the study, and from the midpoint to the post-survey. The negative trend is shaded in gray.

Table 9

Summary of the Mean Differences for Survey Questions

Summary of Question, Participant Number	Pre/Post Change	Pre/Mid Change	Mid/Post Change
Stands Against Prejudice	-0.9142857	-0.7142857	-0.2
Stands for Social Justice	-0.8571429	-1.4285714	0.57142857
Addresses Intersectionality Regarding	-0.83/1429	-1.4283/14	0.37142837
Achievement	-0.9142857	-1.2857143	0.37142857
Need for Professional Development	0.31428571	-0.2857143	0.6
Experience Diversity	-1.1714286	-1.4285714	0.25714286
Provide Opportunities of Different Values	-0.9714286	-1.8571429	0.88571429
Knowledge of Cultural Awareness	-0.5714286	-0.2857143	-0.2857143
Utilize Student Culture	-0.4857143	-0.7142857	0.22857143
Creates Diverse Groups	-1.8	-2.2857143	0.48571429
Volunteer in Diverse Opportunities	-0.7714286	-2.7142857	1.94285714
Observe Diverse Students	-0.6571429	-3.1428571	2.48571429
Communication of Skills with Others	-0.7142857	-0.8571429	0.14285714
Talk About Intersectionality	-1.1714286	-1.5714286	0.4
Leadership Role Around Diversity	-0.9142857	-1	0.08571429
Avoid Categorizing Groups	-1	-1.1428571	0.14285714
Collaboration with Diverse Populations	-1.2571429	-1.1428571	-0.1142857
Prepared to Teach Diverse Students	0.17142857	-1	1.17142857
Different Learning Styles exist within Diverse Groups	-0.4857143	-1	0.51428571
Incorporate Multiculturalism	-1.1142857	-0.7142857	-0.4

Effective Parent Communication with Diverse Group	-0.9142857	-0.1428571	-0.7714286
Appreciation of Global Education Issues	-0.0857143	-1.5714286	1.48571429

Participants demonstrated their highest confidence levels with 19 of the 21 questions in the pre-survey. This was at the beginning of the study prior to attending their Novice Teacher Orientation and their first professional development session before taking ownership of their new classrooms. The mid-point survey, which showed a decline in ratings for every question, was presented to participants following two professional development sessions once they had been teaching in their new spaces for one month. At this point, participants were exposed to learning, targeting the history of race and the social stratification caused by intersectionality in our local context, as well as exploring how their own biases affect their decision-making as teachers. The decrease in scores may reflect acknowledging over-confidence or unpreparedness from their teacher education programs, or the impact biases play in their practice. It may also indicate that utilizing culturally responsive teaching strategies is different than anticipated once one begins leading a classroom of their own.

The post survey illustrated an increase in the participant's confidence levels for 17 of the 21 questions after the final professional development session. Upon gaining context, experience, and tools through the third professional development, participants started to feel more confident in their abilities. They could utilize explicit strategies for building classroom community and authentic teacher-student relationships.

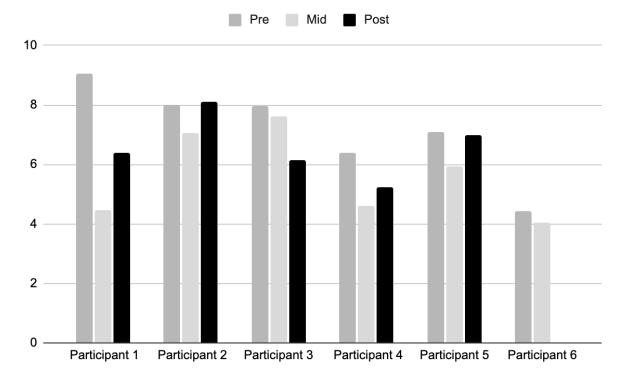
Overall, participants' ratings decreased from the presurvey to the midpoint, and then rebounded; most questions still trended negatively Fourteen questions decreased after the initial survey, and six of them demonstrated a negative change of more than one point overall from the start of the study to the end. The improvement in midpoint survey to the post was encouraging,

as the professional development sequence was complete and participants were now able to implement their tools with the lens to understand why they were necessary.

Individual Participant Results

It is important to look at individual progress to look for trends. Table 10 looks at each participant and their progress from pre to post survey. As described previously, all participants with one exception showed a drop from the presurvey to the midpoint. Individual results from ranged from a decrease of 4.57 points to an increase of 0.38, with an average decrease of 1.25 points on the scale. Individual results from the midpoint to postsurvey ranged from a decrease of 1.9, with an average increase of 0.47 points on the scale.

Table 10



Individual Average Scale Scores Across the Study

Note: The bar-graph tracks the average scale score of participants across the pre, mid and post surveys.

In looking at Participant 5, they had a very similar change to the group's overall average. They discussed initially feeling like an imposter in their journaling exercises. They described the feeling of overwhelming students by trying to impress them when what was needed was more time working with students individually and building relationships slowly. The only participant who had an overall growth, Participant 2, discussed the challenges of the year in their journaling exercises and how things would improve in subsequent years based on experience. They also planned on using more diverse methods to allow their students different ways to show their learning. Overall, participants shared themes of a desire to to make future changes to handle situations differently and discussed relationships as a primary focus, as experience in the field with their newly gained skills will only better themselves moving forward.

Exit Interviews

Each of the participants took part in an exit interview to summarize their experience within the study. The questionnaire below was developed in collaboration with the design team and delivered in a face-to-face interview by members of the district's beginning teacher support.

- 1. What have you learned about yourself over the course of these professional development sessions?
- 2. Do you feel that your answers that you submitted provide an accurate depiction of your experience?
 - a. Is there anything that we should know that was not shared?

- 3. What has been the biggest takeaway from the professional development sessions that have led to changes in your classroom?
 - a. What are some of those changes?
- 4. What do you see as your next step in becoming a more culturally relevant teacher?
 - a. What support do you see you needing?
- 5. If you could go back and start the school year over again with the same group of students, what would you do differently based on what you have learned?
 - a. Why?

It was evident the participants learned lessons throughout the process, and the next time they had the opportunity to teach a new class of students (either at the beginning of a year or semester), there are things that they would do differently. One participant stated,

I felt so unprepared at the beginning of the school year since I had done my student teaching virtually and never really taught in a classroom, so I think I would spend more time the first few weeks of school building a classroom community and letting students

get to know each other, rather than being so focused on actually starting to teach content. Others acknowledged having "imposter syndrome" where they tried to impress their students instead of getting to know them and their cultural backgrounds. Themes of relationships were consistent throughout the responses. One participant discussed not looking at student "labels" instead of getting to know students themselves while not taking in possible biased feedback from others who may have previously taught them. Overall themes were relatively consistent, and it was evident that participants able to take part in the professional developments talked to each other, and the space was supportive and affirming when discussing issues as solutions as they came up similar.

Balancing Measures

Stress surveys were sent out anonymously immediately after the second and third professional developments to allow all participants to share their stress levels at the current time and to give participants an out if they had not filled out surveys previously so they could have a fresh start back into the study without feeling like they were behind. We did not collect names or participant codes to get a general feel of the group. Table 11 focuses on Stress Survey #1, and Table 12 gives data for Stress Survey #2.

Table 11

Anonymous Stress Survey #1 Results

Question Theme	Score 1-5	Average							
PD Applicable?	3	3	5	4	3	3	5	3	3.625
Personal Stress	2	4	4	4	4	4	2	2	3.25
Student Stress	2	3	3	2	4	4	2	1	2.625
Parents Stress	2	5	4	2	3	2	2	1	2.625
Admin Stress	2	4	5	3	3	2	2	3	3
Planning Stress	5	3	5	5	5	5	2	3	4.125

Note: Anonymous stress survey results from participants to gauge stress levels in different

themes.

Table 12

Question Theme	Score 1-5	Average					
PD Applicable?	5	1	3	3	4	4	3.333333333
Personal Stress	3	2	4	2	4	3	3
Student Stress	3	3	4	1	2	2	2.5
Parents Stress	3	1	4	1	4	4	2.833333333
Admin Stress	3	1	4	2	4	4	3
Planning Stress	5	5	4	2	4	3	3.833333333

Anonymous Stress Survey #2 Results

Note: Anonymous stress survey results from participants to gauge stress levels in different themes.

It made sense that the stress levels started to decrease since the third professional development provided participants explicit tools to use in the classroom. The fact that participants had another month in the classroom was also beneficial in decreasing those feeling of overwhelm and increasing feelings of preparation for success. The one area that increased was parent stress, as participants were coming up on their first parent-teacher conferences. The drops in other areas were consistent with a slight variance in averages, though on a general downward trend.

T tests

Using SPSS software, we ran paired sample t tests to see if individual questions had more significance than others (Appendix F) so we could focus on the journaling prompts to find connections. With participants self-evaluating themselves, it was essential to find trends in which questions were most significant since they were all done in isolation, but with the same treatments applied to each participant through the professional development sessions. Questions 3, 5, 9, 10, 11, 13, 14, 16, and 17 each had at least one area (pre to mid, mid to post) that showed

at least moderate significance. Having this focused lens allowed us to look deeper on trends in the journaling.

