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Culturally Responsive Teaching Within a Montessori Learning Environment

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CULTURALLY RESPONSIVE TEACHING WITHIN A MONTESSORI LEARNING
ENVIRONMENT

by

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A capstone submitted in partial fulfillment of the requirements for the degree of Master
of Arts in English as a Second Language

Hamline University
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DEDICATION

To my amazing wife, who believed in me so much that she left her beloved Poland to

start a new life in America. Your faith in me is what keeps me going. Know that I will

always be there to support you as you pursue your dreams. To my four children, who I

have had the honor of raising into compassionate adults. You are my inspiration.   To all

the students I have taught over the years, who live and thrive in two or more cultures. I

hope this capstone will encourage others to see you for the extraordinary people you are.

CHAPTER ONE

Introduction

Introduction

I have been a teacher in a large Midwestern school district for almost 25 years. I began as an adult educator in the district's Adult Education program, where I taught in various capacities such as, adult diploma, ESL (English as a Second Language), GED (General Education Diploma), and citizenship. Six years ago, I left adult education and was fortunate to obtain a position as an ESL teacher at an elementary Montessori school in the same district.Through these various positions, I had the opportunity of working with students from diverse cultures and backgrounds. Over the years, I have come to realize that I learn just as much from my students as they learn from me.

During my teaching tenure, my state's foreign-born population increased from 114,000 in 1990 to nearly 400,00 in 2012. (Minnesota State Demographic Center, 2015) But even as classrooms became culturally diverse, there continued to be a reluctance among many teachers to view their students with a holistic approach. Teachers often failed to consider their students' languages, races, and cultures as if these things had no bearing on their success in school. It seemed that teachers and administrators were expecting students to adapt to the school's culture while completely disregarding the child's culture. The ideas behind Culturally Responsive Teaching (CRT) state that when teachers recognize the cultures of their students and allow students to build upon their

background knowledge and experiences, they have a higher chance of succeeding academically. (Gay, 2002, p. 106)

Therefore, this capstone addresses the question: *how might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic achievement gap between white students and students of color*? The capstone examines the role of culture in education and compares the ideas behind Culturally Responsive Teaching with the philosophy behind Montessori pedagogical methods. This project stems from my experience as an English as a Second Language (ESL) teacher in a Montessori elementary school.

Personal Journey

Because some of the reluctance of teachers to incorporate CRT into their classroom stems from their unwillingness to acknowledge their own cultural identity, the first part of chapter one will focus on my cultural realizations. Robinson defined cultural identity as "both visible and invisible domains of the self that influence self-construction. They include but are not limited to, ethnicity, skin color, gender, sexual orientation, nationality, and physical and intellectual ability" (Robinson, as cited in Berry & Candis, 2013, p.45).

Growing up in a white middle-class family in a small Midwestern city in the 1970s, I never met anyone born outside of the United States or anyone whose culture was different from my own. Moreover, according to cultural identity scholars, this is entirely normal. "…it is rare that a white person has an experience that causes them to assess their attitudes about being a racial being" (Robinson, as cited in Berry & Candis, 2013, p.45).

Therefore, I did not begin to realize my own cultural identity until I volunteered for the United States Peace Corps and got the chance to live and work in another country.

During my first six months as a Peace Corps volunteer in Poland, three events helped me perceive myself through a cultural lens. The first occurred when the only two African American volunteers in the group announced they were resigning from the Peace Corps because of the racist harassment they received from the native population, which was 95% white. For the first time, I became aware of my privilege status as a white person. The second revelation of my cultural identity was that I did not speak the Polish language at a time when very few Polish people spoke English.This experience opened my eyes to the fact that not everyone in the world spoke my native language. Lastly, on the fourth Thursday of November, I went to work like any other day instead of basking in my family and friends' warm company. The sense of loneliness I felt that Thanksgiving Day I will never forget. This experience taught me that none of us knows just how ingrained our culture is until we remove ourselves from it.

But the most significant part of my cultural reflection occurred as a result of my marriage to my now Polish wife of twenty-seven years and becoming a member of her Polish family. Growing up in an American nuclear family, I was under the impression that my family consisted of two parents and two sisters. I soon discovered that in Poland, there was no distinction between immediate and extended family. Family included all relatives and close friends who were lovingly referred to as *ciotka* (aunt) and *wujek* (uncle). Every Sunday afternoon, the front door would be left wide open to anyone who wanted to visit. My wife's mother would greet each person with a warm embrace, three

kisses on their cheeks, and a table full of delicious Polish cuisine. It was then that I learned the Polish proverb, *a guest in the house is God in the house*. This experience taught me to be nonjudgmental when viewing cultures different from my own, and it made me curious to expand my cultural knowledge.

Though my experience in the Peace Corps brought me into contact with people from different cultures, it did not bring me into contact with people of different races. I acknowledge I still have a lot of growing to do. In her book, *White Fragility,* Robin Diangelo wrote, "The most profound message of racial segregation may be that the absence of people of color from our lives is no real loss" (2018, p. 67). Even at the age of 55, all my closest friends are still white, which means I still have not done enough to seek out the friendships of racially different people.

Professional Journey

After serving two years in the Peace Corps, my wife and I moved back to Minnesota, where I obtained a position teaching ESL in the Minneapolis Adult Education program (ABE). It was here I became aware of how quickly my city's demographic composition was changing. The classes I taught consisted of Hmong, Somali, Russian, Vietnamese, Cambodian, Latino, and Liberian refugees. I learned about my students by having them write essays about their journeys to the United States. Through these essays, I began to understand the immigrant experience and the struggles they endured to make a better life for themselves and their families.

During this time, I also taught in the adult diploma program where I helped both native and nonnative speakers of English obtain their high school diplomas. I soon

discovered that people did not drop out of high school because of character flaws but because of circumstances beyond their control. For the first time, I heard stories of domestic abuse, parental neglect, teenagers as primary caregivers, homelessness, and schools failing kids.

For the last five years, I have been an ESL teacher at an elementary Montessori school located in one of the most affluent neighborhoods in my city. According to demographic data, whites make up a higher percentage of neighborhood residents than the city as a whole and have a higher median household income (World Population Review, 2020). The school itself is identified as low poverty with two-times the percentage of white students than the district as a whole.

