EXPLORING THE IMPACT OF CULTURALLY RESPONSIVE PROBLEM-BASED LEARNING ON THE INSTRUCTIONAL ENGAGEMENT OF AFRICAN AMERICAN STUDENTS IN AN URBAN SETTING

by

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ABSTRACT

RICHARD D. REYNOLDS. Exploring the impact of culturally responsive problem-based learning on the instructional engagement of African American students in an urban school setting. (Under the direction of DR. GREG WIGGAN).

This study examined the impact of culturally responsive problem-based learning on the instructional engagement of African American students in an urban high school setting. The study explores how culturally responsive pedagogy and Problem-based Learning (PBLs) have individually impacted the learning outcomes of students, while arguing for the value of combining the two frameworks into one singular approach (CRPBL). This interpretive case study was designed through the use of the critical race theory to address the following issues: the lack of access of African American students within urban school settings to rigorous educational opportunities; negative outcomes in the current educational experiences specific to African American students; and the alienation of students within the traditional curriculum. The findings of the study indicate that students who were exposed to Cultural Responsive Problem-based learning (CRPBL) showed an increase of student engagement which will in turn increase student achievement. There is a need for future research that specifically explores the instructional needs of African American students.

DEDICATION

This dissertation is dedicated to my wife, ReGinae Goodwin Reynolds. I love you for believing in me even when I didn't. I could not have done any of this without you.

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To be clear, I would not be in this position without the Grace and Mercy of Jesus Christ. It was only until I trusted you that my vision became clear and I learned that all things come of Thee. I am clear that you have blessed me, trusting that I will then bless others.

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CHAPTER 1: INTRODUCTION

Traditional education, while effective in its promotion of middle class traits and values, has historically failed to reach those of the working class and poor. The traditional pedagogy and curriculum fail to provoke the curiosity of students and encourages the authoritarian practices of teachers (Dillion & Grout, 1976). Such curriculum that fails to be student centered does not account for the backgrounds, interests, and strengths of all students and in turn, alienates underserved students from the educational process (Wiggan, 2011). In essence, the educational process has penalized generations of marginalized students and has perpetuated its own ineffectiveness. Lisa Delpit (1995) warns that solely focusing on developing the skills of students without the development of critical thinking, we then create trainable, low level functionaries of the dominant culture.

NAEP

Though the debate on of the achievement gap still persists, the use of the results from the National Assessment of Educational Progress (NAEP) allow researchers to quantify the belief that alternatives including immersion schools and Afro-Centric curriculum to our current instructional approaches to address the needs of African American students are necessary. The current trend provides the platform that should strongly encourage our educational system to begin to develop specific interventions to our most vulnerable students.

According to the 2015 National Assessment of Educational Progress (NAEP, 2015), only 18 percent of African-American fourth-graders were proficient in reading and

only 19 percent scored as proficient in math. The report continued by stating that only 16 percent of eighth grade African-American students were categorized as proficient in reading, while 13 percent were proficient in math (NAEP, 2015). In comparison, national average of proficiency of all students within this report fourth-grade reading was 36 percent, while it was 40 percent in fourth-grade math, 34 percent in eighth-grade reading and 33 percent in eighth-grade math.

On the high school level, there is a clear distinction between the graduation rates and college readiness for African American students. Examples of such discrepancies are comparisons for African American student graduation in Texas that is 84 percent while in Nevada and Oregon, African American students are graduating at a rate of 57 percent (NAEP, 2015). The inconsistencies remain with regard to the ACT test, which tests for college readiness. According to those results, 17 percent of African American students in Massachusetts are college ready while only 3 percent in Mississippi.

In addition, while African-American students are gaining more access to rigorous classes (NAEP, 2015), disproportionalities to those opportunities continue. In addition, it is also not clear that those who do enroll in higher-level courses are succeeding. Three states have reported in having 40 percent of African-American high school graduates of having taken at least one Advanced Placement (AP) exam. Hawaii, however, is the only state where 15 percent of African-American students actually passed those exams.

For context, according to the Trends in International Mathematics and Science Study (TIMSS) in 2015, fourth grade African American students reported an average school of 495 in mathematics while their White counterparts scored 559. Eighth grade

African American students were reported a score of 462 while their White counterparts scored 541.

As the opportunity gaps for African American students continue to widen as it masquerades as achievement gaps, educational efforts continue to utilize traditional methods to address the needs of said students. Though this is said to be the era of educational reform, little systematic efforts have been made to effectively address the educational inequities of urban students, specifically African American males. While statistical reporting of the achievement deficits and the promotion of such information regarding African American males are vastly made available for societal consumption, a famine of both research and political propaganda persist that highlight the subgroup of African American males who have achieved. Yvette Jackson (2011) addresses in *Pedagogy of Confidence* the lack of attention given to the assets of students rather than to their deficiencies. It is the belief that a focus on the deficits of a group perpetuates ideologies of inferiority. However, because prominent researchers have built their careers on the promotion of these deficit models, the appetites for more of deficit model research persist.

As reflected in dismal statistical evidences as provided by NAEP, it is evident that educational reform that addresses the needs of African American students is necessary. The approach should revert to those dynamics that encourage the development of high achieving African American students. Statistics provide a dismal perspective on the achievement of high school African American students, especially in an urban setting (Rebell & Wolff, 2008).

Statement of the Problem

While research has attempted to develop programs that compartmentalized student learning by focusing on the content, not much research has been focused on the delivery of curriculum containing both rigor and relevance to the experiences of the student. Research should begin to develop strategies that promote student engagement and relevance within student learning while ensuring that learning standards are addressed without alienating the student experience.

We argue that the issue at hand is not the achievement gap, but an opportunity gap where African American students are not afforded the access to highly qualified teachers, rigorous curriculum, or pedagogy that reflects the knowledge of students.

Purpose of the Study

The purpose of this study is to explore the concept of problem-based learning (PBL) as a strategy to provide students with relevant, engaging pedagogy that will not only address the opportunity gap, but will begin to raise student achievement. While the focus of this paper explored the themes of problem-based learning and culturally responsive teaching, an approach is recommended that the synthesis of these strategies increases the engagement of African American students, thus increasing achievement.

According to Gloria Ladson-Billings (2006), one of the three tenets of Culturally Relevant Pedagogy encourages teachers to create a space for "students to use the various skills they learn to better understand and critique their social position and context." In essence, Ladson-Billings suggests that an effective way of allowing students to develop their critical thinking skills is through instructional opportunities that allow students to address actual social issues that impact them personally or that impacts their community.

With this, the problem-based learning approach allows students to develop their own positions and create solutions without teachers promoting their own social agendas or political beliefs.

The synthesis of culturally responsive teaching and problem-based learning has created a concept referred to as Culturally Responsive Problem-based Learning (CRPBL). CRPBL is defined as an approach to teaching, learning, and curriculum development that is based on the combined tenants of problem-based learning and culturally responsive pedagogy. It seeks to use problem posing and students' cultural context as ways of engaging them in course contents.

This study proposes that the merging of the two research based approaches work to increase the level of engagement within African American students to thus increase student learning. By using the structures within problem-based learning to develop learning activities and incorporating culturally responsive pedagogy, students will benefit from the high level of learning and engagement that are products of both concepts.

Research Question

The study is guided by the research question:

How does culturally responsive problem-based learning impact the engagement of African American students in an urban setting in the Mid-West?

Significance of the Study

This study proposes to address the need to not only provide students with rigorous instructional practices, but it also addresses the need to provide opportunities for cultural inclusiveness through a single effort. While simply focusing on student deficits allow the continuance of the presence of an opportunity gap to persist, the incorporation of

culturally responsive problem-based learning allows practitioners to develop lessons that do not alienate students' cultural capital. This study attempts to contribute to the narrative and practices to better serve African American students.

Definition of Terms

Culturally Responsive Teaching

The term culturally responsive teaching is the use of instructional strategies or practices that promote the validation of students' cultural capital or knowledge they bring from their home lives. Culturally responsive teaching is that effort to connect their home lives to that of their school lives. The term culturally responsive teaching will be used interchangeably with the term culturally relevant teaching.

Culturally Responsive Problem-based Learning (CRPBL)

It is an approach to teaching, learning, and curriculum development that is based on the combined tenants of problem-based learning and culturally responsive pedagogy.

It seeks to use problem posing and students' cultural context as ways of engaging them in course contents.

Cultural Capital

The term cultural capital was a term used to provide a hegemonic explanation to why minority students were challenged with the system of public education (deMarrais & LeCompte, 1999). This suggests that only the dominant culture has value and students were deprived if they were not proficient with this knowledge. In this study, cultural capital acknowledges that all knowledge that a student brings to the narrative has value. Urban School

For the purpose of this study, the term urban school is defined as a school that is located within a greater metropolitan area of which nearly 50% of household incomes qualify students for free and reduced lunch (Warshauer-Freedman & Appleman, 2009). In many of these setting, the school has been classified as high needs regarding student achievement, facilities, large minority population, and discipline.

Student Engagement

Student interaction and approach to the curriculum to which they respond with genuine interest and not out of compliance is referred to as student engagement.

Student Outcomes

Student outcomes refer to the desired learning objectives or standards that have been set forth by teachers or schools for students to achieve.

Delimitations

The varying of experience levels of teachers is a limitation of this study. Another limitation of this study is how the teachers were trained. While some of the teachers were provided with training from leading voices in PBL education such as the Buck Institute and the New Tech model, others received PBL training through a more informal means of teachers teaching teachers.

Summary

This chapter provides an introduction and background for the study by exploring the current narrative regarding African American student outcomes according to an analysis provided through the review of NAEP (2015). The chapter continues by proposing that a major issue that has impacted the deficit narrative regarding the achievement of African American students in public schools has been the lack of rigorous

curricular opportunities and relevant pedagogical approaches that are being afforded to students. It is that lack of access that has created an opportunity gap for African American students, yet, the error of educational reform has coined this negligence as an achievement gap. This chapter introduces an argument that the incorporation of culturally responsive problem-based learning into the current landscape of education for African American students in an urban setting will increase the level of engagement in the classroom. It is this level of engagement that synthesizes the rigorous and engaging approach of problem-based learning with the inclusive ideologies of culturally responsive practices that will positively impact the learning outcomes for students.

Chapter 2 provides a review of the literature that focuses on the following points: What is problem based learning and its impact on students; what is the impact of culturally responsive teaching on African American students; how has the coupling of problem-based learning and culturally responsive teaching impacted students. The review of literature examines factors such race, school inequities, best practices for instruction of African American students, problem-based learning instructional approaches, the implications of culturally responsive teaching, and how the use of culturally responsive teaching impacts learning.

Chapter 3 provides an explanation of the research method and rationale of why the approach was chosen. In particular, the use of Critical Race Theory provides a lens for analysis of the influences of race on the educational landscape for African American students. The use of a case study within the method of investigation will also be discussed.