Implications and Next Steps

Fragility

In early August, we retrieved the contact information for 25 newly hired novice teachers. We sent them the virtual presentation asking for their voluntary participation in a study to improve the effectiveness of beginning teacher onboarding in South-Eastern University City Schools. We received written confirmation from 15, agreeing to participate. We distributed the pre-survey in the form of the culturally responsive preparedness scale; only seven participated in the data collection for PDSA cycle 1. There may be many extenuating circumstances that contributed to the lack of participation in the study, but one factor that continued to surface preventing our predominantly White teacher workforce from participating in race conversations was fragility (DiAngelo, 2019).

We were aware of the racial stress and anxiety that participants may experience leading to withdrawal during the study. However, eight of the participants who signed up did not complete the pre-survey upon receiving the culturally responsive preparedness scale suggests the reluctance to engage in a study about race from the onslaught. This behavior follows many patterns of White people's responses to racial discomfort (DiAngelo, 2019). Fragility will continue to play a pivotal role in building racial consciousness.

Overconfidence in Novice Teachers

A clear outcome from the novice teachers that participated in this study was a theme of overconfidence in executing culturally responsive teaching strategies before engaging in professional development. These learning opportunities addressed colorblindness and built the

capacity within teachers to utilize specific culturally responsive techniques while increasing professional and personal vulnerability for race conversations. Public school districts filling teaching vacancies with novice teachers should consider a more strategic approach to onboarding with a racial equity lens that explicitly targets these blind spots. Improving the disproportionate outcomes for students of color may start with creating a lens for a district's newest teachers that addresses colorblindness.

Novice teachers may be starting their careers with various levels of training, whether graduating from a college or university program before starting their teaching career or attending an educator preparatory program during their teaching through an alternative licensure pathway. The novice teachers who participated in the study had different backgrounds but similar experiences with overconfidence in implementing culturally responsive teaching strategies. One may infer that a teacher with no prior educator training has the same overconfidence as a teacher who has completed a university program. As a result, novice teachers may be leading classrooms with these blind spots. Without addressing them during onboarding, they are more likely to continue perpetuating practices that reproduce inequitable outcomes than disrupt them.

Next Steps for Research

The expectation of this research was to provide novice teachers with a professional development series that created a more culturally responsive lens in classroom leadership. This study tracked participants through the first 90 days of their career as a novice. As they continue to engage in professional development during the remainder of the year and develop a deeper understanding of biases, one may wonder how it would impact their perspectives and ability to create a community of care in their classrooms? Trends in the post-survey data indicated more

confidence in executing culturally responsive teaching strategies, but the question remained if that would that change as they continued to put the professional development into practice. Monitoring this in the long term may provide insight to teachers that stay in the field or leave based on trends in data of cultural responsiveness.

Incorporation of the walkthrough tool

One of the original design objectives was to observe culturally responsive teaching strategies in practical application by examining how novice teachers could transfer professional learning into classroom practice. A classroom walkthrough tool, CRIOP (Appendix A), has been identified as an effective instrument to monitor teaching behaviors that are culturally responsive regarding building classroom relationships. In addition, there are specific observable indicators for classrooms that one considers "culturally responsive" and those considered "non-responsive." Unfortunately, due to the district protocols regarding non-evaluative observations as a result of the COVID-19 pandemic, we could not observe any participants in their classrooms utilizing this instrument. Therefore, in the absence of the walkthrough tool, we coded the third and final segment of the journaling sequence for the presence of classroom practices that may be considered culturally responsive strategies based on the instrument.

Classroom observations are an essential component of measuring whether the professional development is doing what it is designed to do (Desimone, 2011), increasing the capacity of novice teachers to interact with students with a more culturally responsive lens. They were also critical in measuring the desired results of this initiative since we based them on classroom practices. For example, reflective journaling exercises indicated vulnerability with the participants, and the fluctuations in the culturally responsive teacher preparedness scale measured their confidence level executing strategies. In addition, however, the continual use of

the CRIOP instrument after each professional development session would have provided valuable progress monitoring data on how the learning can transfer into classroom practice.

Intersectionality

This study sought to deepen the participant's understanding of race and its use in perpetuating disproportionate classroom outcomes. As a result, novice teachers could reflect on their biases around race and begin creating relationship-building platforms in their classes that minimize the barriers between races. However, there is an obligation to deepen understanding of race and the combined social stratification (race, gender, class, disability, and so forth) of students who exist in multiple margins, leading to stereotyping and disadvantage. The social structures around gender, class, and people with disabilities generate biases that create barriers in a classroom, which, combined with race, can only exacerbate a novice teacher's ability to value diversity and cultivate relationships.

Novice teachers may also need additional professional development and reflection around gender bias, disability bias, and stereotyping existing around socioeconomic classes; each plays a vital role in a teacher's efficacy for academic success and classroom management. Novice teachers who experience overconfidence with a survey instrument designed to measure selfefficacy around culturally responsive teaching strategies seem to face similar challenges when met the barriers created by the intersectionality of other social categorizations.

Conclusion

Are novice teachers prepared to address public education's academic and discipline disparities? Unfortunately, they may think they are, though they may not be.

Teachers enter the workforce as novices from various backgrounds with different levels of training. Some may complete degree programs from colleges or universities, while others

enroll in educator preparation programs on alternative licensure pathways. However, they all receive the same opportunity to lead a classroom and play a pivotal role in perpetuating inequitable outcomes reproduced by the public education system.

This study demonstrated that novice teachers generally feel confident in their ability to execute culturally responsive teaching strategies entering the classroom until they receive targeted professional development that explicitly addresses racial disparities and biases. This false knowledge, overconfidence, or thinking one may has more skills than they have can be more dangerous than ignorance, as one may not see the need for educating themselves. Regarding race, this may show indications of dysconscious racism (King, 1991), where colorblindness and White privilege have created distorted understandings about inequity and why it persists, making it difficult for novices to act in favor of genuinely equitable education.

This professional development series created a sense of vulnerability, honest reflection, and a newfound emphasis on relationships during the novices' initial onboarding process to deepen their understanding of race and evoke humility at their level of preparedness. By focusing on how their role in the public school system contributes to the unequal outcomes that reinforce societal inequity and oppression, teachers broadened their knowledge of how society works and its representation in the classrooms. Building capacity around culturally responsive teaching strategies and engaging in further professional learning around biases may translate into more racially conscious decisions that lead to more equitable outcomes. Professional development during initial onboarding creates a more culturally responsive lens in novice teachers as they learn pedagogical practices, management strategies, and approaches for building social efficacy in students who celebrate cultural diversity.

References

- Achinstein, B., & Athanases, S. Z. (2005). Focusing new teachers on diversity and equity:Toward a knowledge base for mentors. Teaching and Teacher Education, 21(7), 843-862.
- Albaum, G. (1997). The Likert Scale Revisited. *Market Research Society. Journal.*, 39(2), 1–21. https://doi.org/10.1177/147078539703900202
- Agosto, Vonzell, and Ericka Roland. "Intersectionality and Educational Leadership: A Critical Review." *Review of Research in Education*, vol. 42, no. 1, 2018, pp. 255–285., doi:10.3102/0091732x18762433. Accessed 22 July 2020.
- Anderson, A. (2013). Teacher for America and the dangers of deficit thinking. Critical Education, 4(11), 28-47.
- Angelle, P. S. (2010). An organizational perspective of distributed leadership: A portrait of a middle school. *Rmle online*, *33*(5), 1-16.
- Aronson, B. A. (2017). The white savior industrial complex: A cultural studies analysis of a teacher educator, savior film, and future teachers. *Journal of Critical Thought and Praxis*, 6(3).
- Bartolomé, L. I. (2004). Critical pedagogy and teacher education: Radicalizing prospective teachers. *Teacher education quarterly*, *31*(1), 97-122.
- Beady Jr, C. H., & Hansell, S. (1981). Teacher race and expectations for student achievement. *American Educational Research Journal*, 18(2), 191-206.
- Bécares, Laia, and Naomi Priest. "Understanding the Influence of Race/Ethnicity, Gender, and Class on Inequalities in Academic and Non-Academic Outcomes among Eighth-Grade
 Students: Findings from an Intersectionality Approach." *PloS One*, vol. 10, no. 10, 2015, p. e0141363., doi:10.1371/journal.pone.0141363. Accessed 22 July 2020.

