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**An Examination of the Impediments to Implementing Student-centered Teaching
Methods in Public Schools**

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Abstract

In education, traditional methods have long relied upon static textbooks and blackboards to impart knowledge to students. Unfortunately, the lack of dynamism with this approach has failed to foster creativity, motivation, inquiry, individualization, and other practices crucial to serving diverse learners, especially Black children. We sought to uncover barriers and potential solutions to this problem by elevating the voices of educators, from classroom teachers to building and district administrators, at a predominantly African-American suburban secondary school in the Midwest.

We designed a qualitative research study to answer a single yet layered research question: What impedes Black students from experiencing and gaining access to relevant, student-centered learning (SCL) opportunities in public secondary education? The study seeks to fill gaps in implementing student-centered teaching methods in public schools.

We utilized three primary theoretical frameworks to analyze primary data collected from educators at our chosen site, including critical race theory, liberatory pedagogy, and culturally relevant pedagogy. The three classroom teachers and three administrators who participated in the study identified a myriad of issues, such as state-mandated testing and bias and stereotyping by teachers and other faculty.

Using thematic coding analysis, two themes emerged: systemic issues and cultural relevance. We trust our findings will contribute to addressing disparities that require increased funding for schools in underserved areas, help target support for disadvantaged students, and advance ongoing professional development for teachers to improve their ability to provide student-centered instruction to ensure that all students have equal access to resources and support needed to thrive.

Dedication

This dissertation serves not only as a culmination of our academic pursuits but also as a testament to the unwavering love and support of our beloved families. They have been our constant source of encouragement and inspiration, providing us with the foundation upon which we have built our successes. Their unwavering faith in our abilities has been a guiding light throughout this journey, and we are forever indebted to them for their sacrifices and selflessness. We express our deepest gratitude and appreciation to them, for their unwavering support has been integral to our academic success.

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We express our utmost gratitude and deep humility for the honor of embarking on this research endeavor. We recognize that our capacity to undertake this task is a direct result of the benevolence and provision of the Divine. His unwavering faithfulness and guidance have been a constant source of strength as we navigate the complexities of this undertaking. We feel incredibly fortunate to have such a steadfast and Resolute God by our side, guiding us every step of the way.

Nicole Adewale thanks her parents, Jane Reed and Robert Tinsley Hutcherson, husband Abiodun Adedolapo Adewale, daughters Adeola, Shola, Fumilola, and Folake, her LARK sisters and the many friends, family, mentors, and sorority sisters who have supported her.

Robert Bloch acknowledges the guidance and love of his parents, Denise and Barry Bloch, husband Bob Reel, his brilliant, handsome, and ebullient son Raj, along with his army of fantastic and fierce Glittercorn friends.

Garry's journey toward success has been shaped by many important factors, and he recognizes the intricate web of influences that have played a part in his life. He is deeply grateful for the tireless efforts of his parents, Shirley and Edward Gibbs, whose unwavering support and guidance have been instrumental in his achievements. Their selfless love and sacrifice have been a constant source of inspiration for him.

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Chapter One: Introduction

Background

Our research team was formed around our shared interest in the practical, equitable training of teachers in student-centered teaching methods, which we believe directly impacts students' academic success. Unfortunately, we have all witnessed the denial of student-centered learning to students of color in various ways. This is a major concern for us, and we are dedicated to finding ways to address this issue head-on.

We started this journey by stoking our curiosity about traditional versus non-traditional teaching methods and how instructional methodologies within each paradigm impact Black students. As we studied works like *Freedom Dreams* (Kelley, 2003), *The Color of Mind* (Darby & Rury, 2018), *Fugitive Pedagogy* (Givens, 2021), *The Sum of Us* (McGhee, 2021), and *The Color of Law* (Rothstein, 2017); we learned how education has been used to uphold the persistence of race as a core systemic mechanism of oppression. Many American public schools have adopted a standards-based curriculum rooted in traditional and subsequently biased pedagogy framed in white supremacy.

Social equity implies fair access to livelihood, education, and resources, full participation in the political and social life of the community, and self-determination in meeting fundamental needs (U.S. Green Building Council, 2016). When some are excluded or lack the knowledge, income, training, or equipment necessary to participate in public discourse fully, they must overcome obstacles to access. Therefore, fairness demands remedies to redress historic injustices that have prevented or diminished access in the first place (U.S. Green Building Council, 2016).

For many years, educational institutions have relied on traditional teaching methods to impart knowledge to students (Elmore, 1996). This approach has been successful in the past, and it has become deeply ingrained in educational culture. However, in today's constantly evolving academic landscape, educators must remain open to new approaches and adapt their teaching methods to better serve their students (Chassignol et al., 2018). While traditional teaching methods are still widely used, it is crucial to recognize that there may be more suitable approaches for meeting the needs of diverse students. As such, educators must be willing to explore and experiment with student-centered teaching methods (Wright, 2011). By doing so, they can ensure that every student can thrive academically. It is essential in student-centered teaching methods to prioritize each student's individual needs and learning styles to create a supportive and inclusive learning environment (Chassignol et al., 2018).

Problem Statement

Formal education through vocational studies, military training, or higher education continues to serve as a vehicle for upward mobility and the most efficient vehicle for economic success (Sturgis & Casey, 2018). However, access to culturally competent classroom strategies that center on the needs of students and produce equitable academic outcomes appear to be available at a higher frequency for gifted and advanced track students, more of whom tend to be White (Staiger, 2004). In contrast, pedagogies employed for Black students tend to be heavily focused on their performance on standardized tests (Knoester & Au, 2017). These tests are presented as objective assessment tools needed to place students in courses of appropriate ability. Instead, these tests tend to drive those students into lower-track courses or toward special education at a

much higher rate (Watanabe, 2008). As such, instructional time for Black students tends to be consumed with test preparation and rote memorization rather than problem-posing dialogue that leads to authentic and critical thinking (Freire, 1970/1996). Devine-Eller (2012) finds that in the days and weeks leading up to state-mandated testing, students of color tend to get shorted on classroom instruction due to heavy test preparation compared to advanced and gifted students, many of whom are White, who receive minimal disruption to their academic day. Pedagogies that rely heavily on traditional forms of measurement inspire tedium in the curriculum, which in turn fosters disenchantment and disappointment with coursework and leads to poor test outcomes that only serve to breed low self-efficacy among students who then fall into a cycle of disengagement and low performance (Gul & Rafique, 2017).

In many American communities, quality education - that advances students toward higher education and other opportunities for development as engaged adults - is rationed for Black yet available in abundance for White and otherwise privileged students (Mickelson & Everett, 2008; Watanabe, 2008). This phenomenon is rooted in the history of racial sorting (Darby & Rury, 2018), through which students are ostensibly placed in vertical tracks based on academic preparedness, which disproportionately and negatively impacts the educational trajectory of Black students in particular (Oakes, 2008; Watanabe, 2008). While there is anecdotal evidence of barriers to implementing these methods (Kim et al., 2019), more research is necessary to evaluate their effectiveness fully. Darby & Rury (2018) offer that racial sorting simultaneously reinforces the superiority of White intelligence and the inferiority of Black minds. As we continue exploring new teaching methods, it is crucial to prioritize educational strategies that

celebrate the historical and cultural context of Black students while addressing how that history has impacted their academic preparedness (Ladson-Billings, 2009).

Students who do not fit within the teacher's ideal student profile are often punished harshly for violating school codes of conduct, resulting in students missing class. When students fall behind, teachers are less likely to help those students catch up, and in response, those students lash out in ways that bring harsher punishment, including incarceration (Johnson & Jabbari, 2022). Another unfortunate consequence of the over-policing of Black children is their disproportionate representation in special education (SPED) classes. Often, Black children are referred for SPED services for behaviors that are overlooked in White children (Darby & Rury, 2018; Ladson-Billings, 2009).

Unfortunately, many educators do not take the time to investigate the existence of learning or emotional disabilities and instead allow their biases and long-standing stereotypes about children of color to brand the student as uneducable and look for ways to remove them from the classroom. SPED tends to place Black students in a holding pattern and provides services to support them where they are, while White students are given resources to overcome their disabilities (Darby & Rury, 2018). Consequently, many teachers focus on depositing knowledge into their students rather than trusting them to generate knowledge alongside the educator (Freire, 1970/1996). As classroom and community educators, we have witnessed the subjection of Black students to oppressive pedagogies that lack respect for the cultural context of those students (Popenici & Kerr, 2017). Below, we offer brief accounts of educational oppression our team members have witnessed over time.

Nicole's Personal Witness Statement

In August 2017, I celebrated my 49th orbit around the sun by returning to school for a second bachelor's degree at a midwestern HBCU. One of my first classes was freshman geography. On the first day, the professor told the class that his primary objective was for us to know the information, not just learn it to earn a passing grade. Instead of us just sitting in class and being fed information from him, he wanted to engage in dialogue with us about the topic. His methodology was a radical departure from the philosophy of many educators I encountered during my K-12 education in a predominantly Black inner-ring suburban school district and the five years spent pursuing a degree from a highly ranked predominantly White engineering school in the Deep South.

Our professor's strategy became more transparent when he invited us to help him develop the study guide for our first test. Initially, many of my classmates were hesitant about this approach because they were only used to serving as repositories of information and had minimal experience engaging as co-creators of knowledge. To succeed on the quizzes, students only needed to attend class, ask questions, and take careful notes during the test preparation sessions. While this sounds easy, it is pretty daunting for students who have been submerged in oppressive pedagogies for their entire academic careers to now serve as accomplices in their own liberation.

Bobby's Personal Witness Statement

In the same region, an inner ring suburban public school district supports the idea that Black students cannot be trusted to take ownership of their learning and must be subjected to a heavy set of rules and regulations of both mindset and body over Black

students. However, in the alternative program that I helped build over five years, these same students experienced rates of high success, learned from teachers who empowered them, and thrived within the context of individualized and project-based learning. While in the alternative program, students received active trauma-informed and therapeutic counseling while also being connected to post-high school career, vocational, and community college opportunities.

Because of the program's success in a short amount of time, other elements were added, including a middle school and permanent suspension component. If it were not for COVID, we would have had an elementary component that partnered with BJC Hospital. However, under a new administration that favored punitive, charter school-like structures, our alternative program floundered and eventually closed. Even when the alternative program succeeded, there was still an increased incidence of student criminality after graduation. The number of students who faced incarceration only got worse after the program's undoing. Unfortunately, two of the most behaviorally and academically challenged students who sorely needed the alternative program ended up floundering at the program's demise. One student was arrested for carjacking with a group of peers, and another was expelled. These students missed out on several months of education. When there was no practical replacement for the alternative program, many of the students merely added to the negative stereotypes and tropes used to oppress Black students.

Garry's Personal Witness Statement

Why can't we have the "good stuff"? Growing up in a small town, I was taught to be grateful for what I had, but as I grew older, I began to question why Black

communities couldn't have the same resources and opportunities as others. As a teacher who has worked in three school districts, I have observed stark disparities between the private schools and public schools where I have taught, especially those serving predominantly Black populations.

The private school was housed within a magnificent edifice with state-of-the-art facilities, including well-equipped laboratories, modern classrooms, and a well-stocked library. The facilities were well-maintained, and the grounds were immaculate, creating a welcoming atmosphere that fostered a sense of community among the students, parents, and teachers. In contrast, the public schools struggled to maintain basic accommodations, and the lack of funding was evident in the poorly equipped classrooms, outdated textbooks, and inadequate technology.

The Black public high schools that I worked in initially flourished when they were first built. Still, the lack of proper accommodation to prolong the lavish building and well-maintained facilities made sustaining a welcoming atmosphere challenging in the long run. The buildings lacked the necessary infrastructure, such as laboratories and libraries.

This lack of physical resources was a significant impediment to implementing successful teaching methods like student-centered learning, which requires a conducive environment that promotes learning. This lack of resources affects the quality of education, making it harder to implement successful teaching methods like student-centered learning. Over the years, I've seen firsthand how Black schools often start strong, only to falter when the district fails to provide adequate support. This unfair distribution of resources contributes to low-performing schools and perpetuates the

mindset that Black communities should be grateful for whatever they're given. In the Black public schools I worked in, the classrooms were overcrowded, and teachers had limited resources to create an engaging learning environment. The overcrowding increased the school's ability to keep up with the ever-changing education and technology, thus increasing challenges to deliver quality education.