Chapter 4 presents the findings of the research study to which the findings are categorized by the emergence of themes. Teacher experiences provide a rich narrative of student experiences. Chapter 5 concludes with a discussion of the findings, including limitations of the study and recommendations and implications for practitioners to change practices to increase student engagement, which will change educational outcomes for African American students.

CHAPTER 2: LITERATURE REVIEW

Chapter 1 provided an overview of the purpose for this research topic. Not only were the statistics for student outcomes for African American students discussed, but also the structures and inadequacies in the educational landscape that have been discriminatory in the service of African American students. While the current traditional instructional practices have created student outcomes that negatively impact scores on standardized testing and graduation rates, this study presents that the issue of failing student outcomes are due to opportunity gaps for African American students instead of traditional thinking around achievement gaps.

This chapter will review the literature and will begin to explore the concepts of problem based learning and culturally responsive teaching. Educational challenges will then be explored to rationalize the need for this research. This chapter will conclude by discussing how some educators are incorporating culturally responsive problem-based learning.

Problem-based Learning Instructional Approach

Problem-based learning is an instructional method that finds its origin in the field of medicine in the 1960s. This method of instruction was derived from the dissatisfaction of researchers with the common medical practices of the time (Barrows, 1996). Though many variations of the instructional practice has evolved, six core characteristics of PBL remain central to the practice. The characteristics are as follows: the learning is student centered; learning must occur in small student groups; student groups work with guidance from a facilitator; an authentic problem has to be provided; the problems encountered are

to be used as avenues for learning and the development of problem solving skills; and learning has to be self-directed (Barrows, 1996; Dochy, Segers, Van den Bossche, & Gijbels, 2003).

In the development of the problem, PBL construction allows students to activate their prior knowledge of the problem within the group. If that knowledge is limited, the facilitator (teacher) works to help the group to identify gaps in knowledge to better understand the problem and to identify what is necessary to develop a solution. With this, students develop questions that will guide learning activities. The activation of this prior knowledge allows for the critical analysis of the information and increases the cognitive engagement of the learner as they focus on understanding the problem (Loyens, Jones, Mikkers, & Gog, 2015). Linnenbrink (2007) describes cognitive engagement as the quality of an individual's thinking as it relates to higher order learning strategies as proposed by Bloom's taxonomy. This also includes the willingness of the individual to self-direct and willingness to engage in the purposeful tasks required by the PBL.

After learning targets are established through the identification of learning gaps, students then explore the literature surrounding the problem. Students then use what they have learned to develop a product that will attempt to respond to the problem. The aim of PBLs is to foster deeper learning strategies within students by placing the learning in a meaningful context (Baeten, Kyndt, Struyven, & Dochy, 2010).

Studies have shown that students who receive instruction through PBL receive similar outcomes for short-term learning acquisitions as to those who receive lecture. However, those same studies show that students who receive PBL show positive effects on long term learning, as they show significant retention of learned information than

those who receive the lecture based curriculum (Dochy et al., 2003; Strobel & Van Barneveld, 2009). This can be attributed to the application of learning activities as opposed to recall of information.

Because PBL require instructors to create problems based on clear learning goals, a shift in the educational paradigm where teachers abandon the traditional lecture must occur. PBL problems are intentionally posed by not providing all of the information that is needed. This strategy is intended to motivate the students to conduct self-motivated research (Allen, Donham, & Bernhardt, 2011). In a well-constructed PBL classroom, teachers rely on authentic assessments where students are able to demonstrate the learning through the development of products relating to the resolution of the problem or instructional tasks (performance tasks). For example, science students may complete a unit focused on bacteria where the problem introduced could be the reduction of student absences due to illnesses. Students could learn about bacteria and then develop a video that will teach 4th grade students about preventing illness through correctly killing bacteria through proper hand washing and knowledge of germs. A performance task could consist of, but is not limited to, a debate, Socratic seminar, position paper, or lab report.

In the implementation of PBL, it is imperative that the teacher maintains knowledge of students' progress and challenges within the PBL process. The teacher can devise mini- lessons within the PBL to address instructional gaps to assist students with working though conceptual impasses or to emphasize certain content topics like social inequalities or immigration (Allen et al., 2011).

While there may be contrasting research on the effectiveness of PBL on student achievement, research is in wide agreement that the core of best practices and effective teaching should actively engage students through instructional activities that involve supportive environments that encourage interactions with teachers, peers and community members (Allen et al., 2011; Smith et al., 2005). Because PBL encourages an active, collaborative, student-centered learning focus that is at the core of student engagement, it could be expected that such methods will increase instructional interest. By requiring students to discuss the topic and work collaboratively on projects, PBL addresses student disconnect from content and peers.

Culturally Responsive Teaching

Gloria Ladson-Billings in *The Dreamkeepers* (2009), provides a framework for what makes up a culturally relevant teacher. Through her observations and interviews, the author expresses the notion that culturally relevant teachers capitalize on the cultural strengths of African American children rather than attempt to invalidate the student's prior knowledge. In those classrooms, students are not made to choose academic success over culture but they help them to draw connections between the home culture and the school culture. In this section of the reading, Ladson-Billings (2009) explored how culturally relevant teachers have positive perspectives of their students, themselves, parents and the community which she believes guides how students are educated. She continued by explaining that these culturally relevant teachers develop a social environment of support for their students both in and outside of the classroom. The premise is that when one succeeds, we all succeed.

The concept of culturally relevant teaching consists of beliefs and strategies developed to provide a bridge between students' home lives and their school lives. Ladson-Billings believes that culturally relevant teaching provides the educational, emotional, and political support that promotes the validity of the knowledge that students bring to the table. The author not only explores the ideologies of culturally relevant teachers, but she also provides clear characteristics and best practices of teachers who work in the best interest of African American students. The Dreamkeepers and the work of Jawanza Kunjufu in Black Students, Middle Class Teacher (2002) have similar approaches in how both researchers believe that African American children should be educated. Both believe that one of the keys to the success of African American children is the relationship piece. Ladson-Billings states that effective teaching involves an in-depth knowledge of their students. She feels that students will develop more of a commitment to learning because of their commitment to the teacher. Kunjufu echoes that sentiment by stating that significant learning cannot take place if there are no significant relationships. While both authors provide practical strategies in equipping teachers with culturally relevant practices, in my mind, Ladson Billings was able to solidify her argument by not only providing in-depth research but complementing that research with her own experiences and those of culturally relevant teachers. Dei (1997) also contends that virtually all dropouts involved in his study felt that the curriculum did not include anything relative to their experiences, a factor that Lisa Delpit (1995) finds extremely critical as she refers to this knowledge as cultural capital in that effective teachers validate and not discount.

Akbar (1999) contends that we cannot expect African Americans to operate efficiently as long as their educational experience excludes their contributions to human progress and scientific development. So in an attempt to invoke the full potential of our students, we have to provide opportunities for them to discover who they are. Freire (1970) states that when the oppressed are educated, there is an awakening. This awakening may be the difference in saving some of our students.

While approaches of the culturally relevant teaching varied, the central concept persists that instruction should be presented so that African American students are able to build upon the knowledge that they bring to the table.

The Impact of Multicultural Education and Culturally Responsive Pedagogy

Within the Urban Education strand of the Curriculum and Instruction doctoral program at the University of North Carolina at Charlotte, the understanding of the impact of multicultural education and culturally responsive pedagogy is vital to developing strategies of school reform. Though fluid in structure, both multicultural education and culturally responsive pedagogy are necessary. While culturally responsive teachers were discussed previously within this work, the following will discuss multicultural education and how it impacts the educational landscape.

Multiculturalism in education acknowledges a variety of cultural perspectives within curriculum. This approach maintains the fact that the Eurocentric perspective is the culture of the majority, but the approach addresses how insufficient it is that only a singular perspective is explored and validated. Multiculturalism <u>proposes</u> that all humans have contributed to the development of the world as we know it, and that it was completely an international achievement (Asante 1991).

Asante (1991) defines Afrocentricity as a frame of reference where various aspects of the works are viewed from the perspective of the African or those of African descent. From a classroom standpoint, this means that students are given the opportunity to study the world and history from an African view in every subject. It should be understood that Afrocentricity does not imply a removal of the Eurocentric narrative. The placement of Africa as the focal point of discourse provides a platform to a once silenced voice.

As a Hilliard et al. (2003) discusses that the focus on closing the achievement gap is misguided. He states that the real focus should be placed on the opportunities gap. Those gaps consist of inequitable access to highly qualified teachers, adequate facilities, educational resources, and opportunities to connect with the curriculum. While the curriculum and the structure of public education is geared towards the promotion of the values of middle-class whites (Kunjufu, 2002), minority children are expected to function at a high level in a system that has alienated them from the curriculum. Naim Akbar (1998) contends that the responsibility of education is to ensure that people know their particular legacy of competence in order to be able to explore the universal legacy. Akbar (1998) continues to argue that we cannot expect African Americans to operate efficiently as long as their educational experiences exclude their contributions to human progress and scientific development. So in an attempt to invoke the full potential of our students, opportunities must be provided for them to discover who they are. The only way that African American students can continue the tradition of excellence in education is for them to be made aware of such tradition.

In contrast, the theory of *Cultural Deprivation* states that it is a "culture of poverty" that explains the poor performance of minority children in public education (deMarrais & LeCompte, 1999). This concept alone provides a hegemonic perspective that the only culture that has validation is that of the majority. It is preposterous to utilize the term "cultural capital" with a singular perspective when every culture should be validated in both the educational and social environments. The message of invalidating the perspective and experiences of a group provides to minorities the misconception that the sole avenue for success is through that of assimilation.

Molefi Kete Asante (1991) states that the role of the teacher is to make the students' world and classroom relevant. In some cases, teachers feel at a disadvantage when the topic of a multicultural curriculum is in play. According to Yu Ren Dong (2005), teachers fear that their unfamiliarity with several cultural issues will, in a way, feed into stereotypes. Some teachers are afraid that their efforts will cause a divide in the classroom instead of an understanding because of the tension that multicultural literature can create.

Multicultural education and culturally responsive pedagogy are foundational concepts to Urban Education. Darling-Hammond (2010) argues that districts should develop ways of fostering innovation without sacrificing equity and the purpose of public schooling (free and adequate education for all students). If education is to remain consistent to this concept, then educators have to create strategies that are more prescriptive instructional opportunities for African American students. Through the data derived from the widening achievement and opportunity gap, the overrepresentation in special education, increasing dropout rates, and diminishing graduation rates among

African American students, it is obvious that traditional educational practices fail to provide an adequate education for all students. The impact of multicultural education and culturally responsive pedagogy to Urban Education is invaluable in countering the failings of the educational system as it applies to African American children.