- Bell, D. (1987). And we are not saved: The elusive quest for racial justice. New York, NY: Basic Books.
- Bianchini, J. A., & Brenner, M. E. (2010). The role of induction in learning to teach toward equity: A study of beginning science and mathematics teachers. *Science Education*, 94(1), 164-195.
- Blaisdell, B. (2005). Seeing Every Student as a 10: Using Critical Race Theory to Engage White Teachers' Colorblindness. International Journal of Educational Policy, Research, and Practice: Reconceptualizing Childhood Studies, 6(1), 31-50.
- Brock, B. L., & Grady, M. L. (2007). From first-year to first-rate: Principals guiding beginning teachers. Corwin Press.
- Brown v. Board of Education, 347 U.S. 483 (1954).
- Browning, A., & Romer, N. (2020). Mindfulness-Based Practices for Schools. WestEd.
- Byrk, A.S., Gomez, L.M., Grunow, A., LeMahieu, P.G., (2016) Learning to improve: How America's schools can get better at getting better. Cambridge, M.A.: Harvard Education Press.
- Carter-Andrews, D., & Tuitt, F. (2013). Contesting the myth of a post-racial era: The continued significance of race in U.S. education. New York, NY: Peter Lang Publishing.
- Carver-Thomas, D. (2018). Diversifying the teaching profession: How to recruit and retain teachers of color. *Learning Policy Institute*.

- Chapman, T. K., Lamborn, S. D., & Epps, E. (2010). Educational strategies for children of
 Milwaukee: A critical race theory analysis. Multicultural Learning and Teaching, 5(2), 4–
 27.
- Cho, S., Crenshaw, K. W., McCall, L. (2013). Toward a field of intersectionality studies:
 Theory, applications, and praxis. Signs: Journal of Women in Culture and Society, 38, 785–810.
- Civitillo, S., Juang, L. P., Badra, M., & Schachner, M. K. (2019). The interplay between culturally responsive teaching, cultural diversity beliefs, and self-reflection: A multiple case study. *Teaching and Teacher Education*, 77, 341-351.
- Clayton, J. K. (2011). Changing diversity in US schools: The impact on elementary student performance and achievement. *Education and urban society*, *43*(6), 671-695.
- Claessens, L., van Tartwijk, J., Pennings, H., van der Want, A., Verloop, N., den Brok, P., &
- Wubbels, T. (2016). Beginning and experienced secondary school teachers' self-and student schema in positive and problematic teacher-student relationships. Teaching and Teacher Education, 55, 88-99.
- Cole, T. (2012). The white-savior industrial complex. *The Atlantic*, 21(March).
- Costello, B., Wachtel, J., & Wachtel, T. (2009). *The restorative practices handbook: For teachers, disciplinarians and administrators*. International Institute for Restorative Practices
- Critical race theory. (2021, April 02). Retrieved April 07, 2021, from https://www.britannica.com/topic/critical-race-theory
- Crenshaw, K. W. (2010). Twenty years of critical race theory: Looking back to move forward. *Conn. L. Rev.*, 43, 1253.

- Crenshaw, K., Harris, L., HoSang, D., & Lipsitz, G. (Eds.). (2019). Seeing Race Again: Countering Colorblindness across the Disciplines. Oakland, California: University of California Press. Retrieved April 7, 2021, from http://www.jstor.org/stable/j.ctvcwp0hd
- Crow, R., Hinnant-Crawford, B. N., & Spaulding, D. T. (2019). The educational leaders guide to improvement science: Data, design and cases for reflection. Gorham, ME: Meyers Education Press.
- Crow, S. R. (2009). Relationships that foster intrinsic motivation for information seeking. School Libraries Worldwide, 15(2).
- Darling-Hammond, L. (1998). Unequal Opportunity: Race and Education. The Brookings Review, 16(2), 28. doi:10.2307/2008077
- Darling-Hammond, L. (2000). How teacher education matters. Journal of teacher education, 51(3), 166-173.
- Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? Journal of teacher education, 53(4), 286-302.
- Delgado, R., & Stefancic, J. (2017). Critical race theory: An introduction (Vol. 20). NYU Press.
- De Neve, D., & Devos, G. (2017). Psychological states and working conditions buffer beginning teachers' intention to leave the job. European Journal of Teacher Education, 40(1), 6-27.
- Desimone, L. M. (2011). A Primer on Effective Professional Development. *Phi Delta Kappan*, 92(6), 68–71. https://doi.org/10.1177/003172171109200616
- DiCicco, M., Sabella, L., Jordan, R., Boney, K., & Jones, P. (2014). Great expectations: The mismatched selves of a beginning teacher. The Qualitative Report, 19(42), 1-18.

- Dillard, C., Collins, C., Shuler, J. (2018). What Is White Privilege, Really? Retrieved from https://www.learningforjustice.org/magazine/fall-2018/what-is-white-privilege-really
- Diamond, J. B., Randolph, A., & Spillane, J. P. (2004). Teachers' expectations and sense of responsibility for student learning: The importance of race, class, and organizational habitus. *Anthropology & education quarterly*, 35(1), 75-98.
- Diamond, J. B. (2013). The resource and opportunity gap: The continued significance of race for African American student outcomes. Contesting the Myth of a Post-racial Era: The Continued Significance of Race in Education, 97-111.
- DiAngelo, R. (2019). White fragility: Why its so hard for white people to talk about racism. London: Allen Lane, an imprint of Penguin Books.
- DiAngelo, R. & Sensoy, O. (2010). "OK, I get it! Now tell me how to do it!" Why we can't just tell you how to do critical multicultural education. Multicultural Perspectives, 12(2), 97– 102.
- Emdin, C. (2016). For White folks who teach in the hood... and the rest of y'all too: Reality pedagogy and urban education. Beacon Press.
- Fredricks, J. A., Parr, A. K., Amemiya, J. L., Wang, M. T., & Brauer, S. (2019). What matters for urban adolescents' engagement and disengagement in school: A mixed-methods study. *Journal of Adolescent Research*, 34(5), 491-527.
- Ferguson, R. (2002, October). What Doesn't Meet the Eye: Understanding and Addressing Racial Disparities in High-Achieving Suburban Schools. Retrieved from ERIC.
- Gates, S. (2018, October 18). *Benefits of collaboration*. NEA. Retrieved December 18, 2021.
- Gay, G. (2002). Preparing for culturally responsive teaching. Journal of teacher education,

53(2), 106-116.

- Gay, G. (2010). Culturally responsive teaching: Theory, research, and practice. New York, NY: Teachers College Press.
- Gershenson, S., & Papageorge, N. (2018). The power of teacher expectations: How racial bias hinders student attainment. *Education Next*, 18(1), 64-71.

Gholam, A. (2018). A Mentoring Experience: From the Perspective of a Novice Teacher. International Journal of Progressive Education, 14(2), 1-12.

- Goldenberg, B. M. (2014). White teachers in urban classrooms: Embracing non-white students' cultural capital for better teaching and learning. *Urban Education*, *49*(1), 111-144
- Gorski, P. C. (2008). Good intentions are not enough: A decolonizing intercultural education. *Intercultural education*, *19*(6), 515-525.

Gorski, P. (2008). The Myth of the ``Culture of Poverty". Educational leadership, 65(7), 32.

Grant, C. A., and Sleeter C. E. (2007). Doing multicultural education for achievement and equity.

New York, NY: Routledge

Grant, C., and Zwier, E. (2011). Intersectionality and Student Outcomes: Sharpening the Struggle against Racism, Sexism, Classism, Ableism, Heterosexism, Nationalism, and Linguistic, Religious, and Geographical Discrimination in Teaching and Learning. Multicultural Perspectives, 13(4), 181–188. <u>https://doiorg.proxy195.nclive.org/10.1080/15210960.2011.616813</u>

Green, C. A., Duan, N., Gibbons, R. D., Hoagwood, K. E., Palinkas, L. A., & Wisdom, J. P.

(2015). Approaches to mixed methods dissemination and implementation research: methods, strengths, caveats, and opportunities. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 508-523.

- Halberstadt, A. G., Cooke, A. N., Garner, P. W., Hughes, S. A., Oertwig, D., & Neupert, S. D.(2020). Racialized emotion recognition accuracy and anger bias of children's faces.*Emotion*.
- Hammond, Z., & Jackson, Y. (2015). Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students.Thousand Oaks, CA: Corwin, a SAGE Company.
- Hancock, S., & Warren, C. A. (2016). White women's work: Examining the intersectionality of teaching, identity, and race. IAP.
- Howard, T. C., & Rodriguez-Minkoff, A. C. (2017). Culturally relevant pedagogy 20 years later: Progress or pontificating? What have we learned, and where do we go? *Teachers College Record*, *119*(1), 1-32.
- Hramiak, A. (2014). Using a cultural lens to explore challenges and issues in culturally diverse schools for Teach First beginning teachers: Implications for future teacher training.
 Professional Development in Education, 40(1), 147-163.

Hooks, B. (2013). Writing beyond race: Living theory and practice. Routledge.

- Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. Teaching and teacher Education, 26(8), 1530-1543.
- Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. Teaching and teacher education, 21(4), 343-356.