Our research team is working to uncover the systemic impediments to implementing student-centered teaching methods in public schools and advocating for equal access to resources and opportunities for all students, regardless of race. It's time to recognize that everyone deserves access to the "*Good Stuff*."

Rationale of the Study/Purpose

This case study explored the barriers to implementing student-centered teaching methods within an inner-ring suburban high school. The study sheds light on how these barriers are established and facilitated using the lens of Critical Race Theory (Decuir-Gunby et al., 2019; Ladson-Billings & Tate, 1995) to examine how and to whom Student-Centered Learning is delivered. Precepts of Liberatory Pedagogy (Freire, 1970/1996; Shor & Freire, 1987) and culturally relevant pedagogy (Ladson-Billings, 2009; Ladson-Billings, 2021) guided this research.

Our team investigated the barriers to accessing pedagogies that liberate students from simply serving as vessels for the deposit of information (Freire, 1970/1996). Moreover, we set out to understand why these barriers appear to be more pervasive and pernicious for Black compared to White students. We also examined how and why public K-12 instruction revolved around measures of success for teachers and local education agencies (LEAs) rather than the needs and dreams of their students. The ultimate goal is

to increase the availability of equitable and inclusive educational systems that benefit all students.

Exploring this line of inquiry is essential because it is often the case that schools do not provide equitable educational opportunities in the form of student-centered learning (Talbert et al., 2019). The contrast comes between schools serving students of color that tend to utilize pre-packaged scripted curricula (Beaudoin, 2013; Hursh, 2008) versus re-creative student-centered learning that will enhance students' academic success (Robinson & Aronica, 2016; Akdemir & Özçelik, 2019). Our team anticipates that this research will improve educators' understanding of the most effective learning strategies for helping students prepare for post-secondary endeavors (Harris, 1993).

Teachers are constantly challenged to ensure students achieve high scores on national assessments, regardless of the obstacles those students face inside and outside the classroom. (Oakes, 2008; Watanabe, 2008). When presented with students with low skills or off-task behavior, educators find it easier to justify a student's current academic placement rather than consider how character and competency could indicate their potential for achievement (Guinier, 2016). Student-centered teaching is about meeting students where they are in terms of skill level and helping them approach their full potential by shoring up gaps in these skills through culturally relevant teaching methods (Ladson-Billings, 2009).

Additionally, when students have high levels of trauma or low skills that contribute to negative behavior, those students are removed from class or school entirely (Hardin-Bartley & Harris, 2019). Students fall further behind and have a significantly

lower chance of obtaining a high school diploma, a significant tenet toward future success (Darby & Rury, 2018).

Significance of the Study

Several factors can impede Black students from experiencing and gaining access to relevant, student-centered learning opportunities in public secondary education. Some of these factors include inadequate resources (Ahn et al., 2018), lack of access to technology and high-quality curriculum (McMurtry et al., 2022), and systemic racism (Banaji et al., 2021). Additionally, Black students may face challenges such as discrimination, stereotypes, and a lack of representation in the classroom (Philips, 2021). These factors can contribute to a lack of engagement and motivation, ultimately hindering their academic success (Martin et al., 2017).

Ladson-Billings (2009) makes a clear case that students should assist in constructing their learning objectives and be trusted that they have basic knowledge about what they are learning. She also recommends that students should be able to continually invest in their learning and draw on the lived experiences of other students. Each teacher's duty should be to ensure that, in the classroom, student culture becomes centered as a "point of affirmation and celebration" (Ladson-Billings, 2009, p. 127). Furthermore, Ladson-Billings (2009) clarifies that a culturally relevant classroom appreciates students' skills, knowledge, and background. Such an environment builds on prior knowledge but does not punish students for what they do not know or never learned.

Educators need a consistent playbook on best practices to implement student-centered learning for K -12 environments. Students can be task-focused and organized, following multi-step directions (Powell et al., 2017). However, they can be easily

overwhelmed by large assignments, time management, and careless mistakes, causing them to lose focus and miss assignment deadlines. These behaviors affect student involvement and progress (Zhang & Hyland, 2018). The resulting fact is that when we practice diversity, equity, and inclusion, we break down immediate and systemic barriers (Barber et al., 2020).

This study will join other research that helps to advance social justice in education (Francis et al., 2017). The intent is to offer resources for educators serving Black students to determine how to improve educational delivery (Lacerenza et al., 2017). A key objective is to help those educators question how society's pre-imagined abilities of Black people impact their delivery of education. Educators should actively challenge their personal values and assumptions while simultaneously rising to meet the ever-changing social justice system (Kelly et al., 2020; Lorde, 2007).

Researching the implementation of traditional learning methods versus a more student-centered approach to instruction and how race and class impact those efforts is imperative to advance equitable academic outcomes (Haynes, 2017) for students of color and other marginalized groups. Schools with predominantly Black populations should have the knowledge base to build a classroom culture that empowers students to learn on their own terms. Black students especially need teachers and other adults in their school to support and celebrate them in a way that makes them feel wanted and loved (Ladson-Billings, 2021).

Advice from Darby & Rury (2018) to school leaders is clear: "Leaders must do more than count heads in classrooms to fix the problem[s]" (p. 111) related to educating students of color. To work against oppressive Color of Mind frameworks, teachers must

purposefully and intentionally fight against measures that sort and trap Black students in educational pathways constructed by low expectations (Darby & Rury, 2018).

Research Question

We are curious to understand what makes a school district inequitable and who is behind the successful and unsuccessful output of student learning. We want to know the indicators of equitable success in schools that use student-centered learning within a school district. We have gained this understanding by focusing on a single research question:

What impedes Black students from experiencing and gaining access to relevant, student-centered learning (SCL) opportunities in public secondary education?

We analyzed the data through the lens of critical race theory with a focus on Liberatory Pedagogy (Freire, 1970/1996; Shor & Freire, 1987) and culturally relevant pedagogy (Ladson-Billings, 2009; Ladson-Billings, 2021). Our desire was to understand the extent to which these observed disparities are impacted by race and the most effective learning strategies to help equitably implement student-centered learning strategies for all students.

Our research team formulated a qualitative case study (Glaser, 2017) aimed at providing a thorough analysis of the various policies and resource factors that significantly impact the quality of delivery and availability of student-centered teaching methods (Soubra et al., 2022). With a keen focus on providing an in-depth understanding of the key factors at play, our study involved meticulous data collection and analysis through various sources. Given the proliferation of student-centered teaching

opportunities at the high school level, we bolstered our study with in-depth interviews with teachers and school administration within one Suburban high school.

We aimed to explore the most effective approaches for implementing student-centered teaching methods (Akdemir & Özçelik, 2019). Our findings will continually provide valuable insights for educators, policymakers, and other stakeholders in the education sector. We accomplished this by amplifying the voices and perspectives of administrators and teachers (Decuir-Gunby et al., 2019) to ascertain the resources needed to deliver student-centered learning equitably. Through this study, we hope to contribute towards developing evidence-based policies and practices (Beerens, 2020) that can enhance the quality of education and improve student outcomes (Namoun & Alshantqi, 2020).

Definitions of Terms

Student-Centered Teaching Methods - “Student-centered teacher methods for which the planning, teaching, and assessment revolve around the needs and abilities of the students. The teacher shares control of the classroom, allowing students to explore, experiment, and discover on their own” (Brown, 2008).

Student-Centered Classroom - A student-centered classroom is a learning environment where teaching and learning occur (Wulf, 2019).

Student-Centered Environment – A classroom culture that shifts the focus of instruction from the teacher to the student by utilizing teaching strategies that are knowledge-centered, learner-centered, assessment-centered, and community-centered component, which will develop the student to be self-sufficient and independent (Froyd & Simpson, 2008).

Culturally relevant pedagogy - Culturally relevant pedagogy embraces a school culture that supports a learning environment centered on empowerment, cultural competence, and critical consciousness. It is a pedagogy of opposition that facilitates the teacher's capacity to celebrate the languages, customs, and history of the students they serve and develop classroom practices that help every student grow academically and develop a critical sociopolitical consciousness that allows them to participate in society fully (Ladson-Billings, 2021).

Liberatory pedagogy - Liberatory pedagogy seeks to understand and address how schools and educators sustain and reproduce systems of oppression by introducing learning strategies that allow students to participate in constructing knowledge. (Freire, 1970/1996) Liberatory Pedagogy creates a safe and conducive learning environment through feedback and assessment methods focused on advancing the needs of the student (Williams, 2014).

Project-Based Learning (PBL) - Project-based learning focuses on the learning process and goals rather than the outcome. The teacher's role is to facilitate by setting student goals from the start and model the process of inquiry and exploration. The students heavily determine what is being learned and will make real-world applications of their learning. Though there is some direct instruction related to the project, students are primarily working together and problem-solving over a common issue to solve. (Martin, 2021).

Chapter Two: Review of Literature

Introduction

In our literature review, we will present existing scholarship on our central topic of student-centered learning, which is an approach to education that prioritizes individual students' needs, interests, and abilities and emphasizes their active engagement in the learning process (Sturgis & Casey, 2018). Liberatory pedagogy (Freire, 1970/1996) and culturally relevant pedagogy (Ladson-Billings, 2021). Liberatory pedagogy advances the need to build educational structures that empower students to participate in their own liberation (Shor & Freire, 1996) and subsequently become agents of change in society. Culturally relevant pedagogy recognizes and values students' cultural backgrounds and experiences and uses them as the epistemological foundation for teaching, learning, and social action (Ladson-Billings, 2021).

Student-Centered Learning

As an educator, it is important to understand how to effectively use learner-centered teaching strategies. This approach puts the needs and experiences of the students at the forefront of the learning process. Acknowledging the diverse backgrounds and experiences of the students in the classroom is crucial to creating an inclusive and equitable learning environment. Educators must also recognize that schools are sites of social reproduction and how their pedagogical approaches reflect and reinforce dominant societal values and norms (Weiss, 2021). Consequently, students' educational experiences and outcomes are often not determined by their individual abilities and efforts but by factors reflected in the broader society, including social class, race, and gender. Weiss (2021) offers that a review of social reproduction theory is critical to understanding that

schools are not intrinsically centers of equal opportunity. Instead, public schools often serve as mechanisms for maintaining and reproducing existing social hierarchies and power relations.

Sturgis & Casey (2018) espouse student-centered learning as the most effective means for achieving equitable educational outcomes. The core philosophy behind student-centered learning requires the development of strategies geared toward meeting every student's unique needs. The four main characteristics of this model, voice, choice, competency-based progression, and continuous monitoring of student needs, all work together to ensure that students are given the best chance to succeed and reach their full potential (Sturgis & Casey, 2018). They become more engaged and motivated by giving them a voice and choice in their learning. There is a reversal of roles where the weight of learning is put onto the students (Tomlinson, 2017); the teacher gets to know each learner individually and sets or adjusts goals based on the student's strengths and weaknesses.

According to Martin (2021), Personalized emphasizes investigation, inquiry, and problem-solving based on a process rather than rote memorization and regurgitation. Learners are then coached to meet specific individualized goals while also giving lots of feedback to students on their progress. The competency-based progression ensures that they are truly mastering the material before moving on, and continuous monitoring helps to catch any issues early on so that they can be addressed quickly (Sturgis & Casey, 2018). Overall, student-centered learning is a great way to ensure every student is given the best chance to succeed. As seasoned educators, we have found that implementing student-centered teaching methods can effectively promote diversity, equity, and

inclusion in the classroom. However, successfully implementing these techniques requires careful planning and considering potential challenges (Walia, 2022).

A frequently used student-centered teaching approach is project-based learning. This method empowers students to explore and delve deeper into relevant and exciting topics, leading to a more engaged and collaborative learning experience. Moreover, project-based learning can help break down barriers between students from different backgrounds and promote cross-cultural understanding (Shadiev et al., 2015). Another effective strategy is culturally responsive teaching. This approach involves recognizing and valuing students' cultural experiences and backgrounds and incorporating them into the curriculum.

When teachers take the time to understand and appreciate their students' diverse backgrounds, students feel seen and heard (Ladson-Billings, 2021), fostering a sense of connection to the material and helping them see themselves reflected in their learning. Of course, implementing these approaches may present challenges, especially for classroom teachers who are new to these methods. However, these obstacles can be overcome with proper training, support, and a collaborative approach (Brush & Saye, 2000). Student-centered teaching is a powerful tool for promoting diversity, equity, and inclusion in education and creating a more equitable and inclusive learning environment for all students. By embracing these teaching methods (Duckworth & Maxwell, 2015), we can ensure that all students feel valued and supported in their learning journeys.