The students I teach are predominately Somali and were born in the United States or arrived in the United States at a very young age. Since the school's status is a magnet Montessori school, it draws and buses students from an area larger than its immediate neighborhood. Consequently, ELL students at the school, most of whom live in communities far outside the regular busing zones, can attend. However, even this has not prevented a decline in the school's ELL numbers. Four years ago, the number of ELLs at the school required the support of two full-time ESL teachers, but as of next year, there will only be one teacher due to a decline in ELL enrollment. Some reasons for this decline in numbers may relate to the transient tendencies of immigrant families, the transferring of students to all-Somali charter schools, and the government restrictions currently being placed on the number of refugees entering the country. Another reason

could be the school's failure to acknowledge the culture of the students of color who attend.

Rationale

Many of the ideas behind the Montessori teaching methods would seem conducive to CRT; 1) education must be children centered with lessons adapted to meet the interest of each child; 2) children work independently and at their own pace; 3) teachers do not dominate the classroom but give each child meaningful feedback; 4) children are free to move about the classroom and are exposed to different learning environments; 5) and children learn best in a social environment where they can teach others what they learned. (Bragdon, 2014, p. 7).

Based on my observations, not all teachers practice all of these concepts. There have been times when I have observed my ELL students wandering around their classrooms, unable to convey to me what they were learning. I have observed classes with little conversation happening among students, which shows indifference to the Montessori idea of creating a social environment and allowing students to teach one another.

The foremost theorist on CRT, Gloria Ladson-Billings, stated that students learn best in an environment that supports both home and school cultures and that teachers should use students' cultural experiences to help them grow academically (Ladson-Billings, 1995). This idea directly parallels Maria Montessori's pedagogical philosophy:

When the independent life of the child is not recognized with its own

characteristics and ends, when the adult man interprets these characteristics and

ends, which are different from his, as being errors in the child which he must

make speed to correct, there arises between the strong and the weak a struggle

which is fatal to mankind (Montessori, 1986, p. 20).

This begs the question, why cannot the two teaching methods exist within the same

learning environments?

Even though 14% of students at the school go home every day and speak a

language other than English, and even though 20% students are either African or African

American and are forced to deal with issues of race regularly, there is very little

representation of this diversity in the school's culture or the curriculum. Furthermore, the

fact that the school's teaching staff is currently 95% white impedes this from ever

changing.

This school year, I kept a journal recording some of the cultural insensitivity I

observed at my school, and these are some examples. A teacher complained about a

Somali 2nd grader's work ethic as if this were somehow a determiner to her lack of

academic progress. A teacher called on a Somali student to explain the Ramadan holiday

to her classmates instead of taking the time to learn about it herself. Teachers complained

about the lack of parental support with student homework. One ELL 4th grader was

caught forging her name on another student's assignment because she felt overwhelmed

by the amount of homework. Some teachers on the school's ILT (Instructional Leadership

Team) committee criticized the idea of having a Family Inclusion day celebrating the

school's diversity of cultures. They said it interfered with preparing students for an upcoming standardized test. All these events stemmed from a lack of cultural sensitivity.

But the primary rationale for the capstone relates directly to the academic achievement of my students. The school's standardized test scores are some of the highest in the district. In 2019 80% percent of third and fourth graders tested proficient in math, and 76% scored proficient in reading. Nevertheless, when these scores were broken down by race and culture, a different picture emerged. While 91% of white students met or exceeded levels of proficiency in math, only 47% of black students and 36% of ELLs students did the same. On the reading test, 83% of white students scored at or above levels of proficiency compared with 40% of black students and 18% of ELLs (State Dept. of Education, 2020). Because the teaching strategies of CRT, discussed in the next chapter, are shown to engage more students, implementing such practices could help alleviate this inequity in achievement.

Conclusion

A momentous event took place as I began my last class towards the completion of my master's degree capstone. The killing of George Floyd while in police custody could be the spark that leads to world-wide changes in how people perceive racial injustice. At my final school staff meeting of 2020, I heard teachers at my school for the first time, speak on racial issues that before George Floyd, were considered taboo. My hope is this societal shift opens teacher's hearts and minds to exploring the ideas around Culturally Responsive Teaching so every student, no matter their culture or race, will reach their academic potential.

This chapter described how a white teacher came to grips with his own cultural identity through his life and professional experiences. It also acknowledged that he still had a lot of work to do when it came to developing close relationships with people of color. It also made a connection between Culturally Responsive Teaching and Montessori methods of instruction and that they have enough in common to be practiced within the same classroom environment as relates to the research question: *how might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic achievement gap between white students and students of color*? The chapter also described the cultural insensitivity witnessed over a school year, the inequity in standardized test scores, and how incorporating CRT methods in the classroom could better serve all students. Chapter 2 reviews the literature and research surrounding CRT and Montessori methods of instruction and their compatibility. Chapter 3 outlines the project, which is to create professional development around the research question. Chapter 4 reflects on the project and discusses its implications.

CHAPTER TWO

Literature Review

Introduction

The purpose of this chapter is to review the research that has been published on

cultural identity and Culturally Responsive Teaching (CRT) as relates to Montessori

teaching methods and philosophy. Because of the demographic shift in the United States

over the last thirty years, Montessori schools no longer just serve students from white

middle-class families but of all racial and cultural backgrounds (Banks & Maixner,

2016). Recent data shows that even in the most successful Montessori schools, students

of color lag behind their white peers in academic achievement. Therefore, this literature

review examines the groundwork laid by scholars that relate to the research question, *how*

might the use of Culturally Responsive Teaching within a Montessori learning

environment help eliminate the academic gap between white students and students of

color?

Cultural Identity

Research on the importance of cultural identity in education shows that culture

plays a significant role in a student's academic success. Teachers must learn to

acknowledge their students' cultures as well as of their own. Only when teachers accept

and genuinely understand their own culture can they begin to understand their students.

The first part of this section defines the term *cultural identity*. The second part reviews

the literature on the role language plays in determining one's cultural identity and the impact this has had on the education students receive. Lastly, there is an overview of the literature regarding the ideas of race in defining one's cultural identity, and the harmful impact racism has on students of color both physically and academically and what educators can do to alleviate this impact.

Definition

Before exploring the connection cultural identity had to a student's academic achievement, it is essential to consider cultural identity's meaning. According to Edward Taylor (2013), cultural identity was "one's understanding of the multilayered, interdependent, nonsynchronous, interaction of social status, language, race, ethnicity, values, and behaviors that permeate and influence nearly all aspects of our lives." (Taylor, 1999 as cited in Berry & Candis, 2013, p.45). Berry and Candis defined it as the "shared beliefs, values, traditions, customs, practices, and language" of a particular group (Berry & Candis, 2013, p.45). Furthermore, Goodenough wrote that it is the knowledge a person needs to have to function in a way that is accepted by their societal members (Goodenough, 1981, as cited in Rangriz & Harati, 2017, p. 210). Another definition of cultural identity was simply one's *collective identity* (Jenkins, 2004 as cited by Altugan, 2014, p. 1159). The one commonality of all these definitions was the idea of a person's identity fitting into a broader community. Therefore, the two aspects of cultural identity that were analyzed and that had the most significant impact on the research question were language and race.