- Ingersoll, R. M., & Strong, M. (2011). The Impact of Induction and Mentoring Programs for Beginning Teachers. Review of Educational Research, 81(2), 201-233. doi:10.3102/0034654311403323
- Irvine, J. J. (2003). Because of the kids: Seeing with a cultural eye. New York: Teachers College Press. J
- Johnson, H. R. (2001). Administrators and mentors: Keys in the success of beginning teachers. Journal of Instructional Psychology, 28(1), 44-44
- Kane, R. G., & Francis, A. (2013). Preparing teachers for professional learning: is there a future for teacher education in new teacher induction?. *Teacher Development*, 17(3), 362-379.
- Kelchtermans, G. (2017). 'Should I stay or should I go?': unpacking teacher attrition/retention as an educational issue. Teachers and Teaching, 23(8), 961-977.
- Kutcy, C. E. B., & Schulz, R. (2006). Why are beginning teachers frustrated with the teaching profession?. *McGill Journal of Education/Revue des sciences de l'éducation de McGill*, 41(1).
- King, J. E. (1991). Dysconscious racism: Ideology, identity, and the miseducation of teachers. *Racism: Essential Readings*, 295–303. https://doi.org/10.4135/9781446220986.n29

Ladson-Billings, G. (1994). The Dreamkeepers. San Francisco: Jossey-Bass Publishing Co.

- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American* educational research journal, 32(3), 465-491.
- League, A. D. (2012). Creating an anti-bias learning environment. 2016-04-21]. http://www. ad. org/educatin-utreach/urricuum-resurces/c/creating-an-anti-bias-earning-envi-ronment. html#. VybgwPmEB-k.

- Lipsitz, G. (1998). The possessive investment in whiteness: How white people profit from identity politics. Philadelphia: Temple University Press
- MacPhail, A., & Tannehill, D. (2012). Helping pre-service and beginning teachers examine and reframe assumptions about themselves as teachers and change agents:"Who is going to listen to you anyway?". Quest, 64(4), 299-312.
- Marchitello, M., & Trinidad, J. (2019). Preparing Teachers for Diverse Schools: Lessons from Minority Serving Institutions. *Bellwether Education Partners*.
- Matias, C. E., & Liou, D. D. (2014). Tending to the heart of communities of color. Urban

Education, 50(5), 601-625. doi:10.1177/0042085913519338

- McIntosh, K., Smolkowski, K., Gion, C. M., Witherspoon, L., Bastable, E., & Girvan, E. J.
 (2020). Awareness Is Not Enough: A Double-Blind Randomized Controlled Trial of the Effects of Providing Discipline Disproportionality Data Reports to School Administrators. *Educational Researcher*, 0013189X20939937.
- Milner, H. R. (2010). *Start where you are, but don't stay there*. Cambridge, MA: Harvard Education Press.
- Milner, H. R., & Laughter, J. C. (2015). But good intentions are not enough: Preparing teachers to center race and poverty. *The Urban Review*, *47*(2), 341-363.
- Milner, H. R., & Tenore, F. B. (2010). Classroom Management in Diverse Classrooms. Urban Education, 45(5), 560–603. https://doi.org/10.1177/0042085910377290
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New directions for adult and continuing education*, *2001*(89), 3.

McKim, C. A. (2017). The value of mixed methods research: A mixed methods study. *Journal of Mixed Methods Research*, 11(2), 202-222.

Morris, Sherri. 2019-2020 Certified Staff Resignation Data by Race (6/17/20).

- Neri, R. C., Lozano, M., & Gomez, L. M. (2019). (Re) framing resistance to culturally relevant education as a multilevel learning problem. *Review of Research in Education*, 43(1), 197-226.
- Southeast State Department of Public Instruction. (2019). NC School Report Card District Snapshot for South-Eastern University City Schools.

https://ncreports.ondemand.sas.com/src/district?district=681LEA&year=2019& lng=en.

- Nuthall, G. (2004). Relating classroom teaching to student learning: A critical analysis of why research has failed to bridge the theory-practice gap. Harvard educational review, 74(3), 273-306.
- Nielsen, C. (2016, May 25). Timeline: A Century of South-Eastern University City High School Claire Nielsen. *Southern Neighbor*.
- Oakes, J. (1990). Multiplying inequalities: The effects of race, social class, and tracking on opportunities to learn mathematics and science.

Oxford University Press. (n.d.). Food. In *Oxford Advanced Learner's Dictionary*. Retrieved October 22, 2020, from

https://www.oxfordlearnersdictionaries.com/us/definition/english/food?q=food

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational researcher*, *41*(3), 93-97.

- Picower, B. (2009). The unexamined whiteness of teaching: How white teachers maintain and enact dominant racial ideologies. *Race Ethnicity and Education*, *12*(2), 197-215.
- Pitzer, J., & Skinner, E. (2017). Predictors of changes in students' motivational resilience over the school year: The roles of teacher support, self-appraisals, and emotional reactivity. *International Journal of Behavioral Development*, 41(1), 15-29.
- Pollack, T. M. (2012). The miseducation of a beginning teacher: One educator's critical reflections on the functions and power of deficit narratives. *Multicultural Perspectives*, 14(2), 93-98.
- Pokorny, S. B., Jason, L. A., Schoeny, M. E., Townsend, S. M., & Curie, C. J. (2001). Do participation rates change when active consent procedures replace passive consent. *Evaluation review*, 25(5), 567-580.
- Powell, R., Cantrell, S. C., Correll, P. K., & Malo-Juvera, V. (2017). Culturally Responsive Instruction Observation Protocol (4th ed.). Lexington, KY: University of Kentucky College of Education.
- Reardon, S.F., Kalogrides, D., & Shores, K. (2016). The Geography of Racial/Ethnic Test Score Gaps (CEPA Working Paper No.16-10). Retrieved from Stanford Center for Education Policy
- Rieckhoff, B. S., Ockerman, M., Proweller, A., & Wolfinger, J. (2020). Building Teacher Empathy and Culturally Responsive Practice Through Professional Development and Self-Reflection. *Journal of Vincentian Social Action*, 5(2), 8.
- Ridley, C., & Lingle, D. (1996). Cultural Empathy in Multicultural Counseling: A
 Multidimensional Process Model. In P. Pedersen, J. Draguns, W. Lonner & J. Trimble
 (Eds.), Counseling Across Cultures (4 ed., pp. 21-46): Thousand Oaks: Sage.

Ridley, C., & Udipi, S. (2002). Putting Cultural Empathy into Practice. In P. Pedersen, J.
Draguns, W. Lonner & J. Trimble (Eds.), Counseling Across Cultures (5 ed., pp. 317–333): Thousand Oaks: Sage.

Saldaña, J. (2015). The coding manual for qualitative researchers. Sage.

- Schaefer, L. (2013). Beginning teacher attrition: A question of identity making and identity shifting. *Teachers and Teaching*, *19*(3), 260-274.
- Shedrow, S. J. (2017). Cross-cultural student teaching: Examining the meaning-making of one White, female, middle-class preservice teacher. *Journal of international students*, 7(2), 270-290.
- Sleeter, C. E. (2011). Professional Development for Culturally Responsive and Relationship-Based Pedagogy. Black Studies and Critical Thinking. Volume 24. Peter Lang New York.
 29 Broadway 18th Floor, New York, NY 10006.
- Sleeter, C. E. (2012). Confronting the Marginalization of Culturally Responsive Pedagogy. *Urban Education*, 47(3), 562–584. https://doi.org/10.1177/0042085911431472
- Sleeter, C.E. (2017). Critical race theory and the whiteness of teacher education. *Urban Education*, 52(2), 155-169
- Sharma, M. (2018). Seeping deficit thinking assumptions maintain the neoliberal education agenda: Exploring three conceptual frameworks of deficit thinking in inner-city schools. *Education and Urban Society*, 50(2), 136-154.
- Skepple, Rose Gilmore, "Developing Culturally Responsive Preservice Teacher Candidates: Implications for Teacher Education Programs" (2011). Online Theses and Dissertations. 07

Smolkowski, K., Girvan, E. J., McIntosh, K., Nese, R. N., & Horner, R. H. (2016). Vulnerable

decision points for disproportionate office discipline referrals: Comparisons of discipline for African American and White elementary school students. Behavioral Disorders, 41(4), 178-195.

- Sobel, D. M., Gutierrez, C., Zion, S., & Blanchett, W. (2011). Deepening culturally responsive understandings within a teacher preparation program: It's a process. *Teacher Development*, 15(4), 435-452.
- Solórzano, D. G., & Delgado Bernal, D. (2001). Examining transformational resistance through a critical race and LatCrit theory framework: Chicana and Chicano students in an urban context. Urban Education, 36, 308-342.
- Staats, C. (2016). Understanding Implicit Bias: What Educators Should Know. *American Educator*, *39*(4), 29.
- Stansbury, K., & Zimmerman, J. (2000). Lifelines to the Classroom: Designing Support for Beginning Teachers. Knowledge Brief.