According to Froyd and Simpson (2008), there are four fundamental approaches to establishing a student-centered classroom: knowledge-centered, learner-centered, assessment-centered, and community-centered components. All four approaches shift the

focus of instruction from the teacher to the student (Freire 1970/1996), providing greater opportunities for students' self-sufficiency and independence.

Krajcik and Blumenfeld's (2006) research points toward project-based learning (PBL) as a key student-centered instructional strategy to motivate and engage students while helping them achieve a comprehensive and theoretical conception of concepts beyond the superficial level attained within traditional teaching concepts. SCL methods such as PBL allow students to actively contribute to their understanding of topics and concepts by researching real-world problems and constructing solutions rather than passively understanding pre-formed results (Krajcik & Blumenfeld, 2006)

Blended Learning

A well-implemented blended learning model is inherently student-centered. By leveraging technology and offering flexibility in terms of time, place, and pace of learning, students are empowered to influence the learning process more actively and effectively (Capone, 2022). For instance, students can complete modules at their own pace, participate in virtual discussions, and access learning materials from anywhere, anytime. This approach allows for a more personalized learning experience, where students can focus on their needs and interests. Additionally, blended learning can provide teachers with real-time feedback on student progress, enabling them to adjust their instruction to meet the needs of each student. Ultimately, a student-centered blended learning model can improve student engagement, retention, and achievement (Cummings et al., 2017).

Internships

Self-assigned internships have become increasingly popular (Wolfe & McCoy 2008) in recent years due to the numerous benefits they offer to students. With self-assigned internships, students can choose where they want to learn and experience a real workplace environment, which can be highly rewarding and educational (Kalule et al., 2017). When students undertake internships voluntarily, they tend to have a more positive impact on their learning (Jung & Lee, 2017) as they have the chance to decide how they want to learn and what they want to gain from the experience. Students can personalize their learning experience by choosing their own internship, making it more relevant to their interests and career goals. This personalization factor can be a strong motivator for students to push themselves to gain more knowledge and experience during their internship. In addition, self-assigned internships can provide students with a unique opportunity to network with professionals (Ozuah et al., 2001) in their field of interest, which can be invaluable for their future careers.

Moreover, self-assigned internships also allow students to gain a deeper understanding of their chosen field (Wrigley & Straker, 2017) as they observe and participate in real-world scenarios. This hands-on experience can enhance their understanding of the industry and help them develop a range of practical skills that will be useful in their future careers. Overall, the ability to choose where they get hands-on experience makes learning personally important for students and motivates them to get the most out of their education. Self-assigned internships offer a unique opportunity for students to gain practical experience, develop valuable skills, and network with

professionals (Jackson, 2020) in their field of interest, making it an excellent choice for students looking to enhance their learning and career prospects.

Project-Based Learning

A student-centered teaching approach that emphasizes the importance of hands-on, experiential learning is project-based learning (PBL) (Worsley & Blikstein, 2014). One of the benefits of PBL is that it allows students to develop a deeper understanding (Handrianto & Rahman, 2019) of the subject matter. Engaging in meaningful projects gives them practical skills and knowledge relevant to their lives and future careers. Additionally, project-based learning helps students develop critical thinking, problem-solving, and communication skills (Anazifa & Djukri, 2017), which are essential for success in today's rapidly changing world. It provides a unique opportunity for students to investigate and respond to authentic, relevant, and complex questions, problems, or challenges (Walt & Barker, 2020). This approach involves students working collaboratively in groups or independently for an extended period to investigate and solve real-world problems. Project-based learning may include conducting research, brainstorming, creating prototypes, testing and refining solutions, and presenting findings to an audience. Project-based learning is not only an effective teaching approach, but it is also a fun and engaging way for students to learn (Leung & Pluskwik, 2018). By working on projects that are personally relevant and interesting, students are more motivated to learn and are more likely to retain the information they have learned. A PBL approach can help students develop a sense of ownership and responsibility for their learning, which can lead to greater success in the classroom and beyond (Agudelo & Vasco, 2019).

Diversity, Equity, and Inclusion in Student-Centered Classrooms

Cultural competence is directly linked to DEI (Diversity, Equity, and Inclusion) practices. Using a DEI method of content delivery falls squarely within the precepts of culturally relevant pedagogy (Ladson-Billings, 2009; Ladson-Billings, 2021) and Liberatory Pedagogy (Freire, 1970/1996; Shor & Freire, 1987). DEI plays an essential role in learning that links to students' higher self-efficacy and empowerment. High self-efficacy is linked to promoting collaborative learning and diverse cultural references, giving students a greater feeling of confirmation and visibility (Stinken-Rösner et al., 2020).

Incorporating diversity, equity, and inclusion into student-centered teaching methods is crucial for creating a welcoming and inclusive classroom environment (Samuels, 2018). By acknowledging and addressing issues of systemic bias and inequality in education (Kramarczuk et al., 2017), teachers can create a learning space where all students feel seen, heard, and valued (Ladson-Billings, 2021.) Student-centered teaching methods can be particularly effective in promoting diversity, equity, and inclusion. By giving students a more significant role in their own learning, teachers can help to create a more inclusive classroom culture. For example, teachers can encourage students to share their experiences and perspectives and provide opportunities to work collaboratively and learn from one another. To ensure that all students feel seen and heard in the classroom, educators can implement a range of strategies, including the use of inclusive language and diverse examples in their instruction, and provide opportunities (Stinken-Rösner et al., 2020) for students to learn about and celebrate different cultures.

Furthermore, student-centered classrooms can create a safe space for students to ask questions, express their thoughts and feelings, and work to build positive relationships with each student. However, implementing these strategies can be challenging. Educators may face resistance from students who are not used to being included (Doyle, 2023) in the learning process or colleagues who are not yet fully committed to diversity, equity, and inclusion. Additionally, teachers may need to confront their biases and assumptions to create a truly inclusive learning environment.

Nguyen (2014) presents scholarship that reveals significant disparities in access to student-centered learning for Black students in public secondary education. These disparities are often rooted in systemic issues such as discriminatory policies, lack of resources, and implicit biases (Bruster et al., 2019).

Effectiveness of Student-Centered Teaching Methods

Practicing a student-centered learning methodology involves group discussions that allow participants to explore and apply concepts in a meaningful way (Samaranayake, 2020). Another aspect is to tailor collaborative information to each one's needs and interests. Collaborative information might involve differentiated instruction, personalized learning plans, or individualized feedback. Ultimately, the goal is to empower students to take ownership of their learning and become lifelong learners (Aljundi et al., 2017) who can adapt to new challenges and opportunities.

When comparing the effectiveness of student-centered teaching methods to traditional teaching methods, several metrics can be used to measure success. These metrics include student engagement, student achievement, and student satisfaction. In terms of case studies, many schools have successfully implemented student-centered

teaching methods (Garrett, 2008; Saka, 2011). For example, the High-Tech High network of schools in California has been praised for its project-based, student-centered approach to learning (Behrend et al., 2014). Similarly, the Big Picture Learning network of schools has also successfully implemented a student-centered approach (Bradley et al., 2019). However, it's important to note that there are potential limitations or criticisms of the research on this topic. Some critics argue that student-centered teaching methods may not be appropriate (Akdemir & Özçelik, 2019) for all students and that there may be cultural or socioeconomic factors that influence (Arseven et al., 2016, Hines-Datiri et al., 2020) the effectiveness of these methods.

Additionally, some critics argue that the research on student-centered teaching methods is often limited to specific contexts or populations, which may limit the generalizability of the findings. Overall, while there is evidence to suggest that student-centered teaching methods can be effective, it's essential to consider the limitations and criticisms of the research on this topic. By doing so, educators can make informed decisions about how to meet the needs of their students.

Barriers to Implementing Student-Centered Teaching Methods

Many public schools are hesitant to implement student-centered teaching methods (Arseven et al., 2016) due to a variety of barriers. One major obstacle is the resistance of teachers and administrators to change (Inandi et al., 2020). This can be due to a lack of training or understanding of the benefits of student-centered teaching (Cain, 2020). Another barrier is the lack of funding or resources (Darby & Rury, 2018). Student-centered teaching often requires a lot of planning and preparation, as well as access to technology and other materials. Without proper funding, it can be difficult for schools to

provide these resources. Cultural biases against alternative teaching methods can also be a significant obstacle (Samuels, 2018). To overcome these barriers, schools can provide training and support for teachers who are interested in implementing student-centered teaching methods (Cain, 2020). Schools also allocate more funding and resources towards these efforts, and they work to address cultural biases through education and awareness campaigns. Overall, schools need to recognize the benefits of student-centered teaching methods and work to overcome the barriers that prevent their implementation. By doing so, they can create a more engaging and effective learning environment for all students (Wang et al., 2009). Student-centered learning allows for different types of learning that would enable a diverse array of learners to have access, while traditional methods of instruction present barriers to all but a small subset of students (Wright, 2011) who tend to be White and affluent (Darby & Rury, 2018.)

Critical Race Theory

Critical Race Theory (CRT) is a framework for examining why access to effective SCL environments is limited for Black students. CRT is an academic and legal framework that examines how race and racism intersect with American laws and society (Bell, 1993). It seeks to understand and address the ways in which systemic racism and discrimination continue to impact marginalized communities, particularly Black people (Solórzano & Huber, 2020). Initially developed for the legal arena, CRT has since been applied to various fields, including education. The theory emphasizes the importance of acknowledging and confronting the historical and ongoing effects of racism to work towards a more equitable and just society (Bell, 1993).

Withholding student-centered learning advances systemic racism. Therefore, it is vital for educators looking to incorporate a more social justice-oriented approach into their teaching practices to understand the basic tenets of CRT (Decuir-Gunby et al., 2019). Bell (1993) theorized that the construct of race is a permanent and deeply rooted fixture of American society. Bell (1993) also postulated that the construct of race serves as a unifier for poor White people to oppose economic, social, and educational policies that could benefit them if those policies would also benefit Black people. According to Ladson-Billings and Tate (1995), the acquisition of property and protection of property rights has been at the core of American values since its founding. Ascribing Whiteness to physical and intellectual property (Harris, 1993) continues to be an effective tool for wealth building, and it is undergirded by educational systems that further facilitate the accumulation of financial assets by a privileged few.

Critical Race Theory is used to analyze how racism and inequality are embedded in legal systems and institutions (Rothstein, 2017). It recognizes that racism is not just an individual issue but is also perpetuated through structural and systemic factors. The theory challenges the idea of colorblindness and asserts that acknowledging and addressing race and racism is necessary for achieving true equality (Darby & Rury, 2018). As a research methodology, CRT aids in highlighting the experiences and perspectives of marginalized humans, especially Black people, and their unique struggles with racism and discrimination (Decuir-Gunby et al., 2019). While it has faced controversy and backlash (Gabbatt, 2022), Critical Race Theory remains an important framework for understanding and combating racism.

Culturally Relevant Pedagogy

Culturally relevant pedagogy (Hernandez, 2022; Ladson-Billings, 2021; Milner, 2010) is an essential model for educators to adopt to support student achievement and promote cultural diversity. Ladson-Billings (2021) emphasizes the importance of acknowledging and valuing students' cultural identities while encouraging critical thinking and challenging societal inequalities. By incorporating these principles into their teaching practices, educators can help students feel seen, heard, and valued while empowering them to become active agents of change in their communities (Hernandez, 2022). Ultimately, a culturally relevant approach to education can foster a more equitable and just society for all (Schmeichel, 2012).

Culturally relevant pedagogy is necessary for teaching because it roots teachers in understanding the voice of their students and makes them look at the faces of their learners (Ladson-Billings, 2009; Howard, 2003; Milner, 2010). Teachers should consider their cultural identity while affirming and positioning students' cultural identities as crucial and relevant to curriculum and learning. Students are then empowered to succeed academically because their experience as students is understood and used to frame classroom pedagogy (Howard, 2003).

Milner (2010) offers that in a classroom actively using culturally relevant pedagogy, the teacher builds cultural competence between them and their learners by building community and looking at the context of race as it applies to the classroom. Teachers are simultaneously learning about their practices as they use them to empower their students (Milner, 2010). Culturally relevant pedagogy entails being aware of and making accommodations around the identity of Black individuals as it applies to the

curriculum. Teachers cannot ignore that students learn best when their interests are fully represented and when people who look like them are represented in the texts of their studies (Ladson-Billings, 2021).