Language

        Language plays a significant role in the cultural identity of all students. In Rangriz and Harait's (2017) article "The Relationship between Language and Culture," they analyze how language and culture are connected. Two possibilities are that culture influences how a language is used and communicated, or that language influences the culture and behaviors that one learns as a member of a specific group (Rangriz and Harait's, 2017). Another theory derived from Khatib, Tabori, and Mohammadi stated that people's culture reflects the language that they use. Language gives meaning to the objects and ideas a culture values. (Khatib, Tabori, & Mohammadi, 1986) This is observed in linguistic translations when a person may be flummoxed by a particular word with no equivalent in another language. In the United States, when people greet each other, they use the informal greeting, "hello. How are you?" In the Arabic world, a verbal greeting consists of the words "salamo alaykom," which when translated to English means, "peace be upon you."

        Therefore, what impact does language play when our English Language Learners (ELLs) enter school and must adapt to the language and culture of the school they are attending and must abandon their home language and culture? The linguistic imperialism, (Kubota & Lin, 2009) that affects today's ELLs, has a long and tragic history. In his book *The Heartbeat of Wounded Knee*, David Treuer recounted the forced assimilation that occurred during the nineteenth and early twentieth centuries (2019). Native American

youth were forcibly taken from their homes and placed in government-run boarding schools. They were prohibited from speaking their native language and forced to relinquish all cultural practices. Boys had to cut their hair, all children had to wear European style clothes, and cultural practices such as dancing and singing were not allowed. It was this time that Col. Pratt coined the phrase "kill the Indian, save the man" to support the widespread belief that it was in the best interest of all Native Americans to adopt the culture and language of their oppressors (Treuer, 2019).

Today, the approach to educating students from different languages and cultural backgrounds still places a higher priority on learning English when weighed against the value of children preserving their native languages and cultures. In their article, "Race, Culture, and Identities, in Second Language Education", Kubota and Lin used previous studies to show that students identified as ELLs are in many ways considered by the educational system to be "lacking culturally, socially, linguistically and academically" (Kubota and Lin, 2009, p. 7). Just being labeled ELL justified keeping students out of mainstream classes and for allowing teachers to distance themselves because they did not know their language or understand their culture (2009).

Race

Racial Identity. As stated previously in Taylor's (2013) definition, cultural identity also refers to the complexities of race. As Berry and Candis pointed out in their article, "Cultural Identity and Education: A Critical Race Perspective," for people of color, their identity is binary or linked to their association with white people (2013). Moreover, Beverly Tatum wrote, "Why do Black youths, in particular, think about

themselves in terms of race? Because that is how the rest of the world thinks of them" (2017, p. 133). While non-white children are assessing their racial identity from an early age, white children are raised not to contemplate race. They learn only to see race in people whose skin color appears different from their own or to be color-blind and not see race at all. At no time are they taught to assess their feelings of being a "racial being" or consider the ways their race and culture affect their view of the world. (Berry & Candis, 2013, p. 45)

Historically, children of color are seen through three lenses: inferiority, cultural deprivation, and diversity (Carter & Goodwin, 1994, as cited in Manning, 2010). Inferiority means a child of color's needs must be protected. Cultural deprivation implies that a child comes from a home that lacks the means to support them in their academic pursuits. The diversity lens sees the child for who they are and acknowledges and gives voice to their cultural identity.

What impact does cultural identity have on learning? Altugan wrote that when teachers appreciate and know the differences students carry, they can better help each student reach their academic potential (Altugan, 2019). "Learning is successful when learners can summon up or construct an identity that enables them to impose their right to be heard"(Rod Ellis, as cited in Altugan, 2015 p.1160).

Beverly Tatum (2000) examined the importance identity plays in one's life. Identity "depends in large part on who the world around me says I am" (Tatum, 2000, p. 10). And for people from subordinate or nonwhite cultures, this may be difficult to accept because the dominant or white culture acts as a mirror reflecting a lower status (Tatum,

2000). She went on to say that as a means to protect one's identity from white derision, students of color may instinctively refuse to accept anything white culture has to offer, including an education. Tatum called this *not learning* (Kohl as cited in Tatum, 1994, p. 12). To accept anything coming from the dominant group would mean losing a sense of one's self. Students who react to their cultural identity in this way are signaled out as troublemakers.

  Racism. Students of color identify with their race more than their white peers because of the racist structures in society, posing a threat to their academic success and overall physical, mental, and spiritual well-being. According to the American Academy of Pediatrics (AAP) (2019), "Racism is a core social determinant of health that is a driver of health inequities" (Trent, Dooley, & Dougé, 2019, p. 2). The color-blind approach, many white educators take when teaching students of color, has no impact on the racism students face every day.

  Much of the AAP's policy statement on race applies to the lasting physical damage racism has on the health of young people today. It asserted that racism works at three levels: institutional, personal, and internalized. Institutionalized racism has to do the racism people must contest in the places where they live, learn, and work. This form of racism has been in place throughout the history of the United States. Personal racism, also referred to as implicit and explicit bias, has to do with the stereotypes individuals possess based on race. Furthermore, internalized race occurs when institutionalized and personal racism becomes embodied and accepted by a particular racial group. This is why having a positive, social, and racial identity is crucial for young people as they grow into

adults. Internalized racial stereotypes can erode a child's self-confidence and negatively impact academic achievement. And academic achievement is one of the leading indicators of future quality of life (Trent, Dooley, & Dougé, 2019).

The policy statement also noted that adults with college degrees have a longer life expectancy and fewer health problems (Trent, Dooley, & Dougé, 2019, p. 4) Teachers can decrease the effects of racism when they have positive interactions with their students of color and set high academic expectations. The article also notes that when African American students have just one teacher of color during their elementary years, they are more likely to finish high school and go to college (Trent, Dooley, & Dougé, 2019).