Culturally responsive teaching strategies cultivate partnerships between the teacher and student in that the strategy incorporates the family and community culture into the school culture. When the curriculum and instructional pedagogy incorporates local norms and behaviors, students and families experience a connection between the home life and the school life (Edwards, 2011).

The point of incorporating culturally responsive teaching practices is to create a level of deeper learning for students where they feel that their prior knowledge is no longer alienated from the school life. It should be noted that any efforts to incorporate culturally responsive teaching should be thoroughly linked to high academic standards that provoke higher order thinking (Edwards, 2011). Educators may work to create culturally responsive lessons; however, if those efforts are not linked to learning standards to increase student achievement, then that lesson is pointless. Lisa Delpit (1995) addressed this issue in *Other People's Children* as she challenged liberal teachers to ensure that there is substances within their efforts that reflect high standards of learning within the curriculum.

Tenets of Culturally Relevant Pedagogy

There are three tenets that shape the ideology of Ladson-Billings' conception of culturally relevant pedagogy. Those tenants are academic achievement, cultural competence, and sociopolitical consciousness. Under the tenet of academic achievement,

Ladson-Billings (2006) insisted on pedagogy that allowed for teachers to help students understand why they are learning the content in spaces that are conducive to developing the knowledge and schools for success.

The second tenet of cultural competence explored by Ladson-Billings is the teacher's ability to help foster student learning about themselves and others and how the world functions around that knowledge. The purpose of incorporating this tenet is to help students to understand the culture of power in our society and how to navigate this forum. With this knowledge, students see themselves as active participants in the societal conversation and can challenge the status quo. Thus, cultural competences is about developing a deeper knowledge of self (Milner, 2008).

Lastly, the tenet of sociopolitical consciousness centers on the idea that local community challenges that the students or their families have experienced have an important role in the national narrative.

Student Voice

In *Framing Dropouts* (1991), Michelle Fine begins to open the dialogue on the issue of the effects that educational institutions have on students. The act of "silencing" was introduced in the reading to describe the action of removing or invalidating the voice of the oppressed. However, when a student's voice or input is ingrained into the culture of a school, it encourages the student to invest in the learning process (Jackson, 2011). This effort engages students and allows for authentic interactions with teachers to guide the curriculum, assessment, and influential matters that ultimately shape schooling. The implication of affording student interactions within the educational environment provides that students are no longer merely empty vessels that the teachers fill with knowledge but

collaborative partners. Amplifying the overall student voice is a strategy that changes the current landscape of education from students being passive recipients to students being active participants, thus creating a necessary distribution of power as argued by Freire (1970).

Justification for Urban School Reform

As educators, it is our moral obligation to ensure that we are providing for our students exactly what they need to be successful. It has been observed that moral obligation plays little to no role with regards to change in America, which is evident in oppressive practices including slavery, segregation, and classism. Carmichael and Hamilton (1967) states that morality and sentiments cannot weather issues that conflict with disturbing the "peace" of the privileged. Urban School Reform acts as the agent for disturbing the peace of the status quo within the realm of education. Because moral obligation is no longer a factor, statistical outcomes serve the purpose of motivation for change. Statistics provide a dismal perspective on the achievement of high school African American males, especially in urban settings (Rebell & Wolff, 2008). The following section will serve as concrete, quantitative reasoning for the importance of Urban School Reform.

According to Kozol (2005), African American children are 3 times more likely to drop out of school than white children, and twice as likely to be suspended from school. The educational issues in North Carolina seem to echo those sentiments. According to the NC Department of Public Instruction's Consolidated Data Report 2013-2014, as in previous years, male students, black students, and students receiving special educational services are groups that continue to be disproportionately suspended. African American

males comprised of 57% of all short-term suspensions, 57% of all long-term suspensions, and 62% of expulsions, though they only make up 26% of the student population. In several instances, the issue of the dropout rate fails to gain the attention of the masses.

Many have become socially desensitized and, in many cases, disconnected from what is quickly becoming an educational epidemic.

Special Education

After the Brown vs. the Board of Education decision that called for the integration of schools, special education has become the new instrument for segregating students (Ferri & Connor, 2005). Pseudo-scientific efforts for excluding minority students through mental testing that were only created to reinforce racial inferiority beliefs of non-Whites (Harry & Klingner, 2006) aided in America's efforts to "sort" children. Though induction into special education seems effortless, the exiting of such programs is near impossible, creating an educational shackling on some students' prospects for success.

The 29th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2007 concluded that African American students (6-21) are 1.5 times more likely to receive special education services as compared to those in all other racial groups combined. While African American children make up only 17% of the public school population in the U.S., they make up 41% of the special education population (Kozol, 2005). Lower employment status, lower rates of living independently, and escalated rates of arrest were cited be some implications of special education for minorities (Losen & Wellner, 2001).

With the substantial proportional inequities in minority students in special education, these "prison tracks", as described by King (2005), inevitably work as feeders

to the prison industrial system. Houchins and Shippen (2012) also explored the correlation between the history of special education and the inequities of youth in the Juvenile Justice System. Roughly 40% of incarcerated youth have disabilities compared with approximately 12% of students in public schools (Gagnon et al., 2009).

School Inequities

There is an endless amount of data that highlights the disparities of predominantly minority inner city schools and their suburban counterparts. In Jonathan Kozol's Savage *Inequalities* (1991), he discusses the inequities in funding of urban schools that consist of populations of 95%-99% minority students and their suburban counterparts. Kozol provide vivid narratives of schools that, in some cases, are literally falling apart to those suburban schools that enjoy immense amenities. But what needs to be understood is that disparities within facilities are only a mere glimpse of the true effect of a lack of equity in funding. According to Jonathan Kozol (2005), districts with the highest percentage of minority children receive less funding than districts with a smaller minority population. In addition, almost three fourths of black and Latino students attend schools that are predominantly minority (Kozol, 2005). These disparities translate into real differences in the services provided in schools: class sizes, pay for more experienced teachers, up to date equipment, and more course offerings (Darling-Hammond, 2000). Schools continue to only prepare about 20% of their students for "thinking work" (Advanced or honors courses that are in most cases less accessible to African American, Latino, and Native American students). Curriculum began to focus on basic skills rather than higher order skills (problem solving, analytical skills).

Access to high quality teachers continue to plague high needs schools. Teacher expertise was the single most important measurable cause of increased student learning, which accounted for 40% of the measured variance in student test scores (Darling Hammond, 2000). Darling-Hammond continues by contending that unprepared teachers only exacerbate the inequalities in the educational experience of low income and minority children. Those teachers who lack effective preparation are less likely to be able to respond to the needs of students, to which districts with the greater concentration of poor and minority children are also those with the least prepared teachers. Rebell and Wolff (2008) continue along this point by then drawing attention to those more "disposable" schools where the teachers who possess the least amount of experience are placed in schools of the highest need. The authors addressed the facade that we now have better teachers in the classroom because of the number of uncertified teachers and minimally qualified teachers have decreased. The law, however, has no means of ensuring that these teachers are capable of providing meaningful learning opportunities for students. Whether by circumstance or by design, these restrictions to access occur because many believe that few students will profit from this demanding instruction, especially children of color (Darling-Hammond, 2000).

Opportunity Gaps

As researchers continue to define the reasoning behind the achievement gap, pseudo-scientific efforts for excluding minority students through mental testing that were only created to reinforce racial inferiority beliefs of non-Whites (Harry & Klingner, 2006) aided in America's efforts to sort children. Asa Hilliard then attempts to change the narrative of student achievement from the lens of searching for student deficiencies as an

effort in explaining academic failures and moving to examining successful teachers and schools as a strategy to counter stereotypical theories and strategies. He contends that the only gap that deserves close attention (as opposed to the use of the term "achievement gap") is the quality of service gap between minority and majority students with more of a focus on teachers and school leadership. Lisa Delpit (2012) adds to the argument by stating that African American children are not born with deficits that contribute the achievement gap.

While many like Ruby Payne (2005) contribute low achievement to poverty and environment, it is also conceivable that ineffective instructional practices and lowered expectations for African American children continues to contribute to the stalling of academic progression. If we do not recognize the potential of African American students, we then not only perpetuate those societal, stereotypical views, but we also contribute to the lack of success of these students (Delpit, 2012).

African American students continue to maintain an underrepresentation of enrollment in rigorous courses. Mickelson and Velasco (2006) cite personal beliefs, peer culture, the opportunity structure at school, and fears around being seen as "acting white" as reasons for the underrepresentation. In addition, schools have also been cited as purveyors of structures that construct racial boundaries (Tyson, 2006). In this, African American students can visibly see that the courses that are considered high in rigor have a low representation of minority students. This awareness of this under representation creates an adversarial attitude as to why students who look like them are not present in such courses (Moore & Lewis, 2012).

Culturally relevant pedagogy provides teachers with the ability to better engage and foster learning among African American students (Moore & Owens, 2008; Moore & Lewis, 2012). Kopetz, Lease, & Warren-Kring (2006) describe an ideal classroom environment for students as those classrooms where teachers incorporate building upon student knowledge through the development of relevant lessons.

Instead of working to understand the complexities of their students and creating opportunities to support student growth, teachers tend to dilute the level of rigor.

Teachers in an urban setting sometimes fail to see the potential within their students because they are not equipped to recognize intellectual prowess and creative talents that may not resemble that of the traditional sense (Milner, 2008). The common idea is that differences mean deficits.

Through culturally responsive pedagogy, teachers develop skills to understand student cultural complexities (Milner, 2011) and to counter to lure of seeing differences as deficits. Milner continues by suggesting that students develop a critical consciousness where they evolve beyond merely consuming knowledge without critical thought.

Ladson-Billings (1992) contends that culturally relevant pedagogy empowers students to be able to critically examine educational content and ask the question of its role in society as the student knows it. Ladson-Billings (1994) also contends that culturally responsive classrooms use student culture to create a counter narrative to the negative effects of the dominant culture.

Moore and Lewis (2012) summarized the outcomes of culturally responsive teaching as follows:

Empowers students to

- · Examine educational content and processes
- · Create and construct their own meanings
- · Succeed academically and socially
- See inequalities in local and larger communities

Incorporates student culture in

- · Curriculum and pedagogy
- · Maintaining focus on students' culture
- · Creating a counter narrative to that of the dominant culture

Creates classroom contexts that

- · Are challenging and innovative
- · Focus on student learning
- · Build cultural knowledge and identity
- · Creates a connection between curriculum and instruction and sociopolitical realities

Issues of Race

The topic of cultural hegemony as a factor in the maintenance of the status quo regarding discriminatory practices and expectations continue to be of great debate. What cannot be debated is the overrepresentation of African American students in special education, which speaks directly to the underrepresentation of African American males in gifted programs, as argued by Harry and Klinger (2006). Historically, African Americans in general have had to grapple with the idea that their mere existence has been ignored or devalued. In education, Anderson J. Franklin (1999), professor at Boston College, has coined the phrase for this act of ignoring. Franklin refers to this as the invisibility

syndrome where African American men and women face disillusionment at the devaluing of their talents, potential, and even their basic humanity is ignored or misrepresented. While historical examples through slavery and civil rights are readily available, more recent accounts are evident. In the 2005 treatment of African Americans pleading for assistance and mere water at the Superdome during Katrina, to the numerous accounts of unarmed African American males being murdered by the police. While these are societal instances of invisibility syndrome, it can also be argued that the traditional classroom is a mere microcosm of societal structures where the needs of African American students continue to be alienated from their educational experiences.