Culturally relevant pedagogy celebrates the lives of Black students every day and places it at the center of curriculum and instruction (Borrero et al., 2018). Unfortunately, students in schools with high populations of Brown and Black students typically do not see their voice represented and instead receive a watered-down version of history that highlights the plight, trauma, and tropes of stereotypes of Black people without also highlighting the joy and triumph of their lived experiences (King & Brown, 2014). The practice of leaving Black voices out of mainstream curriculum is often based on White self-aggrandizement rooted in white supremacy, which puts White people at the center of learning and curriculum (Griffin & James, 2017). The basis here is that the accomplishments of Black people do not matter, and their achievements are believed to be insignificant compared to the accomplishments of White people (Ladson-Billings & Tate, 1995).

Often, the curriculum of English literature in schools revolves around the lives of cisgender White men, which sends the message that the literary works of Black voices are irrelevant, inferior, and unwelcome. Leaving Black voices in poetry and literature out of the written curriculum only marginalizes and alienates Black students further (Givens, 2023; Griffin & James, 2017). When students see themselves reflected in what they learn, they gain an empowering message about themselves and how they relate to the world. Culturally relevant pedagogy empowers students in multiple facets, including intellectual, psychological, and emotional, using cultural references of the students' lives and

communities. The key to culturally relevant pedagogy is helping students critique racial hierarchy so they can actively fight against it (Ladson-Billings, 2021).

According to Martin (2021), curriculum should not be created so rigidly with a structure that does not allow for diversity. Learning should not be based on standards that teach to a test or outdated material that merely needs teaching because of a state mandate. Often, too much emphasis is placed on standardized learning and objectives that align with passing state-mandated tests. Student worth and teacher success are measured solely on the outcomes of test scores. Moreover, students of color have low self-worth associated with testing as they often underperform their White counterparts, or at least students who attend a school with better resources (Au, 2013). The blame is wrongly shifted away from societal and systemic inequities; consequently, nothing gets solved (Borrero et al., 2018).

When the curriculum centers around rote memorization of facts that prepare students for racially biased testing, a large percentage of students fail, many of whom are Black (Au, 2013). The type of testing does not matter, whether IQ or standardized, whether it is for graduating high school or gaining admittance to a prestigious college or university (Berlak, 2008). According to Ladson-Billings (2021), Black students feel like they must sacrifice their well-being to achieve.

There is a sociological phenomenon that happens when Black students do well in school; they are accused of acting white. The misconception is due to the fact that scholastic achievement is wrapped around an identity of success that is often ascribed to White students (Darby & Rury, 2018; Ladson-Billings, 2021). Society does not view black students as smart, capable, and academically successful (Hernandez, 2022).

Therefore, Black students must disassociate academic achievement from their identity if they want to be seen as high achievers and subsequently detach from Black peers to remove themselves from negative stereotypes about Black scholars (Harpalani, 2002). Culturally relevant pedagogy can offer a way for Black students to keep their cultural identity intact while achieving academic greatness (Ladson-Billings, 2021).

Moreover, culturally relevant pedagogy fits into the idea of student empowerment because by representing our students and a diverse array of voices in the material we teach, we empower all students to think of themselves as writers, philosophers, poets, and scientists (Perry et al., 2004). According to Robinson & Aronica (2016), the health of our economy depends on various vocations, including chefs, electricians, plumbers, and paramedics. Access to these jobs may not require a college education, but it should not depend on racial hierarchy. In recent years, we have relied too much on standardized curriculums in US schools (Au, 2023). A standards-based classroom pushes a facts-based curriculum over a more creative, hands-on approach toward learning. A curriculum that is heavily standards-based is often not individualized and places a huge emphasis on data and multiple-choice tests so students can be ranked, sorted, and evaluated. Assessment tools like portfolios, group projects, and self-reflection on learning are not deemed valuable because they are less quantifiable and subjective (Robinson & Aronica, 2016).

Furthermore, placing emphasis on state testing only promotes the idea of competition among students, teachers, and even between schools (Hursh, 2008). Additionally, schools with high populations of Black students already have fewer resources and have an inordinate number of students who read and perform below grade level. Reading and Math scores and competency among Black students are significantly

lower than White students (Hernandez, 2022). These students often underperform on tests compared to areas in the predominantly white suburbs of St. Louis. It can be argued that this is the intended design. Seventeen percent of high school graduates could read or write fluently in 2012, and over 50% of adults read below the third-grade level. In 2006, 21% of young adults could not identify the Pacific Ocean on a map (Robinson & Aronica, 2016). Our nation's obsession with testing and standardization does not equate to high outcomes, especially for Black scholars (Au, 2013). The lowering of outcomes does not correlate to the higher standards desired for students by utilizing high-stakes testing. Schools emphasize scripted curriculum that takes autonomy and control away from teachers. The individualization and experiences of students take a back seat and exist in a state of war with the implementation of a curriculum that revolves around teaching to a test (Hursh, 2008).

Culturally relevant pedagogy practice allows every student to achieve rather than merely focusing on individual students. Teachers identify their entire class as being smart and capable rather than just singling out or alienating certain students. Students in classrooms where culturally relevant pedagogy is used often learn collaboratively and become responsible for one another's learning and achievement (Ladson-Billings, 2021). An obstacle to teaching without constraints is that teachers are frequently blamed for problems stemming from deeply rooted societal inequity. Teachers are not only muzzled but also left out of the conversation on educational practice and reform. (Borrero et al., 2018). Teachers are not trusted, nor are they in control of their curriculum. However, the one aspect teachers can control is how they interact with students inside their classrooms.

According to Beaudoin (2013), teachers should build students up and ignite their passion for lifelong learning.

Without culturally relevant pedagogy, Black students are not given practical modes of learning that prepare them for the workforce or college world. Historically, students of color have been pigeonholed to work only in particular vocations, trades, or jobs that require manual labor. The track toward college and university or into vocations that require higher levels of intellectual output was tracked mainly for White students (Oakes, 2008). In turn, the educational system was inequitable regarding resources, curriculum, and access. White schools had newer books, smaller classroom sizes, and curricula that would set these students up to have authority in the job market rather than being cogs in a wheel (Givens, 2021). Moreover, students learning within a standards and test-based curriculum receive a one-dimensional, static, predetermined outcome mode of learning. They miss out on a more creative, experiential, investigative, and critical thinking approach (Borrero et al., 2018.)

Culturally relevant pedagogy frames students' experiences and lives as the center framework of course study (Schmeichel, 2012). Moreover, culturally relevant pedagogy is needed to fight pedagogies of opposition to empower students. (Freire, 1970/1996). Empowerment takes place at witnessing the academic success of every student, especially those who are Black, while also providing a 'critical consciousness' which in and of itself rebels against the current social order paradigm by centering Brown and Black accolades within the curriculum while shifting focus away from Whiteness as a centrifugal force. (Ladson-Billings, 2021). The 'veil' is lifted, and Black students can see the world for what it truly is; however, they are given the knowledge and tools to understand how they

relate to society as Black learners to subvert and undermine its racist teachings and construction (Givens, 2023).

Liberatory Pedagogy

Liberatory pedagogy (Shor & Freire, 1987) is a powerful tool for creating positive change in the world through education. It is a pedagogy focused on liberating individuals from the constraints of their current reality and empowering them to become more fully human. Liberating is done through problem-posing, where students are encouraged to challenge their assumptions and beliefs and engage in critical thinking about the world around them. By doing so, they become more aware of how their reality is constructed and can better imagine and create a more just and equitable future. Liberatory pedagogy is a fundamental educational approach that can profoundly impact individuals and communities.

Pedagogy equates to the process of transferring knowledge from educator to learner or the actual learning process as the development of the learner influences it. The root concerns a Middle English term meaning a 'boy's tutor.' However, knowing the history of learning and education, pedagogy becomes steeped in a complicated bias around race, class, and gender constructions. (McPheat, 2020). Arguably, the most critical facet of pedagogy is a newer construct of anti-racist pedagogy, which forces the educator to question everything taught and how learners access knowledge equitably. Anti-racist pedagogy is different in that it disrupts white supremacist teaching frameworks, invites all learners to gain knowledge through their lived experience, and questions the formal academic frameworks and structures that have denied certain types of learners from achieving autonomy over learning (Peoples et al., 2022).

Hall et al. (2008) note that the term pedagogy is used frequently but seldom drawn out or understood in full. Pedagogy is central to understanding the educational structure and affecting changes in educational inequity. The outcome of this process is the idea that certain groups of students should learn certain types of material and then, in effect, can access specific career paths. Hall et al. (2008) describe the changes in pedagogy: "Interventions that have been developed to enhance female participation in aspects of the education process or to challenge sexist ideology in schools and society provide detailed accounts of practice" (p. 29). Regarding pedagogical practice, there are students left out based on racial and gender identity. As such, educators need to consider how to shift pedagogical frameworks to become anti-racist and equitable and how to change the narrative of teaching and learning.

According to Patricia Bizzell (2014), many teachers are now questioning traditional forms of pedagogy, such as lecturing and tests. However, interrogating pedagogy is more than just assessing how literature is taught. It relies on the belief that teachers should more heavily involve students in deciding what ideas and materials are essential for their learning. Students should be more active in what they read, analyze, and discuss in their humanities classes (p. 847). When teaching literature, and for that matter, any subject, many educators believe that we should move to a more heutagogical approach and have a curriculum and class structure that is less teacher-centered.

Existing Scholarship Related to Equity and Student-Centered Learning

Research on disparities in the delivery of Student-Centered Learning in K-12 learning environments between racialized groups is limited at best. Ladson-Billings' (2009) *Dreamkeepers* offers a longitudinal look at the practices of successful teachers

who offer culturally relevant education to Black and other marginalized students. Ladson-Billings's work illustrates what culturally relevant classrooms should look like, including treating the students as competent learners, scaffolding skills and knowledge, and focusing on extending knowledge and competency. However, Ladson-Billings does not delve into the barriers to implementing these strategies.

Cain's (2020) research on Learner-Centered Teaching Strategies (LCTS), another descriptor of SCL, focused on the gaps in teachers' understanding of LCTS and the best practices for implementation. Cain's (2020) work is helpful in defining LCTS and SCL. It focuses on what teachers need to implement LCTS, provided there are no policy or resource barriers related to the population they serve. Cain's (2020) inquiry is limited to how teachers at the secondary level use LCTS / SCL for instruction and what additional resources are needed to implement these strategies. We hope to extend this to understand how and why the challenges of utilizing SCL in the secondary classroom appear to be amplified for marginalized students.

Tara Nkrumah (2023) offers a window into the inequities this paper intends to explore. However, her focus is on racial and gender barriers to science education and not student-centered learning specifically. She offers that curriculum strategies focusing on Eurocentric norms continue to widen achievement gaps and point to the need for culturally relevant pedagogies. Nkrumah (2023) presents a litany of research illustrating how systemic racism presents challenges in the equitable delivery of science coursework. Nkrumah (2023) examines how systemic racism fosters continued resistance to upending the traditional teacher-student power dynamic. Upending entrenched educational norms to offer the student a higher responsibility for knowledge acquisition and shifting the

teacher's role to that of facilitator is a crucial aspect of SCL (Tomlinson, 2017). While Nkrumah's (2023) work examines concepts that are core to the effective implementation of SCL, her work is more narrowly tailored to investigate barriers in students' engagement in science coursework and subsequent attainment and mastery of science knowledge.

Additional scholarship on SCL and racialized populations includes several studies on the positive impact of student-centered education on different groups. Salinas and Garr (2009)

Our literature search revealed evidence of the direct and indirect impacts of racism on academic outcomes for Black students and the positive impact of SCL practices on improving such outcomes for those students. However, we were unable to find studies or reports pointing to how barriers to SCL for Black students manifest in the culture and policy of K-12 LEAs. We found that much of the literature on implementing SCL was in the higher education space, including the work of Froyd & Simpson (2008), which provides a compilation of decades of research on the definition and best practices of SCL.

Chapter Three: Methodology

Introduction

Through this case study (Hancock et al., 2021), the researchers investigated student-centered teaching methods and their effectiveness in promoting diversity, equity, and inclusion (Fernandez, 2019) in a Suburban High School (Kettler & Hurst, 2017), utilizing a quantitative case study (Yazan, 2015). According to Yazan (2015), Robert, Yin, Merriam, and Stake are the three prominent scholars of case study methodology. Merriam's research examines the confusion of case study design and clears up discrepancies. Yin's research acts as a guide for correctly utilizing case study design that previous research failed to do. Stake's research delineates that case study design uses 'naturalistic,' 'ethnographic,' 'biographic,' 'holistic,' and 'phenomenological' methods (Yazan, 2015).