The study asked that pediatricians openly discuss the effects exposure to racism with their patients, create a welcoming environment, scrutinize their own biases, and to use their professional standing to work with public officials to rid all institutions of inequities. Educators could also take the lead in not only reacting to racism but to eliminating all institutional aspects of it (Trent, Dooley, & Dougé, 2019)

The literature from this section supports the capstone's research question: *how might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic gap that exists between white students and students of color*? It showed that culture plays a significant role in the education of students of color, principally in language and race. Furthermore, when educators place a higher priority on students conforming to the white dominant culture while disregarding their home culture, they are telling students that their culture is not valued. The next

section examines the literature pertaining to Culturally Responsive Teaching and how it can lead to academic gains for students of color.

Culturally Responsive Teaching

The previous section discussed the importance of students having a positive identity and its effect on their academic success. This section of chapter 2 analyzes the literature on Culturally Responsive Teaching (CRT) and its role in empowering students by giving them a better sense of who they are and their place in the world.

In 1954 the United States Supreme Court ruled in the case *Brown vs. the Board of Education* that legally mandated school segregation was unconstitutional (Harmon, 2012). This historical decision paved the way for equity in education among all races and cultures. However, sixty-six years later, nonwhite students are not as academically successful as their white peers (Harmon, 2012). Culturally Responsive Teaching (CRT) or Culturally Relevant Pedagogy is a pedagogical practice that strives to motivate and empower students by connecting curriculum and learning to their culture (Vavrus, 2008). The first part of this section defines CRT and gives a historical overview, which also included voices opposed to it. The second part reviews the teaching methods incorporated through CRT and how they lead to greater academic success among students of color.

History of Culturally Responsive Teaching

"If teachers are to be effective, they need to be prepared to teach children who are not white" (Ladson-Billings, 1995, p. 161). This quote summarizes CRT's fundamental principle that CRT bolsters a student's belief in themselves by making cultural connections when teaching academic material (Vavrus, 2008).

Culturally Responsive Teaching or pedagogy developed out of the need to help students of color who have historically lagged behind their white peers in academic performance. As Dr. Ladson-Billings (1995) said in the previous paragraph, CRT came to fruition to help teachers reflect on their instruction instead of blaming a student's culture for the lack of academic achievement. Vavus wrote, "CRT strives to increase the engagement and motivation of students of color who have been both unsuccessful academically and socially" (2008, p. 49). In the United States, schools continue to be led by white middle-class administrators and teachers; thus, white middle-class values and norms always carry precedent over those of nonwhite cultures (Vavrus, 2008). When schools solely focus on white culture, it sends a message to all nonwhite students that their culture is not valued (Vavrus 2008). In other words, white teachers are instilling their cultural norms and values in their students' education when they should be using their students' cultures to instill them with an education (C. Pewewardy as cited in Ladson-Billings, 1993).

As discussed in the previous section, white teachers are unaware of how much their culture influences how and what they teach because they refuse to acknowledge their cultural identity. One of the foundations of CRT is for teachers to look inward and reflect on their cultural values, beliefs, and biases. Doing this is necessary because teachers need to understand how their white identity has endowed them with certain privileges that set them apart from their non-white peers. And how these privileges have created the illusion that the United States is a country whose foundations were based on equity and democracy (Vavrus, 2008).

CRT in Practice

How can teachers best provide Culturally Responsive Teaching to their students? First, teachers need to gain knowledge of their students' cultures. Geneva Gay (2002) pointed out that teachers need to know the cultural characteristics and values impact learning. Some of the things include cooperative problem solving, how children interact with adults, and gender roles (Gay, 2002).

Besides learning about different cultural characteristics, it is essential to learn about the contributions of different cultures in various subject areas, meaning teachers must be motivated to become life-long learners. Teachers need to consider how they will adapt their white middle-class created curriculum to meet the needs of their multicultural classroom (Vavrus, 2002). Gay also pointed out that teachers who are serious about implementing CRT in their teaching need to become experts at defining multicultural assets and failings of the curriculum they are required to teach and make changes to boost its quality (2002). An example of this may be teaching different cultural versions of universal folktales discussing the literary qualities of rap or hip-hop. This teaching style would make school more interesting for students of color and help them develop critical thinking skills (Ladson-Billings, 1994).

Ladson-Billings wrote that CRT needs to meet three criteria: students must experience academic success; students must develop and maintain cultural competence; also, students must develop a critical consciousness through which they challenge the

status quo of the current social order (Ladson-Billings, 1995). According to Ladson-Billings (1995) the purpose of using CRT methods in the classroom was to help students realize their academic potential, leading them to think positively about themselves. By cultural competence, Ladson-Billings meant that teachers needed to use their students' culture to motivate their desire to learn (1995). And by critical consciousness, she writes that teachers need to support students in their development of "a broader sociopolitical consciousness that allows them to critique the cultural norms, values, mores, and institutions that produce and maintain social inequities" (Ladson-Billings, 1995 p.162). In other words, to become actors in the world in which they live. According to Ladson-Billings, the importance of teachers using CRT methods in their classrooms is to reach all students. She attributed a teacher's failure to do this to a student's academic death. She wrote, "Death in the classroom refers to teachers who stop trying to reach every student or teachers who succumb to rules and regulations that are dehumanizing..." (Ladson-Billings, 2014, p. 77).

In Ladson-Billings' book, *The Dreamkeepers*, she explored how successful white teachers of African-American students incorporated Culturally Responsive teaching in their classrooms. Some practices she observed were the use of graphic organizers, encouraging students to relate to literature at a personal level, role playing, and the consistent use of realia such as letters, maps, guest speakers, and photographs. In terms of teaching children literacy, Billings wrote that successful teachers of African American children use different reading strategies and different types of literature, build on their

students' prior knowledge, and have high expectations of them as scholars (Ladson-Billings, 2009).

Gay's elements of CRT are building one's cultural knowledge, building learning communities, matching instructional techniques to learning styles, and multicultural communication (2002). By learning communities, Gay (2002) meant that teachers must create a classroom where students are working together to succeed, and demonstrate their concern for each student by demanding that they achieve their academic goals. Matching teaching to a student's learning styles student's culture is valuable because research shows that different cultures have basic learning patterns. However, Gay (2002) admitted the complexity of learning such a skill when she points out that the skill "should be taught in teacher training programs" (Gay, 2002, p. 111). Vavrus (2002), on the other hand, indicated that teachers need to be careful of stereotyping the learning styles under one specific cultural group. He wrote, "the challenge for CRT is to identify those situation-specific cultural variables that may contribute or detract from student learning" (Vavrus, 2008, p. 50). Furthermore, through communicative teaching strategies, Gay (2002) meant that teachers needed to be aware of the different cultural groups' communication styles and the effect this has on learning. She gave an example of how in an American classroom discussion, most commonly consists of students taking turns and speaking one at time. This may conflict with discussions in other cultures where they are much more contextual, meaning listeners are also speaking and participating by giving feedback to tell the speaker, *yes, I hear what you are saying*.