The Campaign for Racial Equity in Our Schools. (2015, October). *Excellence with Equity: The Schools Our Children Deserve*.

https://chapelhillcarrboronaacp.files.wordpress.com/2014/05/excellence-with-equityreport-final10-23.pdf

- Tickle, B. R., Chang, M., & Kim, S. (2011). Administrative support and its mediating effect on US public school teachers. Teaching and Teacher Education, 27(2), 342-349
- Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and teacher Education*, *23*(6), 944-956.
- Walker, T. (2019). Teacher shortage is 'Real and Growing, and worse than we thought. *NEA* today. Retrieved from http://neatoday. org/2019/04/03/how-bad-is-the-teacher-shortage.

- Waugh, D. (2012). From forgotten to remembered: The long process of school desegregation in South-Eastern University City, South-East State and Prince Edward County, Virginia.
- Weist, M. D., Mellin, E. A., Chambers, K. L., Lever, N. A., Haber, D., & Blaber, C. (2012).Challenges to collaboration in school mental health and strategies for overcoming them.Journal of School Health, 82(2), 97-105.
- Weston, K. J., Anderson-Butcher, D., & Burke, R. W. (2008). Developing a comprehensive curriculum framework for teacher preparation in expanded school mental health.
 Advances in School Mental Health Promotion, 1(4), 25-41. *What is diversity*? Independent School Diversity Network.
 https://www.isdnetwork.org/what-is-diversity.html.
- Whitford, D. K., & Emerson, A. M. (2019). Empathy Intervention to Reduce Implicit Bias in Pre-Service Teachers. Psychological Reports, 122(2), 670-688.
- Williams, J. H. (2019). Empathy as Special Form of Motor Skill That Can Be Trained.Compassion and Empathy in Educational Contexts, 15-37. doi:10.1007/978-3-030-18925-9_2
- Winker, Gabriele, and Nina Degele. "Intersectionality as Multi-Level Analysis: Dealing with Social Inequality." *The European Journal of Women's Studies*, vol. 18, no. 1, 2011, pp. 51–66., doi:10.1177/1350506810386084. Accessed 22 July 2021.
- US Department of Education Office for Civil Rights, "Civil Rights Data Collection: Data Snapshot: Teacher Equity," Issue Brief no. 4 (March 2014), <u>http://www2.ed.gov/about/</u> offices/list/ocr/docs/crdc-teacher-equity-snapshot.pdf.
- Valli, L., Raths, J., & Rennert-Ariev, P. (2001). A Beginning Teacher Survey Study: A Theoretical Perspective.

Xu, K., Nosek, B., & Greenwald, A. (2014). Psychology data from the race implicit association test on the project implicit demo website. *Journal of Open Psychology Data*, 2(1).

Appendix A

Walkthrough Tool

Culturally Responsive Instruction Observation Protocol Fourth Payied Edition (January 2017)

Fourth Revised Edition (January 2017)

Rebecca Powell, Susan Chambers Cantrell, Pamela K. Correll, and Victor Malo-Juvera

Originally Developed by: R. Powell, S. Cantrell, Y. Gallardo Carter, A. Cox, S. Powers, E. C. Rightmyer, K. Seitz, and T. Wheeler

Revised 2012 by: R. Powell (Georgetown College), S. Cantrell (University of Kentucky), P. Correll (University of Kentucky), V. Malo-Juvera (UNC-Wilmington), D. Ross (University of Florida) and R. Bosch (James Madison University)

> Revised 2017 by: R Powell (Georgetown College), S. Cantrell (University of Kentucky), P. Correll (Missouri State University), V. Malo-Juvera (UNC-Wilmington)

School (use assigned number):		Teacher (assigned number):
Observer:	Date of Observation:	# of Students in Classroom:
Academic Subject:	Grade	e Level(s):
Start Time of Observation:	End Time of Observation	n: Total Time of Obs:

DIRECTIONS

After the classroom observation, review the field notes for evidence of each "pillar" of Culturally Responsive Instruction. If an example of the following descriptors was observed, place the field notes line number on which that example is found. If a "non-example" of the descriptors was observed, place the line number on which that non-example is found.

Then, make an overall/holistic judgment of the implementation of each component. To what extend and/or effect was the component present?

- 4 Consistently
- 3 Often
- 2 Occasionally
- 1 Rarely
- 0 Never

Transfer the holistic scores from pp. 2 through 9 to the table below.

CRI Pillar	Holistic Score	CRI Pillar	Holistic Score
I. CLASS		IV. INSTR	
II. FAM		V. DISC	
III. ASMT		VI. CRITICAL	

CRIOP © 2012 The Collaborative Center for Literacy Development and The Center for Culturally Relevant Pedagogy. Funded by the State of Kentucky and the US Department of Education Office of English Language Acquisition. Please use the following citation when referencing the CRIOP instrument: Powell, R., Cantrell, S. C., Correll, P. K., & Malo-Juvera, V. (2017). Culturally Responsive Instruction Observation Protocol (4th ed.). Lexington, KY: University of Kentucky College of Education.

I. CLASS CLASSROOM RELATIONSHIPS

	Consistently	Often	Occasionally	Rarely	Never
Holistic scor	e 4	3	2	1	0

CRI Indicator	For example, in a responsive classroom:	For example, in a non-responsive classroom:	Field notes: Time or line(s) of example	Field notes: Time or line(s) of non- example	Field notes: No example (✓)	SCORE for Indicator
 The teacher demonstrates an ethic of care (e.g., equitable relationships, bonding) 	 Generally Effective Practices: Teacher refers to students by name, uses personalized language with students Teacher conveys interest in students' lives and experiences Practices that are Culturally Responsive: There is a "family-like" environment in the classroom; there is a sense of belonging; students express care for one another in a variety of ways Teacher promotes an environment that is safe and anxiety-free for all students, including culturally and linguistically diverse students; students seem comfortable participating in the classroom Teacher differentiates patterns of interaction and management techniques to be culturally congruent with the students and families s/he serves (e.g., using a more direct interactive style with students who require it) 	 Teacher permits and/or promotes negativity in the classroom, e.g., criticisms, negative comments, sarcasm, etc. Teacher does not address negative comments of one student towards another Teacher stays behind desk or across table from students; s/he does not get "on their level" Teacher does not take interest in students' lives and experiences; is primarily concerned with conveying content Teacher does not seem aware that some students are marginalized and are not participating fully in classroom activities Some students do not seem comfortable contributing to class discussions and participating in learning activities Teacher uses the same management techniques and interactive style with all students when it is clear that they do not work for some 				
2. The teacher communicates high expectations for all students	 Generally Effective Practices: There is an emphasis on learning and higher-level thinking; challenging work is the norm Students do not hesitate to ask questions that further their learning; there is a "culture of learning" in the classroom Teacher expects every student to participate actively; students are not allowed to be unengaged or off-task Teacher gives feedback on established high standards and provides students with specific information on how they can meet those standards Practices that are Culturally Responsive: There are group goals for success as well as individual goals (e.g., goals and charts posted on walls); every student is expected to achieve Students are invested in their own and others' learning ; they continuously assist one another 	 Teacher has low expectations, consistently giving work that is not challenging or frustrating students by giving them tasks that are unreasonably difficult Teacher does not call on all students consistently Teacher allows some students to remain unengaged, e.g., never asks them to respond to questions, allows them to sleep, places them in the "corners" of the room and does not bring them into the instructional conversation, etc. Teacher feedback is subjective and is not tied to targeted learning outcomes and standards Teacher expresses a deficit model, suggesting through words or actions that some students are not as capable as others 				

			CRIOP - Page 3
	bilinguals understand directions and have access to the same content and learning as native speakers	bilinguals to assure they understand directions and content	
3. The teacher creates a learning atmosphere that engenders respect for one another and toward diverse populations	 Generally Effective Practices: Teacher sets a tone for respectful classroom interaction and teaches respectful vays for having dialogue and being in community with one another Teacher implements practices that teach collaboration and respect, e.g., class meetings, modeling and reinforcing effective interaction, etc. Students interact in respectful ways and know how to work together effectively Teacher and students work to understand each other's perspectives Practices that are Culturally Responsive: Positive and affirming messages and images about students' racial and ethnic identities are present throughout the classroom Teacher affirms students' language and cultural knowledge by integrating it into classroom conversations Teacher encourages students to share their stories with one another and to have pride in their history and linguistic and cultural identities Classroom library and other available materials contain multicultural content that reflect the perspectives of and show appreciation for diverse groups Classroom library (including online resources) includes bilingual texts that incorporate students' native languages 	 Teacher shows impatience and intolerance for certain student behaviors Lack of respectful interaction amongst students may be an issue Teacher establishes a competitive environment whereby students try to out-perform one another Teacher does not encourage student questions or ridicules students when they ask for clarification Posters and displays do not show an acknowledgement and affirmation of students' cultural and racial/ethnic/linguistic identities Classroom library and other available materials promote ethnocentric positions and/or ignore human diversity Classroom resources do not include any bilingual texts Teacher never affirms students' native languages and cultures 	
 Students work together productively 	 Generally Effective Practices: Students are continuously viewed as resources for one another and assist one another in learning new concepts Students are encouraged to have discussions with peers and to work collaboratively 	 Students are discouraged from assisting their peers Students primarily work individually and are not expected to work collaboratively; and/or students have a difficult time collaborating Teacher dominates the decision-making and does not allow for student voice The emphasis is on individual achievement Classroom is arranged for quiet, solitary work, with the teacher being "center stage" 	

108

					CI	NOP - Page	- 4
II. FAM	FAMILY COLLABORATION	Holistic score	e 4	3	2	1	0
			Consistently	Often	Occasionally	Rarely	Never

NOTE: When scoring this component of the CRIOP, the family collaboration interview should be used in addition to field observations. Observations alone will not provide adequate information for scoring.