Specifically, to identify systemic biases and inequalities (Anyon et al., 2018) in education and how they can be addressed through student-centered teaching methods. The researchers gathered primary data through interviews and secondary data to uncover educators' challenges in implementing student-centered strategies and offering a more student-centered curriculum. Lastly, the researchers provided examples of successful implementation of these strategies (Darsih, 2018; Kaput, 2018) in real-world educational settings to improve and enhance student-centered learning activities.

The researchers implemented a qualitative case study designed to uncover the challenges to implementing effective student-centered learning methodologies for Black children that will provide opportunities for active participation and collaboration (Khan et al., 2017). The study explored the barriers and challenges faced by school personnel and

community partners associated with implementing student-centered teaching methods and examined the attitudes and biases of educators toward Black students (Anyon et al., 2018) and their capacity for success in the classroom.

The goals were threefold. The first was to identify the common barriers to implementing student-centered teaching methods and find ways to overcome them. Secondly, the researchers want to improve the effectiveness of teaching methods by determining effective student-centered approaches, such as collaborative learning and project-based assignments. Third, diversity, equity, and inclusion in teaching methods should be promoted by exploring different teaching strategies that can accommodate (Pelzer et al., 2023) the needs of all students, regardless of their background or learning style. Ultimately, we aimed to add to educators' epistemological foundation to empower students to take ownership of their learning, encourage them to become lifelong learners (Aljundi et al., 2017), and enable them to change the world (Freire, 1970/1996; Ladson-Billings, 2021).

The Case

We studied a suburban public high school in the Midwest, serving students in grades nine through twelve for which at least 75% of students are eligible for free and reduced lunch, and district spending per pupil should be in the upper 50th percentile for the high schools in the region. We targeted a school for consideration that reflects, as closely as possible, a demographic profile consisting of at least 75% Black / African American with a balance of students who identify as White, Hispanic, and Two or more Races. The researchers based their selection of the site on levels of vertical and horizontal

differentiation in coursework, income and wealth of the district, disciplinary practices, and student demographics.

Key selection characteristics were access and familiarity with the school and educator population. The site has an average student-to-teacher ratio of less than 20:1 and offers student-centered programming such as Project Lead The Way (PLTW) coursework, horizontal differentiation in core subjects of math, science, language arts, and social sciences, and extracurricular opportunities that augment understanding of coursework and facilitate exploration of post-secondary opportunities. The teaching staff were highly qualified and included practitioners possessing advanced degrees. The school staff had access to cutting-edge technology and relevant professional development. We are confident that a research site fitting these criteria will offer the best opportunity to achieve our research goals.

Participants

Once the case setting was identified, the research team recruited participants using a purposeful sampling method to strategically identify candidates experienced with Student-Centered Learning and educating Black students. Participants included three district and building administrators and three classroom teachers until data saturation was reached (Aldiabat & Le Navenec, 2018).

We received IRB approval (IRB Project Number: 209753308, IRB Review Number: 395885) from the University of Missouri Saint Louis on December 26, 2023 (See Appendix A for IRB approval letter). Participants were selected based on their accessibility and availability to the researcher. To ensure that all participants were fully informed of the study's details and their rights, we provided our informed consent notice

(See Appendix C) in the recruiting email (See Appendix B) and with the meeting confirmation. Throughout the process, we made ourselves available to answer any questions. Since all participants were personally known to one or more of the researchers, they found it convenient to use their mobile phones to contact us. We diligently addressed all inquiries promptly and thoroughly, ensuring participants understood the study before proceeding.

To reach a participation goal, the researchers employed a purposeful sampling method. This non-probability sampling technique involves recruiting participants through referrals and selecting them based on their accessibility and availability to the researcher. (Naderifar et al. 2017). The rationale for using this sampling method was to allow for the inclusion of individuals with varying backgrounds, experiences, and perspectives, which can contribute to a more comprehensive understanding of the research problem. As per Fraenkel & Wallen (2015), the sample size should be determined based on the amount of time and energy available to conduct the research while ensuring that it is sufficient to achieve the research objectives. To protect the identity of the participants in our study, we used pseudonyms (Mukungu, 2017) throughout the research to replace participant and school names, as well as location. This procedure ensured that all participants remained anonymous and their identity was not revealed.

The recruitment phase was a crucial aspect of the research project, and it required the researchers to navigate several steps to ensure that the process was efficient and ethical. Initially, the researchers obtained the necessary permissions and reviewed all district administration guidelines and regulations for researching human subjects (Mertens, 2012). The researchers relied on their expertise to expedite the identification of

potential participants. The research team aimed to recruit participants who represented gender, age, experience, and ethnic diversity and could provide us with insightful perspectives and experiences related to the research topic. More details about the participants' gender, race, subjects taught (teachers), positions held (administrators), years of experience, and educational attainment are included in Table 1.

Table 1

Participant Demographics

Participant Pseudonym	Gender	Race	Position/Subject	Total Years of Service	Educational Attainment
Thomas Billings	M	Black	Science Teacher	14 – 22 years	Masters
Stephen Bell	M	White	Master Science Teacher	14 to 22 years	Masters
Carmen Schmeichel	F	White	Science Teacher	14 to 22 years	Masters
Mardi Freire	M	Black	Building Admin	16 to 28 years	EdS
Mattie Cain	F	Black	District Admin	16 to 28 years	PhD
Booker Casey	M	Black	Building Admin	16 to 28 years	PhD

Note: Because the Site, both building and district, comprise a small community of professionals, we have aggregated their experience to help protect the anonymity of the participants. The range of experience with the site for all educators is five to twenty-two years.

The three classroom teachers who guided us through our studies were highly skilled and knowledgeable. They consisted of two male teachers and one female teacher, all of whom were passionate about the subject matter and deeply committed to supporting our research. Throughout our studies, the teachers demonstrated a mastery of effective teaching strategies, drawing upon the latest research and best practices in education to

help us achieve our goals. As high school teachers, they brought a wealth of real-world experience and practical knowledge to the table, enriching our learning experience and providing us with valuable insights into the world beyond the classroom. They were dedicated professionals who cared deeply about our topic and were willing to go above and beyond to help us create new knowledge content.

We employed a comprehensive methodology for collecting data through a series of interviews with participants. The interviews were conducted in a one-on-one format, with some conducted by two interviewers and some with only one interviewer present. To encourage participants to share their thoughts freely, you used open-ended questions that allowed for detailed responses. These questions were thoughtfully compiled and are enclosed in Appendix E. To ensure consistency across interviews, the researchers used an interview script that clearly explained the interview protocol to each participant (See Appendix D). The script helped to ensure that all participants received the same information and had an opportunity to ask questions before the recording began. We utilized the Zoom platform for all interviews.

Privacy and confidentiality were paramount throughout the research process. To this end, all interviews were conducted through a secure system provided by the university. Additionally, video and audio recordings were made of the interviews, enabling us to analyze the data more closely and fully understand the participants' experiences. The research methodology was thoughtful and thorough, prioritizing participant privacy while ensuring consistency and accuracy in the data collection.

Data Collection

The researchers obtained the necessary permissions and reviewed all district administration guidelines and regulations for researching human subjects (Mertens, 2012).

We interviewed all six participants over two weeks. Participants were intrigued by the topic and were generous with their time. During the interview process, we kept track of elemental details about each participant in a spreadsheet that we maintained in a secure folder separate from other data. This information included a pseudonym representing each participant, gender, race, number of years in their subject area or position, total years in education, and educational attainment. We used these identifiers to keep track of each participant's responses and to protect their anonymity throughout the research process. As each participant spoke, we also wrote reflective notes, often leading to follow-up questions that helped us gain an even more profound knowledge of specific topics. These notes also included information about the participant's background, responses to each question, and any other relevant details mentioned during the conversation. We structured each interview to allow participants to respond comprehensively to each question. This minimized the need for follow-up questions and helped us gather as much information as possible from each participant. Overall, we took great care to ensure the interview process was thorough, detailed, and respectful of each participant's time and perspective.

The interviews were conducted in a one-on-one format, with some conducted by two interviewers and others with just one interviewer present. To encourage participants to share their thoughts freely, we used open-ended questions that allowed for detailed

responses. These questions are presented in Appendix E. To ensure consistency across interviews, we used an interview script, included in Appendix D, which provided a clear explanation of the interview protocol to each participant. This script helped to ensure that all participants received the same information and had an opportunity to ask questions before starting the interview. Privacy and confidentiality were paramount throughout the research process.

Recordings were made using Zoom accounts tied to our university credentials, enabling us to analyze the data more closely and fully understand the participants' experiences. On our end, we conducted the interview in an isolated environment. We used Zoom's recording function to capture each interview's video and audio content. We then used Temi transcription software to transform the audio or video recordings into text, which we could use for coding. During this process, we referred to our field notes to ensure the most accurate reflection of the participants' input.

Before and after starting each recording of the interviews, we reiterated to all interviewees that there is a risk of confidentiality breach associated with this research. We explained that all identifiable information in interview recordings would be stored on an encrypted and password-protected device, with access restricted only to the researchers. Furthermore, we transcribed the interviews and replaced all identifiable information, such as names and institutions, with pseudonyms known only to the researchers. This transcription was stored on the same encrypted device, and once completed, all identifiable data was destroyed to ensure complete confidentiality. To express our gratitude for their participation, we provided each interviewee with a personalized thank-you note. During the interviews, we followed a consistent

methodology to ensure the reliability and validity of the data. We asked each interviewee the same questions and ensured the interviews were conducted professionally and respectfully. By taking these measures, we hoped to minimize the risk of any potential confidentiality breach and ensure that the data obtained from the interviews was of the highest quality.

After we scrubbed the transcripts of identifiable data, we began the analysis. According to Smith (2021), a code represents short words or phrases of a summative part of data, which could consist of interview transcripts. We first masked the identity of the participants with pseudonyms before we started the data analysis process. We established codes through transitional theory (Pembridge & Paretti, 2019), which we embedded into the interview questions. After interviewing the sixth participant, we realized we had collected sufficient relevant information (Aldiabat & Le Navenec, 2018) to identify themes with rich and valuable insights for our study.

The interview data provided a macroscopic view of barriers that prevent student-centered learning from being consistently implemented and impede Black students from experiencing and gaining access to relevant, student-centered learning (SCL) opportunities in public secondary education. The interview data also uncovered a connection between critical race theory, liberatory pedagogy, and culturally relevant pedagogy. We found disparities that impact race and strategies to help equitably implement student-centered learning for all students. During the data collection process, all the participants appeared excited to share their experiences, which resulted in extensive responses to the interview questions.

Ethical Considerations

To safeguard the privacy of individuals, we used advanced techniques to de-identify the data. These techniques ensured that no individual could be identified from the data we collected. Furthermore, we will not disclose any personal information or identifiers in any report or publication that resulted from the study.

We also took measures to ensure the security of the data we collected. We stored the data on secure servers and granted access only to those who required it for the purpose of the study. We monitored access to the data closely to detect and prevent any unauthorized access.

Our commitment to data privacy and confidentiality is paramount, and we did everything in our power to protect the privacy of individuals and ensured that the data we collected was used only for the purpose of the study. We recognize the importance of this study and its potential impact on education policy in the Midwest, and we are committed to conducting this research with the highest level of integrity and professionalism.

Data Analysis

We used thematic content analysis (Vaismoradi & Snelgrove, 2019), which involved reading each transcript thoroughly to identify patterns and codes that captured the prominent themes. Our analysis included participants' contributions, the district's vision, and the site's curriculum and internal and external support. Using this approach, we captured a comprehensive range of perspectives and insights that helped us better understand the research topic. The research team developed a list of top-level codes (Saldana, 2021) and ran the data through the Dedoose coding software.

We followed Merriam and Tisdell's (2016) method of conversing with the data.' We used 'open coding' to label the transcribed interviews. We went through each interview and created labels that were pre-identified as being prominent among all the interviews. We then grouped the open codes through what is known as 'axial coding,' where we reflected on the meanings of the codes rather than merely doing descriptive coding. Finally, we used thematic analysis coding procedures to analyze the data using Dedoose data analysis software. This involved identifying key themes and patterns that emerged from the interviews and using these themes to draw meaningful conclusions from the data.