From analyzing Gay and Ladson-Billings, it is clear their ideas around CRT complement one another. While Ladon-Billing's ideas were more philosophical and centered around the ethics of using CRT in the classroom, Gay's (2002) criteria delved into its practical implications by focusing on hands-on teaching applications that teachers need to apply in their classrooms. The capstone now examines how CRT and Montessori methods of teaching correspond.

Montessori

In the previous sections, the literature review analyzed the importance of positive cultural identity in students' academic success, and how adapting Culturally Responsive Teaching can encourage students to preserve their identity as they understand its significance to their academic achievement. This section applies cultural identity and CRT to the philosophy of Montessori instruction.

Montessori Philosophy

The Montessori Method of education, created by Dr. Maria Montessori, is a child-centered way of teaching based on her scientific observations of children. It is an approach that values the development of the whole child: physical, social, emotional, cognitive (Bragdon, 2014). In chapter one, Dr. Montessori was quoted as saying:

> When the independent life of the child is not recognized with its own characteristics and ends when the adult man interprets these characteristics and ends, which are different from his, as being errors in the child which he must make speed to correct, there arises between the strong and the weak a struggle which is fatal to mankind" (Montessori, 1986 p. 20).

This quote summarizes Dr. Montessori's teaching philosophy. She meant that developmentally, a child that existed 200 years ago is the same child that exists today. Furthermore, a child that exists in the United States today is the same child that exists in Uganda and Vietnam. In other words, she believed that every child carries the same potential for being fully human (Montessori, 1966, p. 2-3). Therefore, when adults view a child through their adult-perspective of the world and thereby place on them their adult-expectations, they are losing sight of the real reason childhood plays a part in all human development. For Dr. Montessori, the adult's task is to support the development of the child, so they can live and thrive in the time, place, and culture in which they live (1966, p. 198).

As a trained medical doctor, Dr. Montessori's perspective was unique in the field of education. She observed each child objectively and with a scientific mind.Because her goal as a scientist was to study and learn about the developmental stages of the child, she began her research in the poorest neighborhoods of Rome and applied these ideas to teaching, so through education, every child would achieve their full human potential (Montessori, 1966).

Montessori and CRT

There is a misperception that Montessori schools, at least in the United States, serve exclusively white, middle-class, college-educated families. Recent data shows that within Montessori Public schools in the U.S., 56% of students are students of color, and 47% receive free or reduced lunch. (Debs, 2015 as cited in Banks & Maixner, 2016) School data from chapter 1, demonstrated that equity of education was a concern even in

schools with the highest test scores. What changes are occurring in the Montessori community that will help address inequity, and how do they correspond to CRT?.

Beginning in the fall of 2018, the journal *Montessori Life* acknowledged the failure of Montessori schools in the U.S. to address issues of equity (Oesting & Speed, 2018). Although Montessori schools are child-centered, created to give children the freedom to learn in prepared environments, and based on principles of peace, most are led by white teachers and administrators who have biases. Moreover, these same teachers and administrators wonder why their now culturally diverse classrooms do not fit in their vision of school culture (Oesting & Speed, 2018). Dr. Montessori invited teachers to self reflect and to examine any weaknesses that interfere with the relationships they built with their students. This is similar to the ideas behind CRT. She said, "We must be humble and root out the prejudices lurking in our hearts. We must not suppress those traits which can help us in our teaching" (Montessori, 1966, p.153).

Oesting and Speed eferenced one Montessori school where the ideas of CRT were being applied, and that is at the Keres Children's Learning Center (KCLC) in New Mexico (Oesting & Speed, 2018). Keres was co-founded by Trisha Moquino, who aspired to create a school that would "honor the whole Pueblo child" (Oesting & Speed, 2018, p. 50). She believed that the public school system was not serving the Pueblo children in her community because all curriculum and activities were centered around white culture and learning English. She felt this devalued the indigenous (Keres speaking) children and their communities. After establishing KCLC, Moquino (Oesting & Speed, 2019) immediately applied Ladson-Billings's work to the school curriculum to

"allow children to develop cultural competencies, achieve academically, and challenge existing social inequities" (Oesting & Speed, 2019, p. 50). She wanted her teachers to support students' cultural awareness and growth and apply these ideas to Montessori teaching methods and philosophy. She felt CRT, and Montessori's philosophy was a natural fit. "In implementing CRT in our Montessori classrooms, we are representing the lived experiences of people of color in some of Montessori's most basic lessons" (Oesting & Speed, 2019, p. 51)

Gerard Leonard, an Association of Montessori Internationale elementary school trainer, wrote of the importance of teaching children that they are not only members of the society in which they live but citizens of the world. And this can only be done by teaching children about the diversity of cultures and traditions (Leonard, 2015). Even though the article does not explicitly mention CRT, the ideas of global citizenship appear to be similar. Leonard wrote that there are many opportunities within the Montessori learning environment to help students to achieve a more global perspective (2015). A natural place to do this is within the Montessori geography curriculum and its focus on helping students have a mental map of the world. Walk into any Montessori school, and one is likely to see children using Montessori geography materials to draw a map of a continent or country. According to Leonard, learning about the different people, their cultures, religions, and their accomplishments should go hand in hand with the teaching maps and physical geography (Leonard, 2015). One of the strengths of Montessori schools within the U.S. is their racial and cultural diversity. However, this diversity does not always lead to positive educational outcomes among students of color. Mira, Debs,

and Brown (2017) stated that public Montessori schools have the potential to address inequity through CRT and that doing so would strengthen their commitment to Dr. Montessori's philosophy.

The foundations of the Montessori Method began with the establishment of the first Montessori school, Casa dei Bambini, in one of the poorest neighborhoods in Rome (Standing, 1957). This act demonstrated Dr. Montessori's belief in the human potential of every child. Considering that the majority of Montessori schools in the U.S. have a student body that is between 25% and 75% of students of color, this belief should be at the core of every school's mission (Debs & Brown, 2017). Another connection Montessori philosophy has with CRT comes in this quote from Mario Montessori (Dr. Montessori's son), who wrote that in a school's environment, "children should become familiar with their own culture" (Mario Montessori, as cited in Debs & Brown, 2017, p. 6). Montessori teachers are in a better position to do this than teachers of traditional public schools because they are with each student for up to two to three years. Meaning they have more of an opportunity to learn about each student and make strong connections with their families. Montessori schools can attract families of color by making it known to parents that CRT is a basic part of the school curriculum and that conversations around race and bias are part of staff development (Debs & Brown, 2017).