Identifying children with the potential to become high achievers rely on more than the mere attainment of adequate grading. The process of identifying high achieving African American students subjectively relies on the expectations and desire of the teacher to see more than compliance to middle class norms of schooling. In this case, cultural differences tend to alienate African American students from consideration for opportunities that would benefit the student academically. Beth Harry and Janette Klinger (2006) noted the existent nuances of cultural differences in public schools of which the currency of classrooms were of the middle – class Anglo American culture. In essence, those students who are able to assimilate to this cultural dominance were at an advantage. It is possible for an educator's perspective of a child to be influenced by historical stereotypes of low intelligence, poverty, dysfunctional family circumstances, and behaviors (Harry & Klinger, 2006). These perspectives can be detrimental in recognizing the potential of African American males. It is the inability to identify and recognize the academic potential of African American students that allow educators to exclude such

students. Racism cannot be limited to the notion that it is a concept of one individual to the next, but is also practices and ideologies that are interwoven into the classroom or even in the structure of schooling itself.

While schools are intended to be a vehicle of social mobility, they have become sites where African American students are marginalized and stigmatized (Lee, 2000). Traditional education, while effective in its promotion of middle class traits and values, has historically failed to reach those of the working class and poor. The traditional pedagogy and curriculum fail to provoke the curiosity of students and encourages authoritarian practices of teachers (Dillion & Grout, 1976). Such curriculum that is not student centered does not account for the backgrounds, interests, and strengths of all students and in turn, alienates underserved students from the educational process (Wiggan, 2011). In essence, the educational process has penalized generations of marginalized students and has perpetuated its ineffectiveness.

Educating African American Students

Lisa Delpit (1995) warns that solely focusing on developing the skills of students without the development of critical thinking, we then create trainable, low level functionaries of the dominant culture. Though there is evidence of an effective educational approach to educating African American students, systems continue to be put in place that do not change the approach of educating African American students but rather focuses on skill and drill. So many instances, giving students more of the same seems to be the idea for addressing the needs of students. From tutoring to after school programs, the approach in many cases have not changed.

Progressive educators should create daily opportunities to ascend above the utilization of the "banking model" of education (Freire, 2000), in which the teacher merely disseminates content. Rather than banking information, educators should aspire to create opportunities where students become critical thinkers and agents of change. Within this critical thinking environment, students no longer memorize and regurgitate information, but instead, they begin to develop higher-order thinking skills and connections that allow them to develop and cultivate their own thoughts, rather than accepting the perspectives of the dominant culture (Wiggan, 2011).

According to Delpit (1995), educational environments that are ideal are those that allow students to exhibit their own personal power as the expert. In other words, the teacher cannot be the only expert in the classroom. Denying students their own expert knowledge, their cultural capital, is disempowering to students. Additionally, merely adopting direct instruction is not appropriate or appealing to African American students. Students require real audiences and real purpose in order to add value to their own voices in their own learning process. Educational approaches should incorporate strategies that are appropriate for the children who are confided in them (Delpit, 1995).

According to Darling Hammond (1997), schools that teach for understanding engage students in the roles within the context which allow for realistic possibilities. They use the criteria of that of writers, scientists, mathematicians, musicians and critics as standards towards which students and teachers strive. In essence, student learning is based on performance tasks to assess learning rather than that of traditional tests. Within these performance tasks, students are able to apply what they have learned rather than to show what they remember. For example, rather than listing the steps of the scientific

method, students can design and conduct an analysis of an experiment. Newmann et al. (1995) argues that it is the performance tasks that create "authentic pedagogy" where the instructional practice is focused on real world context calling for higher order thinking and an audience beyond the school for student work. Darling Hammond (1995) contends that the authentic performance task is critical to the development of competencies within students. She states that the incorporation of real world context within the curriculum should become inseparable in an educational experience. Constant critique and coaching within an instructional practice where feedback if regularly given create instances of high levels of understanding (Darling Hammond et al., 1995; Sizer, 1992).

Though the indicators of the dire need to create more opportunities for African American students are not new, there have been little efforts developed to create substantial and sustainable reform (Cohen, 2001). Despite the calls for change, it had not been but until recently that the structure of high schools have remained in traditions that have outlived their effectiveness (Noguera, 2008). Schools continue to provide a curriculum with little intellectual depth and rigor that lacks the development of higher order thinking skills to which students of color have been alienated (Steinberg, 1996).

The idea of transitioning our instructional practices to approaches that are nontraditional can be daunting to some educators. A shift from direct instruction to a more student centered approach where learning is interactive has proven to be more of a task for teachers. In *Teaching Critical Thinking* (2010), bell hooks argues that students learn best through engaged pedagogy where the interactive relationship between teacher and student takes precedence. In this, teachers must be willing to engage students deeply where the development of an emotional awareness and emotional intelligences is optimal

in the creation in the class environment. Engaged pedagogy basis the assumption that all students contribute the instructional and learning process. In an engaged classroom, teachers no longer carry the sole leadership role.

The role of the educator is to create opportunities where students can begin to think critically. According to hooks (2010), student collaboration (conversations) allows educational environments to begin to break the notion that learning is private and competitive. Choosing collaboration creates an atmosphere where learning is democratic to which everyone has a voice.

PBLs and Best Practices for Educating African American Students

Though each of the points made in this section addresses the instructional needs
of African American students, it speaks directly to the characteristics of problem based
learning, as discussed previously. The following points were made with regards to best
practices for educating African American students:

- Authentic performance task is critical to the development of competencies within students and the incorporation of real world context within the curriculum should become inseparable in an educational experience (Darling Hammond (1995).
- Educators should aspire to create opportunities where students become critical thinkers and agents of change (Freire, 2000).
- Engaging students in the roles within the context allows for realistic possibilities (Darling Hammond, 1997).

 Solely focusing on developing the skills of students without the development of critical thinking, we then create trainable, low level functionaries of the dominant culture (Lisa Delpit, 1995).

Educators who utilize the strategies of problem based learning create environments that speak directly to best practices. As stated previously, within PBLs students are provided with real world problems that require them to develop solutions through the use of their prior knowledge of the topic and identified learning targets developed by the student and teacher. The students are provided with a role of which they are the scientist, the lawyer, or community member who has the responsibility to create a solution.

Within the creation of that solution, students create a product or performance task that provides evidences that not only provides a solution, but that the learning targets are met. Instead of student assessment remaining the memorization of facts as it currently exists in traditional classrooms, the students are assessed by the application of their knowledge to the problem. This application, instead of memorization (recall), invokes critical thinking within students that allow them a deeper learning of the content as suggested by Baeten et al. (2010). Through the literature review, there is a clear connection between what is suggested as best practices for African American students and the aims of problem-based learning.

Culturally Responsive PBLs

The call to incorporate culturally responsive teaching with that of problem-based learning is vital in the effort to increase student engagement. Linda Darling-Hammond (1995, 1997) urges educators to proceed by providing students with realistic roles and

engaging them in authentic educational opportunities through the development of performance tasks, in essence, describes the concept of problem-based learning. Problem-based learning experiences call for assessments to be products (performance tasks) developed by students that will allow them to apply what they have learned rather than regurgitate information. With incorporating both practices, the educator is taking their knowledge of the students and selecting PBL problems that are relevant to their students' cultural capital.

In a case study developed by Timothy Berry (2013) that explored culturally responsive project-based learning, the findings spoke directly to best practices necessary to effectively educate African American students. As a result of the PBL, students felt comfortable with providing feedback and participating. Students reported feeling empowered and unafraid to share their perspectives with the teacher. This study suggested that the participants of his research (African American students) were successful because they were very engaged in their learning process. In addition, Barry argued that the following were key factors in the successful increase of engagement: student choice within the selection of performance tasks and the topic of race being a central point in the discussion topic. Berry (2013) continued by stating that CRT should be at the forefront of student learning for black males in order to make the topic meaningful.

Summary

This chapter reviews the literature that responds to the question of the impact of culturally responsive teaching with increasing the level of engagement of African American students. While focusing on best practices for instruction for African American

students, this chapter tied in the tenets of PBLs and culturally responsive teaching with those best practices. Finally, the chapter concluded with a case study that responded specifically to the findings of the use of culturally responsive PBLs conducted with African American students.

Chapter 3 discusses the use of a qualitative case study through the lens of the Critical Race Theory to develop a rich analysis of student experiences through the voices of their teacher who created the culturally responsive PBLs. The goal of the Critical Race Theory is to unveil racism or racist practices that contribute to inequalities according to race. The chapter continues by discussing how participants were selected.

CHAPTER 3: RESEARCH METHOD

The purpose of the study is to obtain a deeper understanding of the impact of combining culturally responsive teaching to that of problem-based learning instructional practices with regards to the increase of the engagement of African American students.

This work will inform educators of strategies that will begin to increase the possibilities of providing African American students with opportunities to explore rigorous curriculum in an effort to close the opportunity gap. The study is guided by the following question:

How does culturally responsive problem-based learning impact the engagement of African American students in an urban setting?

Critical Race Theory

This chapter discusses the method of research, Critical Race Theory (CRT), used to conduct this study. CRT is a theoretical framework that establishes a committed effort to social justice by advocating and unveiling biases on the basis of race (Bell, 1992). CRT focuses on the effects of racism on society, while directly addressing discriminatory systems of White supremacy (Cook, 1995; Crenshaw, 1995; Matsuda, 1995). Though CRT was a concept primarily used in the legal arena (Crenshaw, 1995), Ladson-Billings and Tate (1995) have been credited with introducing this concept in the realm of education.

CRT asserts that racial privilege is a dominant factor in the creation of laws and policies (Parker, 1998). Ladson-Billings (1998) furthers the point by contending that the

method of storytelling (narratives) that provides the experiential knowledge shared by those whose realities are filled with lived experiences of social injustices. It is the role of CRT to examine the societal limitations placed upon a race and how those limitations impact educational opportunity and equity for students of color (Ladson-Billing, 1998; Tate, 1997).