After each interview, the team repeated this process until we collected data from all selected participants until we reached data saturation (Aldiabat & Le Navenec, 2018; Tran et al., 2017). We built themes from the generated codes and explored areas of correlation with data from educators. We also used secondary data gathered from syllabi provided by the site's teaching faculty. We followed strict ethical guidelines throughout the study to ensure that all data collected was treated with the highest care and respect. We designed these procedures to ensure that we had accurate and comprehensive data that could be used to analyze and draw conclusions from the research.

Validity

A critical issue that can impact the validity and reliability of our findings is confirmation bias (Nickerson, 1998). Specifically, the fact that two of us are high school teachers who use student-centered strategies at the time of the study raises the possibility that our prior beliefs and experiences may have influenced the interpretation of the participants' responses.

Researchers' Role / Positionality/ Self Reflection

While we used various means to transcribe, record, store, and analyze our data, we recognized that we were the primary data collection instruments. May & Perry (2014) emphasize the importance of reflexive practices to expose the full breadth of limitations and delimitations of the study, the basis of analysis, and potential biases that may influence conclusions. This reflection helped increase the researcher's awareness of their positionalities related to personal background and professional and community experience with the subject matter. This self-awareness was critical to ensuring interviews, data collection, and data analysis were focused on addressing the research questions and adding to the body of knowledge (May & Perry, 2014).

In this case study, the researchers asked questions that did not have a clear right or wrong answer. The questions were structured to minimize the impact of our personal biases on participants' responses (Morik et al., 2020). Marcelin et al. (2019) state it's essential to acknowledge our own biases and perspectives and show unconditional positive regard towards the respondents. We understood the potential for our biases and perspectives to shape the research and outcome. By adopting a cultural relativist approach (Fung, 2017), the researchers gathered data that was as objective and unbiased as possible to inform future research and policy decisions.

Our team consists of three doctoral students with professional backgrounds in engineering, secondary education, technical education, and military education. We have a diverse team with one Black woman, one White man, and one Black man. We are aware of our biases and will do everything we can to minimize their impact on our research.

Nicole's Reflexivity Statement

I am a cisgender, heterosexual female, married to a cisgender heterosexual male, and was fortunate to give birth to four healthy female children. I am above average height and have no major health challenges or physical or mental disabilities. I was raised as a Christian and continue to embrace this as my faith tradition. I identify as African American and Black. I am an only child and have lived most of my life in a diverse, middle-class, suburban enclave near St. Louis, Missouri. I attended a public school from kindergarten to twelfth grade, and my bachelor's degrees were earned at public institutions. I acknowledge that these accepted and chosen identities, as well as my experiences, affect my access to certain populations and impact my analysis of the data I collect. I realize that in the past, I have fallen for confirmation bias even in my literature reviews by striving to find studies that support my theories without carefully examining those that don't.

Unlike the laboratory and field instruments for which my company pays a third-party authority to calibrate each year, I don't have an objective entity to calibrate my thoughts, history, experience, or biases against a centrally accepted standard during the data collection and analysis phases of our study. My primary source of checks and balances will be my dissertation partners to validate my approach, as they both possess an interesting intersection of identities that sometimes may confirm my own epistemological framework and contradict in other situations. As such, our team engaged in reflexive discussions throughout the project to navigate subjectivity so we could attain a level of rigor and authenticity in our work.

Bobby's Reflexivity Statement

I grew up in White, suburban St. Louis, a land of privilege and opportunity. I went to private school from kindergarten through twelfth grade. I attended a private liberal arts college, and my schooling was paid for without incurring debt. Though my family was not part of the set of names you see on every donor list and on buildings throughout St. Louis, they were part of a dynasty of wealth. Though I never considered myself part of the 'haves,' I realized that I had an immense amount of racial, economic, and educational privilege. And though I identify as gay, Middle Eastern, and Jewish, I do not physically present as these marginalized identities, and therefore, I do not receive second-class treatment within society.

Though I was aware of the reality of the 'haves' and 'have nots,' I did not know the perspective of anyone with a different racial or economic background than myself. I cared about issues related to social and racial injustice, but I was not inside the framework of those concepts. I did not understand that some kids' high school experience was so vastly different from mine that they might as well have attended school in another galaxy. What was 'normal' in my universe was undoubtedly a delightful fantasy for someone else.

It is my teaching experience that has mostly made me realize the different lived experiences of others. I have been lucky to work at a variety of schools, both public and private (boarding, magnet, charter, alternative). I have worked with students from economic disadvantage who have vastly different lived experiences than peers I grew up with. As a result, I realize the biases and assumptions I hold inside. My team and cohort members have consistently held me responsible for owning up to any bias I might have.

We continually challenge each other's biases and predetermined opinions on race, identity, and privilege.

Garry's Reflexivity Statement

Growing up in the small town of New Madrid, Missouri, I identify as both African American and Black. I joined the Army National Guard during my senior year in high school and later the United States Army Reserves, where I am still a member. With the help of an athletic scholarship, I obtained my first Bachelor of Science degree in Metallurgical Engineering from Missouri S&T. Throughout my childhood; I was exposed to the rich culture and traditions of my community, which instilled in me a deep sense of pride and belonging. Joining the military was a natural choice for me, as I felt a strong desire to serve my country and give back to my community in a meaningful way. My time in the Army has been both challenging and rewarding and has taught me valuable skills such as leadership, discipline, and teamwork.

I felt a sense of familiarity and acceptance among everyone while growing up in my small town. Social life was not a problem, and the environment was comfortable. However, when I started attending Missouri S&T, I came to realize that this familiar and accepted social environment was actually just a presumption. During my early years after college, I worked in the engineering field, but I gradually began to notice the deceptive nature of social injustice around me. This realization led me to switch to a career in education. Growing up in a small town had deeply influenced my mindset, and I was previously unaware of the existence of systemic injustice towards the Black community. However, over the past few years, my perspective has shifted, and I am now more aware of the systemic injustice that exists in our world.

As someone who has accepted and chosen specific identities and experiences, I recognize that they are likely to impact my analysis of the data that I collect. In the past, I have avoided confronting challenging events in my life in an attempt to move forward. However, moving forward, I am committed to challenging these events for the sake of social justice. I will confront what I have been avoiding and share the knowledge and outcomes with others, particularly my fellow Black individuals. I am fortunate to have a cohort of fellow researchers who will hold me accountable for any biases I may have and challenge them to ensure authenticity in our work.

Limitations and Delimitation

When conducting a single case study, there are several limitations and delimitations (Theofanidis & Fountouki, 2019) that are crucial to consider. One of the major limitations was that the study exclusively centered around a single suburban high school. Therefore, the findings might not be as comprehensive or applicable to high schools situated in rural or urban areas. This limitation could be attributed to the differences in students' social, economic, and cultural backgrounds, as well as the available resources and infrastructure between schools in different regions. Therefore, future studies should consider including a more diverse range of high schools across different regions to provide a more in-depth understanding of the subject matter. The single case studies limited the ability to establish causal relationships between variables (Goodrick, 2020) and to generalize the findings to a larger population. We also recognized that the global majority all experience oppression and challenges in education; however, we chose to focus on students who identify as Black.

The demographic makeup of our site was another limitation. Because we wanted to focus on Black children, we chose a site with more than 70% African American population. As such, we could not comprehensively compare White students' access to SCL versus Black students. Another limitation is our choice to study a school in a Suburban area, as the findings may not be applicable to urban areas or other regions.

Factors such as cultural differences, socioeconomic status, and educational policies can vary across different contexts and can affect a study's outcomes. Single case studies are often limited in their ability to establish causal relationships between variables (Goodrick, 2020). Furthermore, single case studies may be limited in terms of sample size, which can affect the statistical power of the study. These factors can make it difficult to draw conclusions and generalize the findings to a larger population. Overall, while our single case studies provided valuable insights into complex phenomena, researchers need to be mindful of their limitations and delimitations, including geographical barriers and the context of the study. We recognize that students of color/students of the Global Majority all experience oppression and challenges in education; however, we have chosen to focus on students who identify as Black.

The researchers interviewed classroom teachers who had been in the profession for 14 years or more and administrators with 16 or more years of experience in education. While this criterion was helpful for capturing the perspectives of seasoned professionals, it also had the drawback of excluding newly employed teachers and administrators, whose insights could have been essential in understanding the challenges of implementing student-centered strategies across the board. By excluding the perspectives of newly hired teachers and administrators, the study might have missed valuable insights

into the current state of the education system and the changes that are needed to improve it. Newly employed teachers and administrators might have had unique experiences implementing student-centered strategies that could contribute significantly to the overall understanding of the barriers to widespread implementation. Furthermore, their perspectives on how to overcome these barriers might have been different from those of more seasoned professionals, providing a more comprehensive view of the issue at hand. Therefore, while the study's findings and recommendations might be instructive, it is essential to acknowledge the limitations of the research methodology used, mainly the exclusion of newly employed teachers and administrators.

The study's delimitation of focusing on high school teachers and administrators as participants is another crucial element that needs to be acknowledged. While the study's findings are insightful and provide meaningful insights into the effectiveness of student-centered learning strategies, it is important to recognize that the study's results may not be generalizable to other educational contexts like elementary and middle school. This is because each educational setting has unique challenges, requirements, and student populations that could impact the implementation and effectiveness of student-centered learning strategies. For example, elementary school students may have different learning styles, attention spans, and cognitive abilities as compared to high school students. As a result, student-centered learning strategies that work well for high school students may not be as effective for elementary school students. Similarly, middle school students may have different social, emotional, and developmental needs from high school students (Presseisen, 1990). Therefore, it is important to conduct additional research in these

educational settings to determine the effectiveness of student-centered learning strategies and how they could be tailored to meet the unique needs of students in these contexts.

A phenomenon that can impact the validity and reliability of our findings is confirmation bias. Specifically, the fact that two of us are high school teachers who use student-centered strategies at the time of the study raises the possibility that our prior beliefs and experiences may have influenced the interpretation of the participants' responses. Confirmation bias is a prevalent cognitive bias that refers to the tendency to look for information that confirms preexisting beliefs and ignore or downplay information that contradicts them. This phenomenon can have a profound impact on our findings, as it can lead to inaccurate or biased interpretations of data. To mitigate this potential bias, we took several steps to ensure the accuracy and validity of the findings. We adhered to a set of interview questions that were closely aligned with the research topic to ensure we focused on gathering information directly related to the study. By doing so, we avoided the potential influence of our own beliefs and experiences and were better able to provide an objective interpretation of the data. Overall, our efforts to mitigate the potential impact of confirmation bias are commendable. By taking steps to minimize the influence of their own beliefs and experiences, we were able to produce findings that are more accurate and reliable. This is an excellent example of the importance of being aware of potential biases in research and taking steps to address them.

Chapter Four: Results

Introduction

The interview data provided a macroscopic view of the barriers that impede Black students from experiencing and gaining access to relevant, student-centered learning opportunities in public secondary education. The interview data also solidified the connection between Critical Race Theory (Decuir-Gunby et al., 2019; Ladson-Billings & Tate, 1995), Liberatory Pedagogy (Liberatory Pedagogy (Freire, 1970/1996; Shor & Freire, 1987), and culturally relevant pedagogy (Ladson-Billings, 2021).

In this chapter, the researchers will share the results of our six interviews from the case study. We will discuss the participants' responses to the research team's interview schedule and subsequently organize them based on identified themes within the data. The themes discussed center around systemic issues and culturally relevant pedagogy. The researchers will also thematically analyze thirteen syllabi across multiple disciplines.

The six interview subjects spoke about systemic issues resulting from race and how oppressive systems impact the availability and use of financial resources. They also shared how those systems constrain the time needed for effective delivery of SCL, especially when considering external demands on curriculum and testing. Cultural relevance rose as a second theme centered on teachers' ability to be culturally responsive and culturally competent by acknowledging and resisting implicit biases and stereotypes that impact trust in students and, therefore, how knowledge is transferred. The last major theme centers around student efficacy, for which concerns about student resistance to SCL were elevated along with what the site is doing to empower students with voice and choice.