One fundamental aspect of Dr. Montessori's teaching philosophy is the idea that children are to be honored. The way to do this is by creating learning environments that satisfy their "physical, intellectual, emotional, and spiritual needs" (Mcfarland, 2004, p. 25). When this happens, children become confident in their abilities and proud of their

own identity. Sonnie McFarland (2004), a Montessori teacher and leader in peace education, created a model for teaching children for peace, something Dr. Montessori stressed after the horrors of the First World War. Her model has six features, with three of them relating directly to CRT. They are "self-awareness, community awareness, and cultural awareness" (McFarland, 2004, p. 25). Self-awareness activities are those that help each child see the beauty and talent they have inside them (McFarland, 2004). Community awareness activities focus on developing safe and nurturing communities that encourage respect for others. Cultural awareness activities recognize the connection and commonality among people and attend to understanding and appreciation culture (Mcfarland, 2004).

What made Dr. Montessori a revolutionary in the field of education was her realization that a child's failure in school was not because of any mental deficiency but because of pedagogical failures (Montessori, 1995, p. 11). Her training as a scientist led her to develop a teaching method based on scientific observations and research. Jillian Manzo (2018) described how Dr. Montessori's philosophy was influenced by the time in which she lived. Seven years after opening her school, *Casa Dei Bambini* in Rome, World War I engulfed all of Europe. Seeing the amount of destruction the war was causing and witnessing the number of children who were being orphaned, Dr. Montessori became concerned about the war's impact on children's mental health. This resulted in Dr. Montessori's understanding that there was a higher purpose to her work, and that purpose was world peace (Manzo, 2018).

In her writings and lectures from this time, Dr. Montessori defined peace as a means of preventing all future wars. She believed that war was the result of humanity's mistreatment of children, and thought that the way to prevent war was by teaching children to live peacefully with those around them. She wanted to create an educational method whereby all children could reach their full human potential (Montessori, as cited in Manzo, 2018, p. 2). Because teaching methods centered around the dignity of the child, she believed the only way to prevent war from ever happening was through education. Manzo (2018) went on to describe the influence Montessori's peace philosophy is having on Montessori schools today. However, the article focused on the classroom environment, materials, and activities without addressing the need for CRT in the classrooms. Manzo wrote about schools promoting peace through multicultural celebrations, which CRT states are insufficient for bringing about real equity.

Summary

How did the literature review answer the capstone's question, *how might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic achievement gap between white students and students of color*? There are many teaching strategies educators can use to serve the academic needs of their students of color. The recent American Academy of Pediatrics' study on racism reported that racism could have negative health consequences on children of color (AAP, 2019). It also stated that educators could help students reach their academic potential when they support them in their struggles with racism and when they take a stand against institutional racism and implicit and explicit biases. The chapter also addressed the need

for white teachers to examine their own cultural identity and acknowledge the influence it has on their teaching and how they interact with their students of color.It went on to say that it is only through self-reflection that teachers can effectively apply Culturally Responsive Teaching and thereby begin reaching all their students no matter their cultural background. Lastly, it compared and contrasted the teaching methods and philosophies of Montessori and CRT. The comparison showed that they are comparable regarding their philosophies and that each child can achieve their full academic potential when teachers create a supportive learning environment. Chapter 3 describes the intended audience of the professional development project, its rationale, and the tools and framework that were used to create the project. Chapter 4 includes a reflection of the project.

CHAPTER 3

Project Description

Introduction

This capstone examines what Culturally Responsive Teaching (CRT) could look like within an elementary Montessori learning environment. I created professional development for Montessori teachers based on my research question: *how might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic achievement gap between white students and students of color*? My objective was to demonstrate the similarities between Montessori philosophy and CRT and how implementing it in the classroom would support students of color in their academic achievement. This chapter describes the project in detail and uses the current research framework to explain its relevance. It also describes the setting in which the professional development took place, its participants, and its timeline for completion.

Project Description and Rationale

The purpose of the project was to use CRT and Montessori methods of instruction as a lens for educators to look through as they considered more effective ways of supporting students of color whose academic achievement lagged behind that of their white peers. The professional development included a slideshow presentation, post evaluations for participants, and toolkit for teachers to help apply CRT methods in their classrooms (see Appendices A, B, & C). The slide show (see Appendix B) consisted of sixy slides, presented over three professional developments, that highlighted the main points of the capstone paper. The topics that were addressed were the importance of

culture in education, what is Culturally Responsive Teaching, and why should Montessori schools use CRT pedagogy?   The presentations also gave teachers time to discuss these topics in small groups and to conceive of their own ideas on how to best incorporate CRT in their classrooms. Each teacher received a toolkit (see Appendix A) that provided a list of resources to support their learning as they aspired to meet the academic needs of all their students. It consisted of academic articles, teaching strategies, and lists of culturally responsive children's literature. At the end of each presentation, teachers received a survey (see Appendix C) in which they answered questions about their comfort level with CRT. These surveys gave me an understanding of how teachers were using CRT in their classrooms and they helped me plan my next presentations.

Each presentation lasted for approximately 60 minutes and was presented at regularly scheduled staff developments over the course of a semester during the 2020-2021 school year. Teachers were then given the responsibility of implementing one idea from the information and the toolkit into their class lessons. I also met with the 3rd-grade team three times during the semester to document their use of CRT in their classrooms and to answer any questions they might have. The rationale for the project was to inform teachers of ideas and theories that, if implemented in the classroom, could help eliminate the achievement gap and to make them aware of how CRT is a pedagogy that encompasses the values of Montessori philosophy.

School data shows a stark contrast in proficiency levels on standardized test scores. While 83% of white students scored at or above levels of proficiency on standardized reading tests, only 40% of black students did the same (State Dept. of

Education, 2020). Research shows that using CRT practices in the classroom could help alleviate this gap (Griner & Stewart, 2012).

Griner and Stewart (2012) discovered in their research that although many teachers believe using CRT in the classroom is vital for making connections with the diversity of students that make up our schools, they lack the tools to do so. A professional development that encompasses both Montessori and CRT might assist Montessori teachers in perceiving that many of the best practices they were already using have CRT intentions and that they just needed to be more explicit in how they applied them. (Griner and Stewart, 2012). One example could be how Montessori teachers greet their students with a handshake or other type of greeting every morning to welcome them to class. Teachers may learn a simple greeting in the native languages of their students and incorporate this with their handshakes.