Elements of CRT prior to Bell's establishing of its tenets can be traced back to the work of W.E.B DuBois in *The Souls of Black Folk* (1903). Dubois' work provided one of the earliest analysis of race in society where he declared race as the premier problem of the 20th century. He suggested that the source of racial inequality in employment and education found its source in racism. Additionally, Carter G. Woodson' analysis of race in *The Miseducation of the Negro* (1933) argued that the low quality of education provided to African American students perpetuated the ideology of inferiority.

CRT operates under the tenets of (a) counter storytelling, (b) the permanence of racism, (c) Whiteness as property, (d) interests convergence, and (e) the critique of liberalism. Though CRT has traditionally been used in the landscape of legal research, Ladson-Billings and Tate (1995) have been credited to introducing the framework to the educational arena. This research primarily focused, but will not be limited, to the tenet of counter-storytelling, Whiteness as property, and the critique of liberalism. As defined by Delgado and Stefancic (2001), counter-storytelling is a method of telling a story that "aims to cast doubt on the validity of accepted premises or myths especially ones held by the majority". This method seeks to oppose and reveal stereotypical ideology that has worked to become a staple within the psychology of both the majority and the minority. Storytelling provides the necessary context for understanding, feeling and interpreting

(Ladson-Billings, 1998). The CRT lens provides a platform for analysis of data that places value on the complexities of the experiences of African American who have been oppressed by the dominant culture. This acknowledgment of experiences provides a voice to the marginalized. Delpit (1988) argues that one of the greatest social miscarriages in the field of education is that the perspectives of people of color have been silenced.

The tenet of Whiteness as property asserts that the right of exclusion within the society holds the same essential attributes to that of property rights. In this, the rights to possess and use have been enjoyed almost exclusively by Whites. Thus the plethora of educational policies and practices that have restricted African American students from access to high quality, rigorous curriculum exemplifies the notion of Whiteness as property (DeCuir & Dixson, 2004; Ladson-Billings & Tate, 1995). Schools have used honors, gifted programs, and advanced placement courses as tools to re-segregate the classroom. This concept asserts that structures are in place to protect those rights so that they remain in the possession of Whites.

The CRT tenet of a critique of liberalism challenges liberal racism, or the tenets of those who are passive or silent as majority group members when they see racism.

Crenshaw (1988) poses that a liberal perspective of the civil rights movement was that of a lengthy, marathon effort that constantly struggled with the "upward pull" was a flawed concept. CRT states that racism requires an immediate, sweeping change that directly contradicts the slow painstaking processes of liberalism (Ladson-Billings, 1998). Those incremental changes benefit those of the dominant culture who are not negatively impacted by social or educational inequities.

Additionally, CRT scholars argue that the liberal notion of color blindness within legal ideology and in educational approaches serves as a vehicle to justify the dismantling of race-based policies that were developed to address social inequities (Gotanda, 1991). This misconception of color blindness allow practitioners to believe that ignoring oppressive societal practices acts as a remedy to eliminate the possibility that racism and racist acts persist (DeCuir and Dixson, 2004). In this discourse, the practitioner seeks to provide equality as opposed to equity. Approaches based on equality assumes that student experiences and opportunities are the same. Equity recognizes that student experiences have been unequal and begin to address inequities. Thus, the practices of color blindness limits the liberal commitment to diversity in instructional practices or approaches.

The choice to utilize critical race theory when examining the instructional impact of culturally responsive problem-based learning approach is appropriate in that CRT recognizes the existence of hegemonic practices that exist in the educational experiences of African American students. Conducting research through the CRT lens allows the researcher to understand the lived experiences and impact of racism through interviews and analysis of data that acknowledges the complexities of race biased policies (Solorzana & Yosso, 2002). Because African Americans have been historically marginalized by the dominant culture, CRT provides a counter-storytelling that places the realities of the oppressed at the center of the narrative.

Because culturally responsive problem-based learning places an emphasis on the richness of understanding a variety of perspectives, utilizing CRT is an appropriate choice for the framework of this study. Through the lens of CRT, traditional school

curriculum serves as yet another tool used to maintain the status quo and a white supremacy master script (Ladson-Billings, 1998). Swartz (1992) argues:

Master scripting silences multiple voices and perspectives, primarily legitimizing dominant, white, upper-class, male voicings as the "standard" knowledge students need to know. All other accounts and perspectives are omitted from the master script unless they can be disempowered through misrepresentation. Thus, content that does not reflect the dominant voice must be brought under control, mastered, and then reshaped before it can become a part of the master script. (p. 341)

This excerpt emphasizes the idea that master scripting silences a diversity in perspectives and legitimizes the singular perspective of the dominant culture. Any account that adds value to other experiences are intentionally omitted to disallow the consumption of complete truth. It is not simply the omitting or distortion of the truth within school curriculum that must be considered, but it is the level of rigor that should also be a concern. This concept emphasized the permanence of racism within the area of education as discussed.

Research Design

For this study, a qualitative research approach was selected to closely examine the instructional outcomes and engagement for African American students who are exposed to culturally responsive problem-based learning experiences. An interpretative case study method conducted through the lens of CRT guided the study. A qualitative research approach allows the researcher to better understand the experiences of the subjects through the exploration of a social or human problem (Creswell, 2003). Peshkin (1993) argues that qualitative approaches to research allow new concepts to emerge, for silenced voices to be heard, and for the development of solutions to begin.

An interpretive case study method creates opportunities for the researcher to understand human experiences. The interpretation of a problem can take form in various methods depending on the set of beliefs and interpretations that the researcher brings to the work (Lincoln & Denzin, 1995). The case study itself is used to capture the perspectives of high school students who experience culturally responsive problem-based learning practices. Case studies methodologies provide the platform and the means of conducting investigations around complex issues that may include multiple factors (Merriam, 1998). Merriam continues by arguing that the ultimate intent of an interpretive case study is the thick descriptions given within an analysis where themes are developed that support theoretical assumptions.

Participants

The staff of the school of which participants were selected employs 42 teachers. During the research period, the staff participated in professional development focused on developing culturally responsive PBLs. A second professional development session was for voluntary participants from the 42 staff members. Additional professional development was provided to assist teachers in their project design as needed. The professional development training was conducted by the school's Curriculum and Instruction Specialist (CIS) who have been trained to develop PBLs through the Buck Institute. The CIS has also been informally trained utilizing the methods of the New Tech model.

The desired sample groups for this study was 4-5 teacher participants which was consistent with the 4 teachers who actually participated. Though there was an ample amount of teachers who were versed in the use of problem-based learning, there were

very few who incorporated culturally responsive strategies into the development of rigorous problem-based learning practices. A criteria was developed for those teachers participating in this study. First, teachers must currently work in an urban, high school setting. Second, teachers needed to be familiar with the concept of culturally responsive teaching and have intentionally developed culturally inclusive practices in the classroom. Additionally, those teachers would also be familiar with developing PBLs. Teachers were selected from an urban high school located in the Cleveland metropolitan area.

Interviews

The participants developed culturally responsive PBLs utilizing the structures provided for them within the professional development sessions. This study utilized semi-structured interviews of participants following the development of the culturally responsive PBL but prior to delivery. The second interview occurred immediately following the completion of the culturally responsive PBL. Interviews were conducted within the school where the teachers are currently employed. Those interviews were individualized and consisted of two sessions. The first interview occurred in February 2018, and the second interview was conducted after the strategy has been provided to their classes in later that month.

Data Collection, Analysis and Procedures

Creswell (1998) states that the data analysis techniques insist that the research is constantly comparing newly collected data for developing thematic categories. To create an analysis of the impact of culturally responsive PBL, two semi-structured interviews were conducted with the teachers who are employed at one urban high school in the Cleveland, OH area. Data was collected during the month of February 2018 through

individual interviews that lasted at a maximum of 60 minutes. The researcher conducted note taking as well as digitally recorded each session. Teachers were contacted to arrange the first of the two interviews. The data received from the interviews were transcribed and were presented back to participants for review. The second interview session occurred after the PBL was completed by students to which interviews, transcriptions, and reviews were conducted in the same manner as the first interviews. Line-by-line coding was utilized. This strategy served as a useful tool of assistance in developing themes. For example, the assumption of the years of experience as initially thought to have been a major theme; however, it was not the years of experience but the use of multiple instructional strategies that immerged as the major theme. Classroom observations were also conducted where the process of script taping was used. These observation will last no more than 30 minutes. Thematic categories were then developed around the impact of culturally responsive PBLs on the engagement of African American students in an urban setting.

Trustworthiness

According to Glense (2006), trustworthiness refers to the credibility of the researcher's findings. Because of the nature of qualitative research, it is a difficult task for the researcher to completely separate the work from beliefs and experiences.

Measures were taken, including the Subjectivity Statement, so that research trustworthiness was obtained.

To ensure the validity of the research, multiple forms of data were collected using teacher interviews to obtain the richness of their experiences and through classroom observations. Second member checks were conducted after each interview. Regarding the

dependability of the research, a peer debriefing occurred to develop a consensus of the transcription and analysis.

Subjectivity Statement

As an educator of nearly 2 decades, I have been a participant in and leader of opportunities to address the needs of African American students. Efforts seemed to be ineffective while incorporating strategies that merely promoted repetition continued to fail our most vulnerable students. With this, I felt that a more sustainable effort was necessary in developing instructional practices that promotes rigor, relevance and engagement. Most recently, I was provided with the opportunity to turn around one of Ohio's most challenged schools. To address the need to increase engagement and achievement, I chose to transform the school into one that focused on developing an environment where problem-based learning was at the core of our instructional approach. Within a year, we began to see not only an increase in student engagement, but we also began to see growth with our students as measured by MAP testing. Those increases lead to the need to focus more research on the strategy.

While there are many factors that contribute to the difficulty for some African American students within public education, I see that the issue can begin to be addressed through teacher/student relationships and through effective instructional approaches. We expect our students to be active participants within their educational experience, yet we make no effort to move past the banking model (Freire, 1970) where student are merely recipients of information. It is my opinion that public education has failed to respond to the needs of African American students in a way that is prescriptive and not repetitive. Developing strategies to begin changing the current narratives around the negative

outcomes for African American students is critical and a liberal approach that will stall immediate change in instructional practices in unacceptable.

Summary

In review, this study utilized a qualitative research approach, while utilizing Critical Race Theory as the theoretical framework. An interpretive case study method was used to explore the impact of culturally responsive problem-based learning on the engagement of African American students. In addition, the chapter discussed the structure of the research design and the selection of participants.

CHAPTER 4: FINDINGS

This study explored the impact of culturally responsive PBL on the engagement of African American students in an urban setting. The study specifically focuses on a new concept to synthesize the approaches of culturally responsive teaching and problem-based learning to create the concept of culturally responsive PBL (CRPBL). The study was designed to monitor firsthand teacher accounts of student responses to implementing this approach to increase student engagement. Chapter four introduces the findings of this study that is characterized based on the research question:

How does culturally responsive problem-based learning impact the engagement of African American students in an urban setting in the Mid-West?