CRI Indicator	For example, in a responsive classroom:	For example, in a non- responsive classroom:	Field notes: Time or line(s) of example	Field notes: Time or line(s) of non- example	Field notes: No example (*)	SCORE for Indicator
 The teacher establishes genuine partnerships (equitable relationships) with parents/ caregivers 	 Generally Effective Practices: Parents'/caregivers' ideas are solicited on how best to instruct the child; parents are viewed as partners in educating their child There is evidence of conversations with parents/caregivers where it's clear that they are viewed as partners in educating the student Practices that are Culturally Responsive: Teacher makes an effort to understand families and respects their cultural knowledge by making a concerted effort to develop relationships in order to learn about their lives, language, histories, and cultural traditions Teacher makes an effort to communicate with families in their home languages (e.g.,learning key terms in the student's home language, translating letters, using translation tools involving a family liaison, etc.) 	 Parents'/caregivers are never consulted on how best to instruct their child, and/or their suggestions are not incorporated in instruction No effort made to establish relationships with caregivers There is evidence of a "deficit perspective" in which families and caregivers are viewed as inferior and/or as having limited resources that can be leveraged for instruction All communication with families is in English. 				
2. The teacher reaches out to meet parents in positive, non-traditional ways	Generally Effective Practices: Teacher conducts home visit conferences Teacher makes "good day" phone calls and establishes regular communication with parents Practices that are Culturally Responsive: Teacher plans parent/family activities at locations within the home community Teacher meets parents in parking lot or other locations that may be more comfortable for them	 Communication with parents/caregivers is through newsletters or similar group correspondence,, where they are asked to respond passively (e.g., signing the newsletter, versus becoming actively involved in their child's learning) Teacher conducts phone calls, conferences, personal notes to parents for negative reports only (e.g., discipline) 				
 The teacher encourages parent/family involvement 	 Generally Effective Practices: Parents are encouraged to be actively involved in school-related events and activities Parents/caregivers are invited into the classroom to participate and share experiences Practices that are Culturally Responsive: Parents from diverse linguistic and cultural backgrounds are invited to share their unique experiences and knowledge (e.g., sharing their stories, 	 Parents/caregivers are never involved in the instructional program There is no evidence of home/family connections in the classroom 				

					CRIOP	- Page 5
	reading books in their native language, teaching songs and rhymes in their native language, etc.)					
4. The teacher intentionally learns about families' linguistic/cultural knowledge and expertise to support student learning	 Practices that are Culturally Responsive: Teacher identifies families' "funds of knowledge" so it can be used to facilitate student learning (e.g., through home visits; social events for families where information is solicited; conversations with parents and students about their language, culture, and history; attending community events; home literacy projects; camera projects etc.) 	•	Families' "funds of knowledge" are never identified			

III. ASMT ASSESSMENT PRACTICES



Consistently Often

Occasionally Rarely

	RI Indicator	For example, in a responsive classroom:	For example, in a non-responsive classroom:	Field notes: Time or line(s) of example	Field notes: Time or line(s) of non- example	Field notes: No example (✓)	SCORE for Indicator
1.	Formative assessment practices are used that provide information throughout the lesson on individual student understanding	 Generally Effective Practices: Teacher frequently assesses students' understanding throughout instruction and uses assessment data throughout the lesson to adjust instruction Students are able to voice their learning throughout the lesson Informal assessment strategies are used continuously during instruction, while students are actively engaged in learning, and provide information on the learning of every student (e.g. "talking partners," whiteboards, journal responses to check continuously for understanding) Teacher modifies instruction or reteaches when it's clear that students are not meeting learning targets 	 Assessment occurs at the end of the lesson Assessment is not embedded throughout instruction Assessment is regarded as a set of evaluation "tools" that are used to determine what students have learned (e.g., exit slips, quizzes, etc. that are administered after instruction has occurred versus examining students' cognitive processing during instruction) Teacher follows the lesson script even when it's clear that students are not meeting learning targets The goal is to get through the lesson and cover the content versus assuring student understanding 				
2.	Students are able to demonstrate their learning in a variety of ways	 Generally Effective Practices Divergent responses and reasoning are encouraged; students are able to share the processes and evidence they used to arrive at responses versus simply providing "the" correct answer Practices that are Culturally Responsive: Students with limited English proficiency and/or limited literacy can show their conceptual learning through visual or other forms of representation (e.g., drawing, labelling, completing graphic organizers etc. depending upon their level of English language acquisition) 	 Most or all tests are written and require reading/writing proficiency in English Teacher expects students to tell "the" answer Students have a narrow range of options for demonstrating competence (e.g., multiple choice tests, matching, etc.) 				
3.	Authentic assessments are used frequently to determine students' competence in both language and content.	 Generally Effective Practices: Students' written and oral language proficiency is assessed while they are engaged in purposeful activity Teacher primarily uses authentic, task- embedded assessments (e.g., anecdotal notes, targeted observation, rubrics/analysis of students' written products, math charts/journals, 	 Assessments measure discrete, isolated skills and/or use short, disconnected passages Students' linguistic competence is never assessed, or is evaluated solely through standardized measures Assessments are "exercises" that students must complete versus meaningful, purposeful work 				

				CRIOP -	- Page 7
 Students have opportunities for self- assessment 	etc.) Practices that are Culturally Responsive: • Teacher assesses both academic language and content Generally Effective Practices: • Students are encouraged to evaluate their own work based upon a determined set of criteria • Students are involved in setting their own goals for learning • Students are involved in developing the criteria for their finished products (e.g., scoring rubrics)	Assessment is always teacher-controlled			

CRIOP - Page 8

0

IV. INSTR INSTRUCTIONAL PRACTICES

Holistic score 4 3 2

Consistently Often Occasion:

Occasionally Rarely Never

1

CRI Indicator	For example, in a responsive classroom:	For example, in a non-responsive classroom:	Field notes: Time or line(s) of example	Field notes: Time or line(s) of non- example	Field notes: No example (✔)	SCORE for Indicator
 Instruction is contextualized in students' lives, experiences, and individual abilities 	 Generally Effective Practices: Learning activities are meaningful to students and promote a high level of student engagement Materials and real-world examples are used that help students make connections to their lives Learning experiences build on prior student learning and invite students to make connections Practices that are Culturally Responsive: Teacher uses instructional methods/activities that provide windows into students' worlds outside of school (e.g., "All About Me" books, student-created alphabet walls, camera projects, etc.) Teacher views students' life experiences as assets and builds on students' cultural knowledge, linguistic knowledge, and "cultural data sets," making connections during instruction in the various content areas Materials and examples are used that reflect diverse experiences and views Families' "funds of knowledge" are integrated in learning experiences when possible; parents are invited into the classroom to share their knowledge 	 Learning tasks and texts reflect the values and experiences of dominant ethnic and cultural groups No attempt is made to link students' realities to what is being studied; learning experiences are disconnected from students' knowledge and experiences Skills and content are presented in isolation (never in application to authentic contexts) Teacher follows the script of the adopted curriculum even when it conflicts with her own or the students' lived experiences Learning experiences are derived almost exclusively from published textbooks and other materials that do not relate to the classroom community or the larger community being served Families "funds of knowledge" are never incorporated in the curriculum; parents are never invited to share their knowledge 				
 Students engage in active, hands-on, meaningful learning tasks, including inquiry-based learning 	 Learning tasks allow students to practice and apply concepts using hands-on activities and manipulatives Learning activities promote a high level of student engagement Exploratory learning is encouraged Teacher engages students in the inquiry process and learns from students' investigations (e.g., inquiry-based and project-based learning) Students are encouraged to pose questions and find answers to their questions using a variety of resources 	 Students work passively at their seats on teacher-directed tasks Passive student learning is the norm (e.g., listening to direct instruction and taking notes, reading the textbook, seatwork, worksheets, etc.) Exploratory learning is discouraged Teacher is the authority Students are not encouraged to challenge or question ideas or to engage in further inquiry Students are not encouraged to pose their own questions All knowledge/ideas are generated by those in 				