Research Framework

Constructivist Transformative Worldview

The research method used for this capstone is the constructivist-transformative worldview. Creswell and Creswell (2018) explained it as a research approach that addresses social issues and attempts to change the "institutions in which individuals work" (Creswell and Creswell, 2018). This method originated in the 1980s and 1990s and was developed as a reaction to the postpositivist worldview, which is a quantitative approach and holds that all proper research is inherently objective. According to the transformative worldview, it is impossible given that humans conduct all research (Creswell and Creswell 2018).

The transformative worldview holds that not all people can be held to the same truths. Moreover, in most cases, these are the marginalized people of a society. (minorities, immigrants, LGBTs, non-English speaker, impoverished) According to this approach, research needs to "speak to the issues of the day" (Creswell & Creswell, 2018, p. 57) The issues I address in my presentations are the importance of one's cultural identity on educational outcomes, and the harmful impact racism is having on students of color.

Setting and Audience

The presentations took place at the school where I teach. As stated in chapter 1, the school was an urban Montessori elementary school located in a large metropolitan area in the Midwest. The city was segregated, meaning that minorities live in neighborhoods apart from white families. The school's location was in a neighborhood that was predominately white. However, because of its magnet status, it had the ability to bus students from areas in which minority families lived. Students of color made up 33% of the school's enrollment, of which 5% qualified for ELL (English Language Learning) services. Students of Somali heritage made up the largest portion of the minorities at the school. Next were African Americans, Latinos, and Native Americans.

The intended audience of the presentations was the licensed teaching staff at the school. It was presented over three sessions during monthly professional development. The audience consisted of classroom teachers, specialist teachers, special education teachers, school administrators, instructional specialists, and educational assistants. Because 3rd grade classes had the most ELLs and because the move from 2nd grade is at

times a difficult transition for students to make, I met with this team three times over the course of the semester to record its implications.

The goal of the presentations was to make the audience (teachers and administrators) aware of the academic achievement gap and its social implications. The second goal was to demonstrate the correlation between Montessori philosophy and CRT and explain how if practiced together, could lead to positive educational outcomes for all students.

Timeline

The presentations took place over three sessions, each an hour in length. The first session's goal was to get teachers to acknowledge the significant role culture plays in education. The second session examined the history and philosophy of Culturally Responsive teaching and its alignment with Montessori teaching practices. The goal of this session was to acknowledge the work teachers were already doing around CRT in their classrooms and to give them the tools, so they felt supported in doing more.

This capstone is being completed during the COVID-19 pandemic of 2020. Therefore most school staff, out of necessity, have familiarized themselves with social media and can access video conference platforms such as Google Meet and Zoom. This means that even if schools did not reopen in the fall of 2020, I still had the ability to present to staff following social distance parameters. If in the fall schools did reopen, I could present at the school during normal professional development times.

Summary

Chapter 3 explained the form the capstone project would take and its rationale. Its research framework consists of Constructivist Transformative Worldview. Its objective was to make the audience aware of the social implications of not taking action in reducing the achievement gap and how CRT and Montessori philosophy, when used together, could prevent this from happening. The presentations occurred in the fall of 2020. The audience was the school's professional staff and the 3rd-grade team. The next chapter reflects on the writing of the capstone project and examines its possible implications.

CHAPTER 4

Conclusion

Introduction

As I wrote in chapter 1, there continues to be a reluctance among the staff at my school to have an honest dialogue concerning the impact culture and race have on student learning. This reluctance was apparent in the professional development meetings we had around race when some teachers appeared to take offense to the idea that the whiteness of the school staff could play a role in how it perceived and treated students of color. At the school's last staff meeting, which occurred one week after the killing of George Floyd, teachers spoke of the need to do more teaching around social justice, but only a few spoke of the need to do more teaching around racial justice or the need to be more culturally sensitive. Therefore, in an effort to close the academic gap that exists at my school between white students and students of color I attempted to answer the research question: *how might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic gap that exists between white students and students of color*?

The literature review and chapter 1 presented data showing that the students of color at a Montessori school scored lower on standardized tests than their white peers. The literature review also expounded on the significance a student's cultural identity had on their academic achievement. Furthermore, it showed that when teachers remain silent and fail to acknowledge the cultures of their students, it sends a message to students that their culture is not valued, causing students to disengage from their learning (Vavrus,

2008). Moreover, Culturally Responsive Teaching (CRT), appearing to align with Maria Montessori's teaching philosophy, could be a pedagogy that, if implemented, might help engage students of color and increase their standardized test scores (State Dept. of Education, 2020).

Using the information I learned from my literature review, I created multiple professional development sessions around *cultural identity, the alignment of CRT and Montessori, and the implementation of CRT in a Montessori classroom*. Furthermore, I created a toolkit (Appendix A) to give teachers strategies and resources around CRT that they can use in their classrooms. I also created a teacher survey (Appendix C) to check to see if and how these strategies are being used and what impact they are having on student learning.

Chapter 4 is a reflection of my capstone and project. It discusses what I learned through its undertaking and what I could have done differently to make it more successful. The chapter also analyzes the literature review, giving reasons for the sources cited, and describing any new insight that came from its research. Last, the chapter discusses the implications of using CRT pedagogy in Montessori classrooms and its benefit to students of color receiving a Montessori education.

Reflection

My experience writing this capstone helped me grow as a researcher and as a teacher. The writing of my literature review increased my understanding of the research process. When deciding on my research question, I knew I wanted to learn more about the impact culture had on student learning, but I did not know how to narrow my focus.

When my professor discovered that I taught at a Montessori school, she advised me to make this experience part of my capstone. Doing this helped me form a capstone question that was more manageable. Because of my experience as a member of the Instructional Leadership Team (ILT) at my school, I had already begun reviewing the literature on the significance of culture in education one year prior to my capstone. I was curious to find research that supported my belief that a student's culture impacted their learning. This is how I discovered Gloria Landon-Billings and Geneva Gay and their writings on Culturally Responsive Teaching and how I became aware that if I desired to grow as a teacher, I needed to keep learning.

My work on my capstone has increased my pedagogical knowledge. Because I have more knowledge about the impact culture has on education and because I am now aware of theorists who support these ideas, I have a voice on these matters at my school. For example, I was recently invited to serve on a teacher committee that is devising a way to incorporate a social justice curriculum at all grade levels for the next school year. I hope the expertise of these teachers assists in creating a school environment that supports the academic achievement of all students.