The four (4) participants of this study are introduced. The participants included two African American male teachers, one African American female teacher, and one Caucasian female teacher. The teachers are from the content areas of English and Science.

In the proceeding section of the chapter, major themes that emerged within the study are explored. Those findings are presented through the lens of critical race theory. The themes that emerged are:

- 1. Multiple Instructional Strategies
- 2. Knowledge of students
- 3. Student emotional attachment to the problem
- 4. Students working collaboratively

Participants (4)

Mr. Herd has been in education for over 10 years and speaks with a high level of excitement when describing the PBL he developed. Within his CRPBL, the focus of his standards to be covered was figurative language within his English class. The CRPBL that he designed combined the elements of both English and Social Studies. He describes his CRPBL as follows:

All right. I was thinking that, and it just so happens that this particular PBL took place during the African and the Black History Month. The kids have been hearing about black history forever. Dr. Martin Luther King, and Malcolm X, and everything else, so I wanted to try a different approach. I wanted to explore the Underground Railroad and how they navigated using different foot patterns, and using code words, and Negro spirituals, and everything. I thought the kids would really be able to take this and run with it, so I designed the project around that.

Ms. Price reported 14 years of experience as a teacher. Within her CRPBL she created a project where the standards focused on drawing relevant information from multiple print and digital resources. This focus is a substandard of the writing standard. Within this CRPBL, students worked to develop digital collages. The driving question for this project was "Am I my brother or sister's keeper?" The teacher incorporated the concept of the #MeToo Movement that provided a voice to those who have been sexually assaulted, human trafficking in Africa, and women's rights in the Middle East. The teacher discussed how the theme of dehumanization played a role in the development of the CRPBL. The goal of the digital collages was to bring light to the same dehumanization students have witnessed in their own community. Ms. Price added:

That's the huge driving question. With all of the themes in mind, I think it's very relevant. I think it's very modern and I think it means a lot in this day and age. Students will compose a multi-paragraph essay about how this theme as informed and transformed their thinking about the world and about each other.

Ms. Smith has been a science teacher for 16 years. In the development of her CRPBL, the teacher highlighted the oppression of a minority group through a recent incident referred to as the Dakota Access Pipeline, where a group of Native Americans are protesting the creation of a pipeline through their land. The environmental standard covered in this CRPBL is the analysis of the human impact on the environment. Ms. Smith continues:

I selected it [Dakota Access Pipeline crisis] because it's a fairly current issue. Even though I presented it as if it was still happening. It did just happen in the last year, year and a half, which makes it very relevant, because we did get to talk about some of the political issues surrounding it like the Obama/Trump transition and different sides of that coin as well. It's also relevant because there is a persecuted minority group of people involved on one side of this that they were able to relate to on several levels. That's it.

After researching the topic and selecting an argument, the students were then directed to create public service announcements (PSAs) to support and promote their argument.

Mr. Pratt has been an English teacher for 2 years. The CRPBL that he developed focuses on the standards of literary themes. The teacher has been reading a book called Speak to which he desired to focus on the themes of isolation, depression, and sadness. With this, the teacher developed a project that would allow students to use their own experiences to emphasize that theme through the development of a sonnet. To create an exemplar for this 3 day project, Mr. Pratt created a sonnet of his own, exploring the Black Lives Matter Movement. He then encouraged the students to use their experiences or what they have observed within their community to be the subject matter of their sonnets.

But I think that once they find something that's actually closely responsive with them, so once they find that theme within their life, or once they find a point of their life that they want to discuss, I think that they'll be fine. That's what I'm going to have to help them with. So day two, once they really get busy, once I

kind of have them point out something in their life they want to really talk about, they're interested in, I think that it'll go.

Part II: Themes

The second part of this chapter discusses the findings and themes that emerge from teacher interviews, classroom observations, and the analysis of the data. To be defined as a theme, it was required that 3 of the 4 shared a similar experience or observation. The level of consistency that is developed through this analysis allowed the researcher to explore those trends. Through the lens of critical race theory, I was allowed to analyze the narrative of the participants from a perspective that allowed race and student experiences through race to be at the forefront. It should also be noted that the research question of the impact of culturally responsive problem-based learning on the engagement level of students was developed to argue that this strategy increased student interest in exploring the topic and remaining on task throughout the learning process. Four major themes emerged from this research:

1. Multiple Instructional Strategies

- 2. Knowledge of students
- 3. Student emotional attachment to the problem
- 4. Students working collaboratively

During the interview, each participant was allowed to discuss their experience in education. Participants were encouraged to discuss their path in their educational journey to their current point. The goal of the study was to examine the engagement level of students who participate in cultural responsive problem-based learning. Though the

engagement level can be subjective, the teacher was asked to gauge the engagement level in comparison the typical instructional practices.

Theme One: Use of multiple instructional practices within the CRPBL problems

While the planning for each of the CRPBL was similar in nature, what began to reveal itself was the level of experience of the teacher implementing the CRPBL.

Because CRPBL still relies on instructional best practices, it is the teacher's ability to plan appropriately for their students using multiple instructional strategies that is key. Three of the four teachers interviewed had 10 or more years of experience. The 4th teacher in this study had two years of teaching experience. This teacher utilized the PBL as the sole instructional strategy. Mr. Herd stated that he utilized technology, collaboration, mini lectures, and Socratic seminar as tools within the CRPBL. In addition, the teacher used a cross curriculum approach of incorporating social studies standards.

Mr. Herd states:

The way I introduced it is that I actually had a Socratic seminar two weeks prior to this PBL where I took one of the rap songs that the kids were talking about, and I broke it down and we discussed it. That activity kind of was the bridge to this activity because it allowed me to see where they were and what direction they would tend to go in with this assignment.

Ms. Price also discussed utilizing multiple strategies.

The target goal is that students would be able to draw relevant information from multiple print and digital resources effectively. Which is of course, in Ohio, a 9th, 10th grade writing standard and we're heavily pushing writing. I said, "How can I do that?" I'd like for the students to create a photo collage using their cell phones or other devices, iPad, whatever of representations of their lives as images from both inside and outside of the building.

In addition to her increased use of technology for her CRPBL, Ms. Smith created activities and processes that were outside of her science content.

It's basically a step by step pre-writing/brainstorming/it starts out identifying their target audience, which we practiced beforehand. We watched lots of PSAs and

talked about, "Who is this PSA talking to? What's the message?" So they had to write down who they were talking to and what's their message. And from there, basically, go scene by scene. What's the viewer gonna see? What's the viewer gonna hear? And from there they had to create a storyboard that gave a little bit more detail. What exactly, if you're gonna see so-and-so's face and hear so-and-so's voice, what's so-and-so gonna be saying?

Theme Two: Knowledge of students

It is the assumption that effective culturally responsive teaching requires the educator to have an extensive knowledge of the students' cultural history. While it would be inconceivable for the teacher to be an expert on each culture they serve, it is the knowledge of their students that will direct the teacher in their efforts to educate themselves on specific areas. With this, the knowledge of students provides the foundation of focus for a teacher to develop impactful culturally responsive PBLs.

According to the teacher interviews, knowledge of their students is far more than conducting interest inventory surveys. Those teachers who recorded a high level of engagement within their CRPBL used the following strategies in the following narratives to understand the students they serve. When asked about understanding his students and how that knowledge played a role in the development of the CRPBL, Mr. Herd clearly expressed the importance of developing relationships with his students.

That's an everyday thing. Just listening, and interacting, and building that relationship with them, and knowing their interests and their dislikes, and what's going to hit home with them, what they will probably just shy away from, giving them their little chances of successes, and just building on that. I kind of knew what to expect when I introduced this to our students.

Ms. Price also discussed how she works to develop a better knowledge of her students to inform the development of this CRPBL.

How I plan on, excuse me, gathering the data on my students' backgrounds or interests, really, it's ongoing. I talk with them. I interview them. I'll pop up at a game or a practice. I love events like the STEAM Festival, because that gives me a chance to just walk around in a more relaxed school environment after the day and just meet with the community.

Ms. Smith added:

I feel like I gather that every single day in class. You hear their conversations, or you hear what they're listening to, talking about.

The analyzed data highlighted that the teachers who immersed themselves into the lives of the students seemed to be able to develop problems where students showed a high level of engagement. In Mr. Pratt's classroom, he, however, discussed the following as his tactic for gathering data on student backgrounds:

Well, I've worked with them throughout the year, for one. But also, in the very beginning of the year, all of my students, I give them a survey to find out a little bit more about them, to find out how they learn, what type of things they enjoy, their strengths and weaknesses, so that way I can teach based off of those things.

Theme Three: Student emotional attachment to the problem

Culturally responsive teaching places the student's background and prior knowledge to the forefront of the instructional process. Within CRPBLs, students who connect with the problem on an emotional level displayed the highest level of student engagement.

During Ms. Smith's science CRPBL, they addressed how a less powerful people were being forced by the government to be removed from land that belonged to them. In this current time, discussions of the oppression by the government has been a topic of discussion since the inauguration of President Donald Trump. The relationship of the government taking advantage of yet another minority group seemed to touch students on an emotional level. According to Ms. Smith, the students developed highly charged, high

quality PSAs that not only addressed environmental concerns, but also addressed the students' beliefs that "stealing" land from Native Americans was wrong in the "discovery" of America and continues to be morally wrong today. When Ms. Smith was asked a question regarding previous lessons that allowed her to see the importance of developing lessons where students are emotionally attached to the problem, her response was as follows:

Because it was a real problem that I based around a story that I told them about a lady from some country in Africa whose three-year-old kid died from dirty water, and so they had to create a water filter for that town.

Mr. Herd also spoke in terms of emotional attachment to the project.

What really threw me is the emotional response that the kids had to this particular PBL, especially when I explained to them about the quilt patterns and navigating through the Underground Railroad, and some of the hardships, and what these people faced. When they actually had to walk it, because I created one around the halls in the school, and actually had to walk it with the consequences attached to it, I didn't expect the emotional response, especially from some of my young ladies.

Mr. Pratt echoes the sentiment that when a project or activity is one that directly speaks to the student, the level of engagement is automatically increased.

I think for all of us, when something is personally relatable, you can be engaged in it. It's about you, and you can relate to all of the themes.

Teacher enthusiasm played a vital role in the initial introduction to the problem. As indicated by the data, 3 of the 4 teachers created elaborate stories, entry events, or activities to ensure that their students would be engaged. For example, Mr. Herd

developed an entry event for his CRPBL that included the development of a video of he and a few of his friends posing as runaway slaves, headed North without the use of maps. In addition, he created learning opportunities throughout the building to add to his elaborate problem (quilt patterns/navigation through the Underground Railroad).