			CRIOP - Page 9
	 Student-generated questions form the basis for further study and investigation 	authority (e.g., textbook writers, teachers)	
 The teacher focuses on developing students' academic language 	 There is an emphasis on learning academic vocabulary in the particular content area Students are taught independent strategies for learning new vocabulary Key academic vocabulary and language structures are identified prior to a study or investigation Practices that are Culturally Responsive: Teacher develops language objectives in addition to content objectives, having specific goals in mind for students' linguistic performance Teacher articulates expectations for language use (e.g "I want you to use these vocabulary words in your discussion; I expect you to reply in a complete sentence" etc.) Teacher scaffolds students' language development as needed (sentence frames, sentence starters, etc.) Academic language is taught explicitly (identifying it in written passages, dissecting complex sentences, using mentor texts, creating "learning/language walls," etc.) 	 Little attention is paid to learning academic vocabulary in the content area New words are taught outside of meaningful contexts Students are not taught independent word learning strategies Teacher does not articulate expectations for language use The teacher does not establish language objectives for students; only content objectives are evident Teacher does not scaffold students' language development No attention is given to the language used in particular disciplines; academic language is not addressed Students are evaluated on their use of academic discourse but it is never taught explicitly 	
 The teacher uses instructional technique that scaffold student learning 	 Teacher uses a variety of teaching strategies to assist students in learning content (e.g., demonstrations, visuals, graphic organizers, reducing linguistic density, etc.) Teacher models, explains and demonstrates skills and concepts and provides appropriate scaffolding Teacher uses "comprehensible input" (e.g., gestures, familiar words and phrases, slower speech, etc.) to facilitate understanding when needed Teacher builds on students' knowledge of their home languages to teach English (e.g., cognates, letter-sound relationships, syntactic patterns) 	 Teacher primarily uses traditional methods for teaching content (e.g., lecture, reading from a textbook) with few scaffolding strategies Teacher does not always model, explain and demonstrate new skills and concepts prior to asking students to apply them Teacher does not use visuals, comprehensible input etc. to facilitate understanding Teacher does not build upon students' home languages to teach terms, skills and concepts in English 	
 Students have choices based upon their experiences, interests and strengths 	 Students have multiple opportunities to choose texts, writing topics, and modes of expression based on preferences and personal relevance Students have some choice in assignments Students have some choice and ownership in what they are learning 	 Teacher selects texts, writing topics, and modes of expression for students All assignments are teacher-initiated Students have no choice or ownership in topic of study or questions that will be addressed 	

V. DIS DISCOURSE

		- Page 10				
Holistic score	4	3	2	1	0	
	Consistently	Often	Occasionally	Rarely	Never	

Consistently Often Occasionally

Rarely

CI	RI Indicator	For example, in a responsive classroom:	For example, in a non-responsive classroom:	Field notes: Time or line(s) of example	Field notes: Time or line(s) of non- example	Field notes: No example (♥)	SCORE for Indicator
1.	The teacher promotes active student engagement through discourse practices	 Teacher employs a variety of discourse protocols to promote student participation and engagement (e.g., call and response, talking circles, read-around, musical shares, etc.) All students have the opportunity to participate in classroom discourse Teacher uses various strategies throughout the lesson to promote student engagement through talk (e.g., partner share, small group conversation, interactive journals, etc.) 	 teacher poses a question and individual students respond The teacher controls classroom discourse by assigning speaking rights to students 				
2.	The teacher promotes equitable and culturally sustaining discourse practices	 Generally Effective Practices: Students use collaborative, overlapping conversation and participate actively, supporting the speaker during the creation of story talk or discussion and commenting upon the ideas of others Teacher uses techniques to support equitable participation, such as wait time, feedback, turn-taking, and scaffolding of ideas Practices that are Culturally Responsive: Students speak in their home language/dialect when it is situationally appropriate to do so There is an emphasis on developing proficiency in students' native language as well as in Standard English; bilingualism/ multilingualism is encouraged (e.g., students learn vocabulary in their native languages; students read/write in their native languages; students learn songs and rhymes in other languages, etc.) 	 Discourse practices of various cultural groups are not used during instruction Students are discouraged from using their home language or dialect and communicating in culturally specific ways, even when it is situationally appropriate to do so Emerging bilingual students are discouraged from using their native language, both inside and outside of school Students are discouraged from communicating in a language other than English There is no evidence of attempts to promote bilingualism/multilingualism 				
3.	The teacher provides structures that promote academic conversation	 Generally Effective Practices: Students engage in genuine discussions and have extended conversations Teacher explicitly teaches and evaluates skills required for conducting effective academic conversations Practices that are Culturally Responsive: Teacher provides prompts that elicit extended conversations and dialogue (e.g. questions on 	 Students are discouraged from talking together, or conversations are limited to short responses Teacher rarely asks questions or provides prompts that would elicit extended dialogue Teacher does not teach skills required for academic conversations 				

						CRIOP	- Page 11
		current issues; questions that would elicit differing points of view)					
4	The teacher provides opportunities for students to develop linguistic competence	 Generally Effective Practices: Teacher provides many opportunities for students to use academic language in meaningful contexts Students are engaged in frequent and authentic uses of language and content (drama, role play, discussion, purposeful writing and communication using ideas/concepts/vocabulary and syntactic structures from the field of study) Practices that are Culturally Responsive: Students are taught appropriate registers of language use for a variety of social contexts and are given opportunities to practice those registers in authentic ways 	•	Students' use of language is limited and they do not use language in authentic ways Students are not taught about the registers of language use; they are expected to use Standard English in all social contexts			

VI. CRITICAL CRITICAL CONSCIOUSNESS

CRIOP - Page 12Holistic score43210

Consistently Often Occasionally Rarely

Never

Field notes: Field notes: Field notes: SCORE for **CRI Indicator** For example, in a responsive For example, in a non-responsive Time or Time or No example Indicator classroom: classroom: line(s) of line(s) of (1) example nonexample Generally Effective Practices: 1. The curriculum and • The focus of literacy and content instruction Students are engaged in experiences that is to teach the skills and information planned learning develop awareness and provide opportunities required to "pass the test"; learning occurs experiences provide to contribute, inform, persuade and have a only as it relates to the standard curriculum voice in the classroom, school and beyond Teacher does not encourage critical thought opportunities for the . ٠ Community-based issues and projects are or questioning of contemporary issues inclusion of issues included in the planned program and new • Teacher does not encourage application to important to the skills and concepts are linked to real-world real-world issues; accepts or endorses the classroom, school and problems and events status quo by ignoring or dismissing real life problems related to the topic being Practices that are Culturally Responsive: community • Students explore important contemporary studied issues (poverty, racism, global warming, human trafficking, animal cruelty, etc.) • Teacher encourages students to investigate real-world issues related to a topic being studied and to become actively involved in solving problems at the local, state, national, and global levels Practices that are Culturally Responsive: 2. The curriculum and Teacher does not encourage students to Teacher facilitates students' understanding of examine biases in instructional materials or ٠ planned learning popular texts; texts are considered to be stereotypes and biases experiences incorporate "neutral" • Teacher encourages students to examine Teacher never addresses issues related to opportunities to biases in popular culture that students . encounter in their daily lives (TV shows, human differences confront negative advertising, popular songs, etc.) Teacher makes prejudicial statements to • stereotypes and biases Teacher makes intentional use of multicultural . students (e.g., girls are emotional; literature to facilitate conversations about immigrants don't belong here; etc.), and/or human differences fails to challenge prejudicial statements of students As appropriate to the grade level being taught, ٠ teacher helps students to think about biases in texts (e.g., "Who has the power in this book? Whose perspectives are represented, and whose are missing? Who benefits from the beliefs and practices represented in this text?" etc.) As appropriate to the grade level being taught, teacher challenges students to deconstruct their own cultural assumptions and biases both in the formal and informal curriculum

	CRIOP - Page	13
 The curriculum and planned learning experiences integrate and provide opportunities for the expression of diverse perspectives Generally Effective Practices: Students are encouraged to challenge the ideas in a text and to think at high levels Practices that are Culturally Responsive: Texts include protagonists from diverse backgrounds and present ideas from multiple perspectives Students are encouraged to explore alternative viewpoints Opportunities are plentiful for students to present diverse perspectives through class discussions and other activities Students are encouraged to respectfully disagree with one another and to provide evidence to support their views Extension of the protagonist form diverse backgrounds and present ideas from multiple perspectives Students are encouraged to explore alternative viewpoints Students are encouraged to respectfully disagree with one another and to provide evidence to support their views Statemation of the protagonist form diverse perspectives for the perspective fully disagree with one another and to provide evidence to support their views	 The conventional, dominant point of view is presented and remains unchallenged Few texts are available to represent diverse protagonists or multiple perspectives Biased units of study are presented that show only the conventional point of view (e.g., Columbus discovered America) or that ignore other perspectives (e.g., a weather unit that does not include a discussion of global warming) No or very few texts are available with protagonists from diverse cultural, linguistic, and/or socioeconomic backgrounds No opportunities are provided for students to learn about or to present diverse views 	

Appendix B

Teacher Interview Questions Summative

- 1. What have you learned about yourself over the course of these professional development sessions?
- 2. Do you feel that your answers that you submitted provide an accurate depiction of your experience?
 - a. Is there anything that we should know that was not shared?
- 3. What has been the biggest takeaway from the professional development sessions that have led to changes in your classroom?
 - a. What are some of those changes?
- 4. What do you see as your next step in becoming a more culturally relevant teacher?
 - a. What support do you see you needing?
- 5. If you could go back and start the school year over again with the same group of students, what would you do differently based on what you have learned?
 - a. Why?