At the beginning of the writing of my capstone, I thought the greatest difficulty I would have to overcome would be teacher reluctance to incorporate CRT pedagogy into their lessons. I had no idea the role outside events would play in its writing and action. I conceived my capstone's research question in the winter of 2020, after a long career of teaching students of color and witnessing the systemic inequities they had to endure. The COVID-19 pandemic and the social unrest after the killing of George Floyd that occurred

during the writing of my capstone brought these inequities into clearer focus. Fear of the virus highlighted inequities in our educational system. Online learning resulted in students having to forage for themselves, meaning students from highly educated and economically stable families were more engaged with their school work than students coming from disadvantaged homes. The virus also highlighted the inequities of the healthcare system. According to the Centers for Disease Control and Prevention (CDC), people of color living in the United States were four times as likely to be hospitalized for the virus than white people (CDC, 2020). Furthermore, the killing of George Floyd highlighted the inequities in the criminal justice system. The chances of a person of color dying while in police custody were 2.8 times higher than for whites (NCBI, 2020). Because these inequities became highly publicized during this time, teachers became more open to the idea of using CRT pedagogy in their classrooms.

Literature Review

The objective of my literature review was to synthesize scholarly research to support the use of Culturally Responsive Teaching in a Montessori learning environment. To accomplish this, I divided my literature into four main topics: cultural identity, Culturally Responsive Teaching, Montessori philosophy, and the alignment of CRT and Montessori.

The literature around cultural identity highlighted the role it plays in students' academic success. The U.S. educational system still places a higher priority on students of color assimilating to white culture than on students creating a positive identity from their birth culture. Unlike white students, much of how students of color see themselves

derives from race. According to Tatum (2000), this was because of racism. When white people only see skin color when interacting with people of color, they do not challenge themselves to appreciate each person's characteristics. The American Academy of Pediatrics (2019) stated that exposure to racism has negative health consequences for students of color. Its policy statement on race called on pediatricians to discuss the effects of racism with their patients and to use their professional standing to help rid society of all racial inequities (Trent, Dooley, & Dougé, 2019).

For the section on the alignment of Culturally Responsive Teaching with Montessori philosophy, I found quotes from Dr. Montessori that highlighted her child-centered approach to education. I also found articles that acknowledge the need for Montessori schools in the U.S. to do more around issues of inequity. Oesting and Speed (2018) used the Keres Children's Learning Center (KCLC) located in New Mexico as an example of a Montessori School that incorporated Gloria Ladson-Billings' ideas around CRT. The founder of the school, Trisha Moquino, believed that public schools were not serving the Pueblo children in her community because the curriculum was centered around white-culture. Moquino wanted to establish a school that would allow Pueblo children to develop an understanding of their own culture.

Project Overview

The purpose of my project was three-fold. First, it was to give a rationale and justification for my project by demonstrating the need for Montessori teachers to be aware of the cultural background of their students and the role culture plays in their academic success. Second, by showing how Montessori teaching philosophy aligns with

Culturally Responsive Teaching, I acknowledged the work Montessori teachers are already doing in their classrooms around CRT when they adhere to Montessori pedagogical methods. Third, I wanted to give teachers the necessary tools to implement CRT methods in their classrooms, thereby giving students of all racial and cultural backgrounds the opportunity to use their prior knowledge to assist with their learning and academic growth.

Limitations of the Project

One of the limitations of this project was teachers' negative attitudes toward learning about the cultures of their students, and the use of this knowledge to create a curriculum that uses culture to teach students. As I pointed out in chapter 1, I have observed many incidents of teacher implicit bias towards students of color and I have heard negative comments from teachers about professional development that is centered around issues of equity. This negative attitude could have implications in how teachers implement the ideas of CRT in their teaching.

Another limitation of the project was support from school administration. As exhibited through her comments, the school principal was of the mindset that as Montessori school teachers we were already doing everything in their power to serve all students no matter their race or culture. She also used negative comments from teachers pertaining to equity issues to legitimize her reluctance to see equity as a problem at the school. Without administrative support, the success of my project could be in jeopardy.

Finally, after the police killing of George Floyd in Minneapolis, there appeared to be momentum among educators to confront inequity issues. Whether this push will continue has yet to be determined.

Implications

Benefits for Students

Students of color will observe their culture in the school environment in which they learn. They will see it in examples of their language being used by teachers or by it being displayed in writing, and they will see it in the use of their cultural symbols. Students of color will see teachers exhibiting knowledge of their culture and then using this knowledge to teach all students. Students of color will know that their teachers have high expectations for them as learners and will see their teachers create strong relationships with their families. By witnessing their culture's acknowledgment by teachers and school staff, students of color will feel accepted for who they are as learners and as individuals.

Benefits for Mainstream Teachers

Montessori trained teachers already have extensive knowledge of how to create a child-centered learning environment. However, they may feel overwhelmed by the idea of learning about the cultures of all their students. I want to give teachers the tools to implement CRT in their classrooms by helping them realize all the prior knowledge they bring as Montessori teachers. For example, one way they can learn more about their students and the influence culture has on their learning is by doing student interviews at the beginning of the school year. Teachers will benefit by knowing more about their

students and bringing this understanding to create a curriculum that supports student learning.

Benefits for School

Three of the goals in the School Improvement Plan related directly to my project: 1) the school would develop structures to meet the academic needs of all students; 2) students' academic needs would be met during core instruction; 3) and reading scores of students of color would improve. The hope would be for the school to meet all these goals with administrative support of CRT and its implementation in mainstream classrooms.

Future Research

One area of future research could be the use of CRT methods in online classrooms to help students of color stay engaged in their school work. As pointed out earlier in the chapter, the COVID-19 pandemic resulted in school closings, which required students to learn from home. Through my teaching experience, I observed the inequities inherited in such a learning arrangement. CRT could alleviate some of these inequities if distance learning needed to continue for a longer time.

Summary

Chapter 4 reflected on the capstone's research question; *How might the use of Culturally Responsive Teaching within a Montessori learning environment help eliminate the academic gap between white students and students of color*? The research demonstrated that CRT aligns with and supports the Montessori pedagogical philosophy. It could be said that for Montessori schools not to incorporate

CRT into their school curriculum would detract from their Montessori status. The

chapter also reexamined the project's rationale, and the impact current events could

have on its success. It analyzed the sections of the literature review, and how it resulted

in the separating of the project into three presentations: the impact culture has on

learning, the alignment of CRT and Montessori philosophy, and the necessary tools to

implement CRT in the classroom. The chapter examined the project's limitations, which

included administrative support, and it discussed how the project could benefit students,

teachers, and the school as a whole.

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