According to the data, teacher enthusiasm in the development of the CRPBL influenced the level of student enthusiasm towards the topic. Those teachers who displayed a high level of creativity with the entry event reflected the highest level of student engagement.

Theme Four: Students working collaboratively

After an analysis of the data, I was able to discover another theme that developed. Three of the four teachers who participated in this study developed CRPBLs by grouping students in pods of 3-4 students. In the case where the students worked on individual projects, the students were less engaged. When speaking in terms of engagement, the teacher who allowed students to work individually, Mr. Pratt, described the level of engagement as follows:

50-60%, which is a high level of engagement because of the dynamic of that classroom. I had one of my lower level learners, he kind of struggled with it, which is tough. It's a sonnet, so that's a very higher level activity. But I have to work with him on almost everything.

Ms. Price who designed a CRPBL also spoke in similar terms when providing a measurement of the engagement levels of her students.

So I think that the students, I like to say probably 18 out of 21 [85.7] students really liked it, and I say that because they were asking for it, "Are we gonna do this tomorrow?" And then even over the weekend when they tend to forget things, they're like, "Are we gonna do this Monday?" Or I also saw a change in behavior management, not that it's bad or anything. Sometimes we need some mild redirection first thing in the morning. But they were on task, we start with a

writing activity, bell ringer. And they got right into it because they knew that without that they wouldn't be able to move to the next step, which was working on their project.

Mr. Herd spoke in more qualitative terms when describing the level of engagement:

The level of engagement during this particular PBL was incredible. I knew the kids would like the project, I just didn't realize how much they would like the project. I think what got them so engaged is the whole music side to it. Right now, music is the big influence in our kids' lives, especially the African American community. Once I explained to them, and showed them what it looks like, and what they'll be able to do, they were all in.

Ms. Price begins a discussion of how she felt about students working in groups during her CRPBL:

But it was a little bit more student-oriented, and they're not working in their notebooks, they're working kind of at their own pace with their group members. They're talking and loud and there's not as much control, 'cause I've got kids in the hallway filming here, and kids in the classroom filming there, and kids in my storeroom filming in there. And it's sometimes hard to let go of the control of the classroom.

Ms. Price's statement highlights a point that the groups allowed the assignment to be more student centered and less teacher controlled. Ms. Price also spoke about the empowerment of her students while working within their groups.

And I just thought about this, with this, because the students are really directing themselves with this, and just with some parameters I'm starting to feel like more of a facilitator than direct lecture, which I don't do a lot of anyway.

Summary

This study explored the instructional impact of teachers utilizing the approach of culturally responsive problem-based learning in a Mid-West urban high school setting.

Through the collection and analysis of the data, five themes that were consistent with the research question emerged: 1). Teacher experience levels; 2). Knowledge of students; 3).

Student emotional attachment to the problem; 4). Teacher enthusiasm in the development and implementation of the CRPBL; 5). Students working collaboratively. The themes assist in devising a response to the research question.

The final chapter discusses the themes and presents recommendations for the utilization of CRPBL through the uses of Critical Race Theory (CRT) as the theoretical framework to connect the findings to the literature.

CHAPTER 5: DISCUSSION OF FINDINGS

In chapter four, an analysis of the data collected from participant interviews allowed major themes to emerge within this study. The themes identified were 1). Use of multiple instructional strategies; 2). Knowledge of students; 3). Student emotional attachment to the problem; 4). Students working collaboratively. In this chapter, we will discuss those findings through the lens of Critical Race Theory and provide recommendations for both replication of the concept and for future research.

The purpose of this study was the exploration of the concept of problem-based learning (PBL) as a strategy to provide students with relevant, engaging pedagogy that will not only address the opportunity gap, but also begin to raise student achievement. The focus of this study explored the tenets of problem-based learning and culturally responsive teaching; however, an approach was recommended that the synthesized both approaches which was referred to as Culturally Responsive Problem-based Learning (CRPBL).

It was vital to the research to recognize the voices of the participants as they discussed their thoughts around the development of the CRPBL and their perspective of student responses to the lesson implementation.

Because this study utilized the framework of Critical Race Theory, race was used to provide a foundational reference to the analysis and interpretation of the findings. As defined by Delgado and Stefancic (2001), counter-storytelling is a method of telling a story that "aims to cast doubt on the validity of accepted premises or myths especially ones held by the majority".

Theme One: Multiple instructional strategies

It was evident that the teacher experience level played some role in the development and delivery of the CRPBL. Though the teacher experience level played a minimal role in the initial discussions with participants, it impacted the variety of their instructional strategies. The more experienced participants utilized multiple instructional strategies within their CRPBL. Though Mr. Pratt, who has two years of experience, reported an increase of engagement that was relative to the engagement level of his traditional instruction, he used a singular approach to the development of the CRPBL. In comparison, Mr. Pratt developed a CRPBL that allowed the students to develop a sonnet focused on their experiences while Mr. Herd, who has 10 years of experience, introduced much of the topic in a Socratic seminar, created mini lessons where students were reading quilt designs that aided runaway slaves, created an activity where those designs were placed throughout the building, created a simile and metaphor lecture, and allowed students to create a recording to show what they had learned through lyrical coding.

The literature discusses that students who are in urban schools, particularly African American students, are more likely to have less experienced teachers. In the *Flat World and Education* (2010), Linda Darling Hammond discusses that in North Carolina, the largest negative effects on student achievement have come from inexperienced teachers and from those teachers who have taken an alternative route, "lateral entry" to teacher certification into the classroom without training within teaching. It should be noted that once these "lateral entry" teachers completed their certification, their effectiveness increased. In addition, a high turnover rate does occur most often within those teachers who feel that they have been ineffective. With this, the process of high

turnover then perpetuates the process of replacing those minimally trained teachers with more minimally trained teachers. Teachers without full preparation are less likely to meet the needs of their students. It should again be stated that teacher expertise was the single most import measureable cause of increased student learning which accounted for 40% of the measured variance in student test scores (Darling Hammond, 2000).

This study does not insinuate that one of the participants was ineffective in their efforts to providing his students with an impactful lesson. What is does show is that a teacher who has less experience in the classroom will have a lessor repertoire of strategies and experiences that could impact the delivery of the CRPBL. With that, this study does provide evidence and support to the idea that teacher experience is impactful to the learning experiences of students. That experience allows teachers to be able ensure that their instructional practices are not one dimensional and provides a level of focus that speaks to the needs of all students.

Theme Two: Knowledge of students

The data analysis revealed that the knowledge of students in the development of a CRPBL is critical to the engagement level of students. Teachers acknowledged that their efforts were ongoing and not limited to topics around teaching and learning. Ms. Price discussed how getting to know students outside of the classroom in a more relaxed atmosphere allows her to really begin to know her students.

As previously stated, *The Dreamkeepers* (1994) and the work of Jawanza Kunjufu in *Black Students, Middle Class Teacher* (2002) have similar ideologies of how African American children should be educated. In both of their arguments, they believe that one of the keys to the success of African American children is the importance of relationship

building. Ladson-Billings states that because of effective teachers' in-depth knowledge of their students, those students' commitment to learning is reflective of their commitment to the teacher.

Kunjufu (2002) contends that there is no significant learning when there is no significant relationship. Malcolm Gladwell's *Blink* (2005) discussed how our decision making process is affected by our experiences. Because of the nature of the profession, educators do not have the luxury of being selective in the relationships they chose to foster with their students. It is the moral obligation of educators to recognize the potential of each of their students. This point was exemplified in another of Gladwell's work, *Outliers* (2008). In one of the chapters from the book, Gladwell discussed the story of Chris Langdon and how he was eventually found to be brilliant, but was overlooked as a student because he did not fit the stereotypical framework of a "good student." Since many inner city African American males do not fit the profile of the "good student", which is only determined merely by student compliance and teacher perceptions and not academic ability, they are systematically overlooked for their brilliance and gifts.

In a research study by Wiggan (2008) that explored school engagement among African American students, he found that students who are considered high achieving attribute successful teacher relationships as a contributing factor. The findings stated that engaging pedagogy was linked to impacting their successes and associated with caring professionals who were committed to building professional relationships with their students.

It should be understood that it is not the student/teacher relationships alone that increases the level of student engagement. It is the knowledge of the student that culturally responsive teachers use to develop instructional plans to reflect what is learned.

From the CRT lens, the lack of developing relationships with African American students provides the platform for those students to feel disconnected from the content and even from the school. With this level of disconnection, African American students begin to feel that their needs and interests are discounted or ignored. In *Framing Dropouts* (1991), Fine begins to open the dialogue on the issue of the effects the educational institutions have on students. The act of *silencing* was defined as the action of removing or invalidating the voice of the oppressed. Because of silencing, mere discussions addressing inequities that can begin the relationship building process within schools are avoided. Fine continues by elaborating on the fact that these behaviors of educators have become institutionalized within daily school processes.

Theme Three: Student emotional attachment to the problem

The participants in this study reported that students were extremely attached to the topics/problems provided to them within the CRPBL. In each of the problems, students were able to see a resemblance of their home lives in the curriculum. In every classroom observed, the students emerged in the work and embraced the topics. Mr. Pratt stated:

Like I said before, I think what stood out to me was I truly think they were engaged. And I think that it also made me realize that I need to have more relatable, especially closer relatable type of topics and lessons I do. So maybe I like to do a lot of writing. So I think more of their writing pieces they would write about them some more.

Ladson-Billings (1994) expresses the notion that culturally relevant teaching capitalizes on the cultural strengths of African American children rather than attempt to invalidate the student's prior knowledge. In those classrooms, students are not made to choose academic success over culture, but are aimed to help them be able to draw connections between the home culture and the school culture. This strategy allows the student to feel connected to the learning. This is where the emotional attachment occurs. Because intentional efforts are being made to connect the students' cultural capital to the curriculum, students are drawn into the learning because it reflects images, ideas, or other artifacts from their culture.

From a CRT perspective, the alienation of students from curriculum seeks to perpetuate feelings of inferiority. When students are unable to see that their cultural capital is valued, then they believe that the culture that is on display carries the value. Within this, students do not see their culture as valued, excluding what they are taught at home. This educational practice itself carries a hegemonic tone as it serves as a tool to maintain the status quo and values of the dominant group while discounting those of the minority group. Akbar (1998) contends that it is vital that African American students, in this case, are immersed in structures that expose them to images and ideas that reflect their own self-worth. Though he argues that negative imagery creates difficulties socially for African Americans, this study contends that the omitting of imagery/ideas that reflect the values of a group will provide similar outcomes.

Teacher enthusiasm in the development of the topics is defined as a sub theme of student enthusiasm because the data has reflected a correlation between the two aspects of the CRPBL. The high the level of enthusiasm of the teacher in their development of

the CRPBL, the more engaged students were within the activity. This may reflect the teachers beliefs in the effectiveness or necessity of an approach that places value in the student's cultural capital and not just on the content alone.