Theme 1: Systemic Issues

The implementation of student-centered learning in Black schools and for Black students has been hindered by a range of complex and deeply rooted systemic issues. These issues stem from a legacy of discriminatory policies and practices that have persisted for decades, creating significant disparities in access to quality education and resources (Ladson-Billings & Tate, 1995). Black schools often lack the necessary resources such as textbooks, technology, and quality teachers, which can negatively impact student learning outcomes (Mentz et al., 2012). There are a few systemic issues that can arise when trying to implement a student-centered learning approach in the context of a curriculum that places a heavy emphasis on testing. One major issue is that the focus on testing can lead to a narrow view of what learning means, which can be at odds with the more holistic approach that is often at the heart of student-centered learning. The 'Color of Mind' philosophy intentionally places these students behind in terms of educational opportunities so that they do not gain power in the hierarchal system embedded in society (Darby & Rury, 2018).

Carmen shared a perplexing observation that there is a higher concentration of White students in AP and honors classes despite them being in the minority of the school population.

AP and honors courses have a higher ratio of White to Black students, and that's been a systemic problem. I mean, I remember coming into the district, and that was an issue that they wanted to rectify. I might be at 50/50 this year. Last year, it might have been 60/40, but it would've been 40, 40 White, 60 Black, and Brown students. And this year, I think I'm at a good 50/50 mix.

This statement offers evidence of barriers to Black students experiencing the higher-level thinking and independence that is the core of Advanced Placement (AP) and honors classes (Staiger, 2004). Booker confirmed this gap in access offering that, in the past, bias in the selection of students for AP and honors courses created a “School within a school [wherein] our honors and AP courses [were] comprised solely of White students, while all of the Black students only had access to general education and special school district (SSD) support courses” This connects to Bizell’s (2014) precept that learning should be more heutagogical and focus on students owning their learning. Higher-level classes that have a higher make-up of White students indicate a barrier that locks Black students out of student-centered learning opportunities. It also exposes how White students are routinely given access to better materials and higher levels of learning (Givens, 2021).

Financial Issues

Financial resources can also play a role in limiting Black students' access to relevant and student-centered learning opportunities. Schools in low-income areas may not have the resources to provide students with the necessary materials and technology to support their learning, which can create additional barriers for students already facing systemic challenges (Rothstein, 2017).

Community involvement and engagement are essential for promoting student-centered learning in Black schools. Black communities lack the resources and capacity to advocate for their children's education (Rothstein, 2017). In some instances, resource allocation has resulted in limited engagement in decision-making processes related to education policies and practices, further perpetuating systemic issues.

Mardi shared: Students that cannot get to their doctor they cannot get that prescription filled. That student that has a death in the family doesn't have to wait to get grief counseling. The student that is self-medicating doesn't have to wait to get into a drug education program or a drug education class to help them detox. That student that has been contemplating self-harm does not have to wait a week or two days to get an evaluation.

Mardi's comments speak to how schools serving African-American students need to expend resources on medical, mental health, and substance abuse services, often to the detriment of curriculum development and delivery. Mattie shared their perception of how the state's ranking and sorting of districts places additional financial pressures on districts that serve Black populations, especially those from low-income neighborhoods.

Mattie said: They rank [our district] against [neighboring affluent and predominantly White districts.] We are not [those districts.] They have less than, I think, 8% minority. And the free reduced lunch rate is like maybe 15%. And you're comparing [them] to a district that is 87% minority and free, reduced lunch rate about 70%. And it's not to say that Black and Brown kids are less than others because they're not, but the circumstances that they are navigating are not the same that students in [more affluent districts] navigate.

This statement points to the barrier in treating school districts the same in terms of ranking. The ranking of schools directly correlates to the allocation of funding and resources that schools receive. Such comparisons produce increased financial demands on districts-like the one in our study- to provide resources for curriculum development that would be able to combat differences in achievement (Darby & Rury, 2018).

Demands on Curriculum and Testing

Participants shared challenges with the current state of education, how state-mandated testing requirements impact curriculum development, and what the site is doing to mitigate these impacts. Some participants believe that the current systems that evaluate student achievement are outdated and ineffective because centering curriculum on testing emphasizes rote skills rather than student-centered pedagogy.

One administrator talked about the pervasiveness of Eurocentric ideas embedded within a school's curriculum and entire system. Booker spoke about the white supremacist frameworks of the educational system: "I think that the entire system is rooted in a Eurocentric approach and was developed by Whites for Whites [sic]...I feel is a tremendous disservice to both our students and communities." Booker continued: "I don't have the autonomy to determine whether I operate within [the system] or not as a public educator...So I endeavor to do the best that I can to work with what it is I've been given."

Thomas said that "the curriculum and teaching methods used in these schools often do not reflect the cultural backgrounds and experiences of Black students, which can lead to disengagement and a lack of motivation to learn." Thomas emphasized that this is due to the lack of teacher training in culturally responsive pedagogy and practices. They also shared that teachers in Black schools often lack the skills and knowledge to engage and support Black students in their learning effectively. This can result in a lack of trust between teachers and students, leading to lower levels of student engagement and achievement.

When asked, “To what extent are classroom teachers given the latitude to determine how and when to use student-centered learning,” Thomas replied, “It depends on the administration [as]some principals give them free range to do what it is that they need to do “as long as the students are learning, and the students are showing movement.”

Thomas continued, Cause now I'm thinking about how much latitude do I have when I have a classroom as opposed to, and even with all my years of teaching versus a teacher that is, that's into their second year, or does that latitude come after tenure after five years? Or does that latitude come after your teacher or after your students have superseded on the EOC [end-of-course] test or ACT, or when the scores come back?

Administrators and teachers alike emphasized how standardized testing has racial bias and inequity built-in within the system (Darby & Rury, 2018.)

Booker declared, I think there are racial biases and inequities in all of the testing. The standardized state testing. I think they are racially biased. I think they are a barrier for our students. And I don't think that they are an accurate measure or reflection of an individual's ability to learn.

Mattie said the state’s methods for assessing students are not culturally responsive because they are designed as “one size fits all.” “We assess students at one point, and that's how we measure a school's performance, a student's performance [SIC].”

Booker said: I don't agree with the use of single event testing for college admissions [because] the entire system is rooted in a Eurocentric approach and

was developed by Whites for Whites [sic], which I feel is a tremendous disservice to both our students and communities.

This statement refers to students learning at different paces and with different modalities. Mattie shared that standardized testing poses a significant barrier to teachers engaging in SCL and recognizing the diverse needs of their students because “teachers focus so much, also balancing, you know, standards, testing accountability structures that I think are inhumane and honestly wedded in White supremacy.”

These tests only push many Black students further behind and end up sorting and keeping them in lower-tracked classes (Watanabe, 2008). Furthermore, overly testing students, especially Black students, has a detrimental effect on their psychology.

Stephen stated, It seems like those standardized tests that they are all being used to get into colleges and stuff like that, they haven't really changed. So we really need to make sure that these students understand how to, to, uh, decipher that test so that they can get the maximum point on those tests.

Mattie insisted “Many schools are foregoing ACT and SAT for that very reason.

It's stressing students out to the point that they're sick physically and mentally.

Some students don't do well on a test, but that doesn't mean that their brain doesn't work. And so we have this system to sort to rank [the] have and have nots.”

Rather than believing they can achieve success, Black students have the mindset of low self-esteem due to poor test performance, leaving many Black students feeling left out and disenfranchised. (Gul & Rafique, 2017). Teaching to a test takes time away from learning that could be student-centered and widens the gap of learning along racial lines.

As indicated here and in the section above, there is a dominant thread of concern related to time constraints. Teachers have a limited number of days to teach a curriculum, which is further hindered by the devotion of teaching hours to testing strategies and skills. It is primarily Black students who are cheated out of curriculum centered around problem-solving (Devine-Eller 2012). There is a heavier focus on test preparation for Black students because test preparation is linked to measurements of rigor (Knoester & Au, 2017). Standardized tests and rote learning are not necessarily linked to high achievement or high efficacy among Black students (Gul & Rafique, 2017). Carmen believes that testing is a complete waste of time:

I absolutely hate high-stakes testing. It's trash quote me. It's trash exclamation point. So, if they really wanna know where students are at, they should really do look at growth versus one test at a time. And I don't think it measures anything close to ability sets.

Instead of focusing on single-event testing, Mattie shared how formative assessments can be valuable in removing barriers to implementing SCL for Black students.

I think formative assessments are good...I love is the NAF partnership [a national program that addresses social and economic disparities for students], where our students worked at KPMG, MasterCard, and Worldwide Technology...when they concluded they had to produce an app based on solving a world problem that's authentic learning...it was meaningful it was impactful. It could potentially help the greater community, and it was learning. So those examples, I think, are standards.

The participants recognized that a more inclusive evaluation system-that offers latitude to center on the needs of each student- is needed. Site participants agreed that state-mandated testing is tied to racially biased systems that presume Black students need heavier testing and surveillance of their learning. Several participants consented that testing not only takes time away from student-centered learning but that the built-in racial bias sets Black students further behind in their learning and growth. There was a consensus that the existing education system needs to be evaluated to identify the gaps and areas that require improvement.

Time constraints

The pressure from state testing performance directly affects how teachers schedule and design their curriculum. The barrier to student-centered learning is that time dedicated to teaching test preparation and skills tends to be prioritized over doing projects or using student-centered learning. Any loss of time significantly impacts the already compact schedule of learning; phenomena like snow days, which often change from year to year, significantly impact teachers having the time to implement any student-centered learning.

Carmen lamented: So there are moments where there is opportunity for student-centered but based on the timeframe of the academic year, and then all the things that seem to take place that are unexpected, you're like, really? Okay, that's X amount of time now out, so you, you start trimming, right? We had three snow days, then the experience with the weapon at the school, and some other things that went down. And so I'm looking at now like two weeks of stuff that has taken

place that has truncated my semester where I could have engaged in that where students were deep diving. But now I am short on time.

Many of these impediments to timing are out of the teacher's control and sometimes fall outside the school district's control. Therefore, anything considered extraneous to the curriculum gets cut out.

Carmen continued by discussing how time constraints impact SCL delivery. In her science course, Carmen shared that because of certain forms of standardized testing mandated by the state and the time allotted to get through the material, she is forced to focus on readying students for the assessment rather than delivering content that centers on their students.

Carmen: It's the bane of my existence because that class is an EOC [end of course exam] tested class. I do nothing truly fun, even though I try to do cool things as much as I can. I truly do nothing fun in that class because of all I am forced to do. [I've] railed [against] these test scores, test scores, test scores delivery of instruction, yada, yada, yada. So I teach to the test period. That's all I do. And so teachers that have tested areas, all they do is teach to the test.

Administrators and teachers were in alignment that sufficient time for preparation and implementation is necessary to implement SCL. As Mattie shared previously, Black students who are part of this site often present with other challenges for which time and resources must be allocated that schools serving predominantly White populations do not.

Carmen commented that students need more time to engage in the deeper critical thinking characteristic of SCL, and teachers need more time to offer feedback: "Cause it's a hundred times easier to do teacher-centered things versus really diving deep and

figuring out what students know what they don't know, and how they could really internalize that learning that takes more time.”

Classroom time is limited and precious, and many teachers count on packing every minute with learning. Mattie mentions that ‘holding space’ is equated to time and the constraints teachers and students face:

Mattie: And our most valuable asset that we have, it is not indefinite. There is a limit on it. We have a limit on time. And so when I say holding space, that is giving students the time and the space...to grapple, to struggle [to produce], to engage, and without judgment.

Holding space is necessary because, as Cain (2020) confirms, the role of the teacher is to facilitate while the student wrestles with the material to master it at their own pace, which can differ significantly from student to student. Every minute counts within the classroom; allowing student-centered learning takes time for students to take responsibility for their education.

Mardi said adequate time affords "teachers an opportunity to start creating engaging lessons, making sure that time on task students having an opportunity to respond.” Even with the most engaging lessons, students may lack stamina and focus for any number of reasons.

Carmen agrees: And if we were given the time, the luxury of time to implement like super rich engaging stuff, we would straight do that. I mean, that's what we want [is] students to feel empowered and love STEM [science, technology, engineering, and math]. We need doctors and engineers. So why would you turn them off to what we need for the future?

Thomas said: I think we're on our way though. We are adopting different curriculums, starting off in the main content areas that will help those areas be student-centered. And with adopting different curriculum it definitely takes time for it to be implemented.

Administrators and teachers all commented that time is a critical tool to execute student-centered learning. Teachers only have a certain amount of time for instruction, which can easily be consumed with classroom management or teaching to a standardized test.