Appendix C

Culturally Responsive Teaching Preparedness Scale

Directions: Rate how confident you are that your professional education preparation has prepared you to complete the following culturally responsive teaching practices using a 10 point Likert type scale with a range of 0 (Not at all) to 10 (Exemplary). This is not a test, so there is no right or wrong answers to the questions. All responses are anonymous and confidential.

0 1	1	2	34	4	5	6	7	8	9	10
	lovice			Below Apprentice	Apprentice	Above Apprentice	Below Proficient	Proficient	Above Proficient	Exemplary

I believe my teacher education program has....

- prepared me to take a stand against prejudice by constructively disagreeing with those who makes stereotypical statements.
- prepared me to take a stand for social justice, human rights and equal opportunity for all human beings.
- 3. addressed racial, ethnic, socioeconomic class, gender, special education, and sexual orientation pedagogical skills as it relates to student achievement.
- 4. raised my awareness for the need to attend professional development activities or events regarding teaching and learning about diversity.
- 5. allowed me to experience both educational and ethical cultural diversity values other than my own.
- 6. provided opportunities (i.e., classroom discussions, events, trainings/ workshops) to discuss my personal diverse field experiences.
- _____7. prepared me to demonstrate a basic knowledge and understanding of cultural awareness.
- 8. prepared me to utilize a student's social and cultural heritage as it relates to student learning.
- 9. intentionally created opportunities to teach individuals from diverse groups.
- 10. encouraged me to engage in volunteer experiences that allow me to work in diverse settings.

0	1	2	3	4	5	6	7	8	9	10
Not At All	Below Novice	Novice	Above Novice	Below Apprentice	Apprentice	Above Apprentice	Below Proficient	Proficient	Above Proficier	Exemplary

I believe my teacher education program has

- 11. provided me with opportunities to observe students from diverse backgrounds and cultures.
- 12. enhanced my interpersonal communication skills when interacting with people from different cultures.
- 13. given me the opportunity to participate in group discussions about race, class and gender.
- 14. inspired me to take a leadership role with respect to diversity in my professional field.
- 15. stressed the need to avoid categorizing individuals based on their race.
- 16. prepared me to collaborate with colleagues from diverse backgrounds despite our racial or cultural differences.
- 17. prepared me to teach a diverse group of students, particularly those of color.
- 18. emphasized that all students' learning styles are different within the same racial or ethnic group.
- _____19. prepared me to incorporate multicultural education practices into the curriculum.
- 20. stressed the importance of effectively communicating with parents from backgrounds different than my own.
- 21. prepared me to appreciate and understand how global educational issues are relevant to my education.

In the comment box below: Please include additional comments about your college diversity learning experiences (if you need more space use the back).

Comment:

In the comment box below: Please include additional comments about your student teaching cultural diversity learning experiences (if you need more space use the back).

Comment:

Appendix D

Journaling Questionnaire

(12-36 hours after training)

- What are your initial thoughts after completing the last novice teacher professional development?
- 2. How are you thinking differently about yourself as a teacher?
- 3. What are you thinking about in regards to student experiences in your class?
- 4. Are you thinking about any changes in your classroom?

(3-5 days after training)

- What practices are you thinking about trying after completing the last novice teacher professional development?
- 2. Share any reflections you have had about yourself as a teacher.
- Discuss how you have reflected on your student's experience since the last novice teacher PD.
- 4. What changes have you made in your classroom, or what changes are you looking at making?

(Within 2 weeks of training)

- 1. What are your thoughts on the actions/changes you have made and their effectiveness in your classes?
- 2. What thoughts do you have about your teaching and the training you have received thus far?
- 3. If students were to describe the changes they saw since your last novice teacher professional development, what would they say?
- 4. What future changes are you considering making? Who may you seek support from?

Appendix E

Balancing Measures

- On a scale of 1-5 (not useful, barely useful, neutral, somewhat useful, extremely useful), how applicable is your latest novice teacher PD applicable to your teaching practice?
- 2. On a scale of 1-5, (not stressed, barely stressed, neutral, pretty stressed, very stressed) what is your stress level at this time for the following?
 - a. Personal Stress Level
 - b. Student Interaction Stress Level
 - c. Parent Interaction Stress Level
 - d. Administrative Interaction Stress Level
 - e. Classroom Planning Stress Level
- 3. What items would you contribute to your score being what it is?
- 4. Is there anything additional that you would like to share?

Appendix F

SPSS T-Test Results

Question #3

				Paired Differen	ices				Signif	icance
				Std. Error	95% Confidence Differ					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	1.00000	3.31662	1.25357	-2.06737	4.06737	.798	6	.228	.455
Pair 2	Mid-Post	.40000	2.30217	1.02956	-2.45853	3.25853	.389	4	.359	.717
Pair 3	Pre-Post	2.20000	2.16795	.96954	49186	4.89186	2.269	4	.043	.086

					Question #	5				
				Paired Differer	ices				Signifi	cance
				Std. Error	95% Confidence Interval of the Std. Error Difference					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	1.42857	1.71825	.64944	16054	3.01769	2.200	6	.035	.070
Pair 2	Mid-Post	20000	2.28035	1.01980	-3.03143	2.63143	196	4	.427	.854
Pair 3	Pre-Post	1.20000	1.09545	.48990	16017	2.56017	2.449	4	.035	.070

Question #9

				Paired Differer	ices				Signifi	icance
				Std. Error	95% Confidence Interval of the Std. Error Difference					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	2.28571	1.79947	.68014	.62148	3.94995	3.361	6	.008	.015
Pair 2	Mid-Post	80000	2.58844	1.15758	-4.01397	2.41397	691	4	.264	.528
Pair 3	Pre-Post	2.00000	2.34521	1.04881	91196	4.91196	1.907	4	.065	.129

Question #10

				Paired Differen	ces				Signifi	icance
				Std. Error		95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	2.71429	3.03942	1.14879	09671	5.52528	2.363	6	.028	.056
Pair 2	Mid-Post	-3.20000	3.42053	1.52971	-7.44714	1.04714	-2.092	4	.052	.105
Pair 3	Pre-Post	.60000	1.94936	.87178	-1.82045	3.02045	.688	4	.265	.529

Question #11

				Paired Differen	ces				Signifi	cance
				Std. Error	95% Confidence Interval of the Difference					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	3.14286	4.91354	1.85714	-1.40141	7.68712	1.692	6	.071	.142
Pair 2	Mid-Post	-3.60000	3.64692	1.63095	-8.12824	.92824	-2.207	4	.046	.092
Pair 3	Pre-Post	1.80000	2.28035	1.01980	-1.03143	4.63143	1.765	4	.076	.152

Question #13

	Paired Differences								Significance	
				Std. Error	95% Confidence Differ					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	1.57143	2.50713	.94761	74728	3.89014	1.658	6	.074	.148
Pair 2	Mid-Post	.00000	1.58114	.70711	-1.96324	1.96324	.000	4	.500	1.000
Pair 3	Pre-Post	2.00000	1.87083	.83666	32294	4.32294	2.390	4	.038	.075

Question #14										
Paired Differences								Significance		
				Std. Error	95% Confidence Differ					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p
Pair 1	Pre-Mid	1.00000	3.31662	1.25357	-2.06737	4.06737	.798	6	.228	.455
Pair 2	Mid-Post	.40000	2.30217	1.02956	-2.45853	3.25853	.389	4	.359	.717
Pair 3	Pre-Post	2.20000	2.16795	.96954	49186	4.89186	2.269	4	.043	.086

Question #16

	Paired Differences								Significance		
				Std. Error	95% Confidence Differ						
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p	
Pair 1	Pre-Mid	1.14286	2.67261	1.01015	-1.32890	3.61461	1.131	6	.151	.301	
Pair 2	Mid-Post	40000	1.67332	.74833	-2.47770	1.67770	535	4	.311	.621	
Pair 3	Pre-Post	1.60000	1.51658	.67823	28308	3.48308	2.359	4	.039	.078	

Question #17

	Paired Differences								Significance		
				Std. Error	95% Confidence Interval of the Difference						
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	One-Sided p	Two-Sided p	
Pair 1	Pre-Mid	1.00000	1.63299	.61721	51027	2.51027	1.620	6	.078	.156	
Pair 2	Mid-Post	-1.40000	.89443	.40000	-2.51058	28942	-3.500	4	.012	.025	
Pair 3	Pre-Post	.00000	1.22474	.54772	-1.52072	1.52072	.000	4	.500	1.000	