Ladson-Billings (1994) provides a critical argument in the difficulty in changing teacher ideology. She argues that it is critical that the training of our teachers consist of strategies centered on culturally responsive teaching. Film and television have provided a romanticized version of the majority teachers entering the classroom and simply changing the destinies of students strictly by will. This perspective creates a deficit response in those seeking to "save" African American children. Instead of believing that all children bring valuable cultural capital to their educational experience, teachers enter the classroom with the belief that prior knowledge only works as a hindrance to traditional education that says that only the teachers are the experts. Culturally responsive teaching should be a part of the training to solidify that the concept of building onto what children already know is expected as a normal educational practice and not an innovative concept.

Through the CRT lens, culturally responsive teaching requires the teacher to believe that African American students require instructional practices that are outside of a Eurocentric focus. This brings us back to the point of the color blind teaching approach. As stated in previous chapters, this misconception of color blindness allows practitioners to believe that ignoring oppressive societal practices acts as a remedy to eliminate the possibility that racism and racist acts persist (DeCuir and Dixson, 2004). While the teacher strives for equality, they ignore societal challenges that require a stronger sense of equity. It should also be considered that the concept of color blind instructional practices

would lead the teacher to be grounded in Eurocentric ideologies and taught to them within teacher preparation.

Theme Four: Students working collaboratively

An analysis of the data found that the level of engagement was increased among participants in those classes that encouraged student collaboration. Within those classrooms, the students held discussions within the group on the topic at hand. While discussing that she saw herself as more of a facilitator during her CRPBL, Ms. Price discussed how the students felt more empowered through their collaborative work. In her terms, the student felt more in control.

Collaborative environments can be a powerful tool to empower and support student learning. John Tagg (2003) contends that collaborative environments benefit both the facilitator and the student groups as the teacher is seen as a member of the learning community instead of the holder and dissemination of information. In addition, collaborative environments moves a traditional classroom where students are placed in rows and asked to take notes to an environment where student interaction and feedback takes center stage.

Freire (1970) argues similar sentiments regarding schooling in general where the teacher is no longer the singular expert in the room. From a CRT perspective, empowering African American students to become active participants in the learning is consistent with best practices of educating students. Collaborative environments places a level of trust in the hands of those participating where the level of expectations are higher that the students will complete assigned tasks. It is the lack access to rigorous curriculum

and lowered expectations of students that has been a hindrance to the advancement of African American students.

Recommendations for educators:

Much of the work surrounding innovative instructional practices for African American students are those of theoretical or vague recommendations. This section of the study will provide a framework for developing CRPBLs for replication. It is hopeful that educators will use this framework not verbatim but in a way that provides guidelines and not restrictions.

Developing Culturally Responsive Problem-based Learning Projects Step By Step:

The teacher will need to begin with the end in mind. Many have referred to this tactic as reverse design. Using this method, the teacher will focus on what standards, skills, or competencies will be covered. The teacher should now begin to develop an idea of how the student can show what they have learned. When you develop what you want your students to know and how it will be assessed, then you can begin to use your creativity to draw student into the content. This is where the teacher develops the driving question. The driving question is similar to that of a research question as all tasks and research is conducted to respond to that question. The driving question should be one that is unable to be answered without students taking the appropriate steps in their research, activities, or tasks.

Knowing Your Students

It is not impossible to create a PBL without knowing your students, but it is impossible to create a CRPBL without knowing the students you serve. With this

knowledge/relationship with your students, the teacher can now create problems with their actual students in mind. This is the most important aspect of creating a CRPBL.

Alignment to Standards

It is vital that projects are aligned to state standards. The most ineffective aspect of developing the CRPBL is the development of any project that merely serves as inconsequential exercises. An educator should keep in mind that the increase of student engagement should be used to increase the students opportunities to improve how they will be measured academically. In most cases, that measurement is high stakes testing. CRPBL Length

Be mindful of the length of the CRPBL. While the length of the CRPBL varied from teacher to teach from 3 days to 3 weeks, we collect from one of the teachers that the length of the project impacted the level of engagement. According to one of the participants, the level of rigor began to dwindle due to the length of her CRPBL. She stated that it was almost as if the student forgot the reasoning for the CRPBL. Entry Event

The entry event serves as the hook to ensure that the student feels compelled to attached themselves emotionally to the problem developed by the teacher. The entry event could a video, a letter describing the problem (entry document), or a guest speaker that will help introduce the problem. The teacher should be intentional that the imagery or resources used in this aspect of the CRPBL is culturally responsive. So the use of video clips of their neighborhoods, familiar terms, or images that reflect the culture of the students.

While the problem itself is legitimate, the teacher should feel free to use their author's license to develop their entry event when necessary. For example, if the role of the students is that they will serve as the FEMA representative, a fictitious letter from the FEMA director can be developed by the teacher to outline the problem at hand. The teacher has to keep in mind that a creative way to engage their student's curiosity, so an enthusiastic entry event is key.

Know, Need to Know, Next Steps

So when the problem is introduced, the teacher then discuss with the students what they understand about the problem. While the discussion should come across as authentic, it is actually designed to discuss what the students will need to learn by the end of the project in order to create the product. The teacher then develops 3 groups: Know, Need to Know, and the Next Steps. The teacher asks the students what they know about the problem then writes down the responses under the Know section of the board. The Need to Know section is actually the most planned out section for the teacher. Before questioning the students, the teacher should use this to focus on the skills necessary for the students to have in order to fulfill the requirements of the standards. Though the teacher has already developed a list of what is necessary for students to learn and research, the art is ensuring that within the discussion with the students, the teacher is using probing questions to allow the students to actually state those items to be learned. This creates a greater level of focus throughout the problem. In this instance, the students are developing the focus for learning. That focus could either be the information that students will research or the mini lessons that the teacher will teach students.

Assessment/Product

The assessment of learning should be centered on what students are able to show what was learned. At the developmental stage of creating a CRPBL, understanding what the student should be able to do it imperative. Now that students have learned what was intended, it is now time for them to develop their product. Their product should consist of a performance task that could include a debate, position paper, a multimedia presentation, the development of a program, or various other means for student students to show what was learned. It is important that the students are provided with rubrics to not only allow students to understand what it expected, but it will also work to improve the quality of the product. Students should be assessed utilizing means that are aligned to the rigor of the standard. For example, if the rigor of the standard calls for students to be able to create an argumentative essay, then the ability to merely define an argumentative essay would not align to the standard. Rather, the creation of an argumentative essay where students are able to support their argument through citing text would be appropriate.

Summary

This study explored the concept of problem-based learning (PBL) as a strategy to provide students with relevant, engaging pedagogy that will not only address the opportunity gap, but will begin to address raising student achievement. While the focus of this paper explored the themes of problem-based learning and culturally responsive teaching, an approach was recommended that the synthesis of these strategies increases the engagement of African American students, thus increasing achievement. This approach was referred to as Culturally Responsive Problem-based learning or CRPBL. Through the collection of the data, it was identified that use of multiple instructional

strategies, knowledge/relationships with students, the student's emotional attachment to the development of the problem, and students working collaboratively within the CRPBL were contributing factors in the increase of student engagement. This study offered a qualitative analysis of CRPBL through the lens of CRT which offers best practices in the instructional approaches developed for African American students.

Continuing to educate students utilizing strategies that merely prepared them to become low level workers only prepares them for the past and not the future. Martin Haberman (1995) describes the ideology of effective, urban teachers, who he refers to as "star" teachers, as those who avoid narrowing school curriculum to repetitive, basic skills and job readiness. Carter G. Woodson (1933) also addressed this concern in *The Miseducation of the Negro* when he discussed the out of date curriculum of the trade schools that were proposed as providing opportunities for African Americans at that time. What he found was that the strategies that were being used were old and out of date. By the time those students completed their training, their "new" skills were obsolete. Additionally, skills developed by repetition and skills drilling does not address the need for the development of the skills required to allow African American students to be able to problem solve, work collaboratively, or think critically. These are the vital skills necessary for students to be productive under the current market, which an approach like CRPBL provides.

While this study contributes to the field of literature on providing African

American students with rigorous, relevant, and engaging instructional practices, questions still remain to be answered for future research. There is a need for studies that will focus

on the level of engagement of CRPBL from both the teacher and student's perspectives in order to compare and contrast the narrative.

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APPENDIX A: INTERVIEW PROTOCOL

Interview 1:

What is the problem that you are presenting to your students?

Why was this problem selected?

What were the target goals/standards that you were addressing within this PBL?

How do you gather data on your students' backgrounds and/or interests?

When creating this problem, how did your knowledge of the students impact the direction of the PBL you designed? Are you incorporating student interest?

How does the PBL design differ from your other instructional practices?

Outside of the learning standards, how do you determine the goal of PBL?

What issues are you anticipating?

What stakeholders or issues are factored into developing your PBL?

What instructional tools do you use to ensure that the level of rigor is high within the PBL?

Describe the student assessment or product on your most recent project.
What were some of your challenges in developing this PBL?
How do you determine if students are engaged?
Based on your most recent project, engaged were your student?
Interview 2:
How would you describe the level of student engagement during the PBL?
What issues did you encounter?
What were some occurrences that you did not anticipate?
Describe the student assessment or product on this project.
What ongoing information did you learn about your students to assist in deepening the
level of rigor for upcoming PBLs?

APPENDIX B: CRPBL Planning Sheet

CRPBL Planning Sheet/Checklist							
Teacher:		Subject/Course:		Grade:			
Part I: What will students be learning and doing?							
Content, Competencies, and Learning Outcomes What will you cover with this unit? What do you want students to know and be able to do as a result of this project?	Content Topics (Find in Course Content Topics Checklist)						
	State Standards						
Project Problem What scenario could you put students in to create a need-to-know for the content?			Role	Audience			
Culturally Responsive What knowledge of your students apply to develop this CRPBL? What images/ideas reflect this knowledge?							
Driving Question What is the challenge or the issue that will be addressed throughout the project?							

Length of the Project (1-3 Day Design Challenges, 1-2 Week CRPBL)	What checkpoints will be in place to manage student progress?					
Part II: What are students producing and how will they be assessed?						
Project Name						
Culminating Products & Performances What will students be expected to produce that will allow them to demonstrate their knowledge and skills?						
Products/Tasks (Does the students to show what the		Group or Individual	Does the Product/Rigor match the level of rigor of the standard?			
Entry Event - What is your hook to engage learners?						

Building to the Project/Assessment What scaffolding might be needed to support the students' development of the content , competencies, and literacy skills?						
Need to Know (scaffolding standards)	of Next Step (Activities, mini lessons, small group sessions for differentiation, etc.)	Product/ Assessment (measurement of understanding)				