Doing projects and providing progress assessments requires more time than traditional lecture-homework-test environments. Teachers are pressured to use any available time to focus on test-taking skills. Problem-solving and critical thinking skills, central to student-centered learning, tend to be pushed back during testing season. Therefore, according to classroom teachers, student-centered learning takes time away from an already tight schedule.

Theme 2: Culturally Relevant Pedagogy

Several themes emerged in the discussions relating to Culturally Relevant Pedagogy (Ladson-Billings, 2021), such as how implicit bias and stereotyping impact the level of trust teachers place in students and their level of control in the classroom. The participants shared an impression that an obstacle to the implementation of student-centered learning is the presence of racial bias and preconceived notions about the academic capabilities of Black students. Participants also discussed their experiences with cultural competence and how that translates to the cultural responsiveness of the district and teachers for classroom management, as well as with evaluation and feedback.

Barriers to Implementing Culturally Relevant Pedagogy

Administrators and classroom teachers also acknowledged the unique challenges and barriers to promoting cultural competency among teachers and staff. Lack of teacher efficacy in SCL drives some educators to continue delivering content based on long-held biases and stereotypes against Black children and resistance to building classroom norms and goals in concert with the students.

Participants highlighted the significance of recognizing different cultural practices and beliefs. They emphasized that building teacher efficacy in cultural competence is of particular importance for Black students, who often experience marginalization and exclusion based on their skin color, dialect, or the neighborhood where they live (Udah, 2021.) Thomas and Stephen discussed various successful cultural competency practices, such as incorporating multicultural literature, promoting diverse perspectives, and engaging in difficult conversations about race and identity. Mattie shared how they engage students in discussions around self and community image through a community book study by contrasting how education and wealth are viewed today compared to the working-class African Americans of previous generations. The disconnect between what the teacher and administrators understand about support systems points to the difference between what is intended versus what is actualized.

Implicit Bias and Stereotyping.

Implicit biases and racial stereotyping are deeply ingrained in our society (Darby & Rury, 2018) and can have a significant impact on Black students in a student-centered learning environment. Participants shared and demonstrated the various ways these biases can manifest, such as teachers having lower expectations of Black students, assuming

they are not capable of knowledge creation, and disciplining them more heavily for similar behavior as their White peers (Ladson-Billings & Tate, 1995.)

Carmen continued: “They want us to be rigorous; they want us to be college and career-ready, right? And then, we've got teacher culture that interprets that a little bit different. Yes, there are teachers that look and say, no, these kids can't. And so they don't. I makes me so sad that teachers judge the students walking in and saying, well, they can't do anything, and so then, therefore, they don't do anything.”

Carmen's statements clearly illustrate how classroom teachers serve as extensions of systemic barriers to learning for Black students.

Stephen stated that to combat these biases, classroom teachers must first recognize the ways in which they may be perpetuating them. This requires a deep understanding of how implicit biases operate and how they can affect our perceptions and interactions with others. Thomas stated that teachers must examine their own assumptions and biases and work to create an inclusive and equitable learning environment for all students.

Thomas said one effective strategy is to provide culturally responsive teaching, which involves incorporating students' cultural backgrounds and experiences into the curriculum and instructional practices. This approach helps validate and affirm the experiences of Black students and other students of color while providing a more comprehensive and diverse learning experience. Stephen added, “Classroom teachers can also use culturally responsive teaching to narrow the achievement gap between Black students and their peers.”

Teachers need training to become adept at modifying curriculum, including textbooks, reference materials, and assignment prompts to ensure the cultural background and history of all students are represented (Ladson-Billings, 2021.) Thomas indicated that you can also use this approach to teach about the historical and contemporary experiences and contributions of Black people. Professional development can also be a valuable tool for teachers to develop a deeper understanding of the impact of biases on student learning. Teachers can also collaborate with colleagues to share best practices and learn from each other.

Mattie confirmed that teachers perpetuate negative color of mind (Darby & Rury, 2018) stereotypes by focusing on the transference of knowledge rather than helping students generate knowledge (Shor & Freire, 1987.) Mattie offered, “And typically, in urban environments, you see a lot of teacher talk. You see a lot of the cognitive load being carried by teachers because teachers fear behavior challenges.” A student-centered classroom requires teachers to relinquish some level of control over the discussion, which is a challenge because teachers serving Black students are limited with time and the latitude to deliver content centered on the needs of the student (Borrero et al., 2018.)

In summary, addressing implicit biases and stereotyping in the classroom is a complex and ongoing process that requires a deep commitment to creating an inclusive and equitable learning environment. By recognizing and addressing these biases, educators can help to promote a positive and empowering learning experience for Black students.

Trust and Control.

A destructive consequence of implicit bias in the school environment is that it can sometimes limit teachers' confidence in their students' ability to learn simply based on the color of their skin. The way that teachers or administrators respond to students often mirrors views of the larger society, that Black students need more discipline and testing rather than the latitude and trust that are essential elements of SCL compared to the grace afforded to White students.

Mattie shared: Teachers fear, you know, students may not grasp the concept and, you know, they're moving through it. I think a part of the learning process is that trust and that wait time, and knowing that students arrive and understand differently.

Mattie's reflection shows how bias manifests in the belief that Black students cannot successfully navigate a level of independence to meet classroom objectives. Therefore, the teacher must maintain tight control.

The participants shared that relinquishing control in the classroom stems from various reasons, such as fear of failure, not trusting others, or feeling like their identity is connected to their level of control. However, they also feel it is necessary to recognize that relinquishing control can lead to positive outcomes such as increased collaboration, better decision-making, and decreased stress levels. Carmen shared that project-based content delivery, like PLTW, has helped her understand that the teacher's role should be more of a facilitator in the classroom. PLTW is a non-profit organization that provides STEM education programs for K-12 students in the United States.

Carmen added: I'm facilitating the learning experience versus driving the learning experience. You have to actually train the students on how to become engaged learners versus the kind that passively sit and just write stuff down and then rote memorization and recall type of thing.

Thomas similarly stated: Absolutely. You're always [going to] get hit with a bunch of resistors, which is the other side of the coin, right? Um, you want teachers who have experience in the classroom, but also some teachers who have that experience in the classroom, like to do things their way, don't want to change, don't want to do anything new, want students to sit down, listen, and do whatever it is that they want them to do.

Many teachers and administrators still have a traditional view of who holds power and control within a classroom. Mardi reflected, "There was always a level of trust between student and teacher because of the position. Teachers were deemed special people in eras prior to now. And now I think the value has been depreciated." Because a teacher's role does not have the same level of respect within society as it once did, Teachers believe that controlling their classroom equates with respect. Mardi espoused, "I believe that there should be a great deal of trust between student and staff, but I also believe there should be [an] even greater deal of respect." Mardi links trust and respect closely together, confirming that there must be trust between teacher and student for respect within a classroom space. However, teachers trained in teacher-centered pedagogies, especially those who operate within pressurized testing environments, find it hard to relinquish authority in the classroom.

Thomas stated: You may worry that [the students] will abuse their new responsibilities or take advantage of your trust. Conversely, it's important to remember that trust is a two-way street. By demonstrating trust in your students, you are also encouraging them to trust you in return. Setting clear expectations and consequences can help ensure that students understand the boundaries of their new responsibilities.

Lacking trust and control of students is a barrier to student-centered learning because it revolves around the idea that teachers hold all the power in a classroom. Student-centered learning revolves around giving students some form of agency over learning and expectations. When teachers do not trust students and, conversely, hold tight control over classroom procedures, norms, and goals, students lack agency and may simultaneously lack respect.

All three teachers expressed concerns about offering the level of freedom of exploration and autonomy that typifies quality student-centered learning. The participants link student autonomy and agency to concerns about classroom management and levels of engagement. There is a disconnect between the language seen in most of the syllabi and what teachers feel and believe about their students. Though the syllabi included language that projected giving students more agency, some teachers are still reluctant to give students autonomy over learning and behavior. For example, one of the advanced language arts course descriptions talked about students holding themselves and each other accountable. The classroom expectations discussed students using respect over their actions and words, having responsibility and accountability for their learning, and promptness and preparation. These ideas espoused high expectations for all learners and

for them to be collectively and individually responsible for these behaviors. However, due to the pressure of high-stakes testing, some teachers are slow to unbridle their students.

Conversely, Stephen shared, “As a teacher, it's natural to feel uneasy about relinquishing control in your classroom. You may worry that giving students more autonomy will lead to chaos or that they will take advantage of their newfound freedom.” While research (Filgona et al., 2020) suggests that when students have more control over their learning, they become more invested and engaged in the material, classroom teachers are still wary about sharing the power of knowledge acquisition with their students.

To help teachers transition to a role that is more of a facilitator than a simple transmitter of facts, Mattie says teachers must be willing to forge visceral relationships with students: “When you have a relationship with somebody, there's a level of trust with them if it is an effective and positive relationship. And so we cannot think about students and trust without relationships.”

Mattie continued, You don't have trust, [which] I think is detrimental for students. And it impedes a teacher's ability to have an impact.” because “when teachers are robotic and just wanna go through the motion, and [decide] I'm gonna do the lesson plan, I'm gonna disregard everything that's happening in your life, and I see your pain, but I'm gonna focus on this.

Carmen shared concern about how teachers' lack of trust impacts students:

I can't, I can't fathom that in my mind. Like why would you not provide a service to your students? 'Cause That's how I view myself as I'm providing a service and I

would want my children to be provided a [good] service. Yeah. I don't know. I don't know how to answer that question to be completely honest. I don't know why [they have these] prejudices; my only assumption [is] anger and bitterness from being in the profession.

Mattie emphasized that this lack of trust is fueled by outside pressures to perform on standardized tests, which connects to the first barrier discussed in the chapter. One consequence of overfocusing on testing standards is losing trust: “When school systems insist (and society) that you just focus on these standards, you get kids ready, but you don't build community and relationships with them.” Trust and authentic relationships stem from teachers checking their biases and giving students a sense of agency and ownership over their learning.

Contrasting Perspectives of Teachers and Administrators.

We also observed an internal barrier between how teachers view the availability of resources to address barriers to the delivery of SCL and what the Administrators purport as standard operating procedures to effectively implement SCL for their students. For instance, Thomas and Stephen recommended providing diversity and inclusion training to school staff and students. They believe training would help to promote awareness of cultural differences and provide strategies to create an inclusive environment where, as Ladson-Billings (2021) enjoins, all students feel valued and respected. Thomas also suggested promoting diverse representation in leadership and decision-making positions to ensure that the school's policies and practices are inclusive and responsive to diverse cultural backgrounds.

According to Thomas: Um, usually it's [student-centered methods] taught by a master class teacher who has been through all the different PDs and developments and has received certification, especially when it comes to our PLTW courses. We also are integrating a different type of ecology course that really has to do with the growing of different urban farming, [and] we'll have to have a teacher go out and make sure that they get a certification on that.

These sentiments differed from the response of Booker, who offered that the school provides training on how to build positive relationships with students; “such that the first week of any school year, our teachers are not able to teach content, and they're required to build positive relationships with students and families.” Booker said another “area the site has embraced work around [for] moving toward that student-centered model is a district initiative with an acronym of SEAL, which stands for Social Emotional and Academic Learning.” He shared that the district’s Cultural Responsiveness coordinator provides weekly training in SEAL.

Thomas also shared that inadequate support systems can leave Black students feeling unsupported and unable to succeed in student-centered learning environments. This can include a lack of access to academic resources, counseling services, and mentorship programs that can help students build the skills and confidence needed to succeed in their studies.

This perception by teachers about resources is contradicted by Booker, who said that the district has heavily invested resources for the site, including the use of:

Wellbeing specialists [who] function in the capacity of a walking counselor [and] social-emotional support for students. In addition to that, we have our SWART

unit, which is an acronym for Safety, Wellness and Restorative Team who walk our hallways and are assigned to specific floors in the building. Both roles function with the social-emotional needs of students in mind, but they are both rooted in a fundamental focus on building and maintaining positive relationships with students.

The resources Booker talks about could be put in place; however, the caseload of any supervisory role could be overwhelmed, and may lack the training to advise on student-centered approaches. Having adults in supportive roles is only the beginning of a solution to student-centered learning. Evaluating staff and faculty in these roles can help remove the barrier of being disconnected from practices intended to help build student efficacy in SCL.

Booker did acknowledge the need for continued training in and greater use of restorative practices used in the classroom by teachers: “These individuals are there to listen and, through a restorative approach to the work, can convene the use of restorative circles for dialogue to repair harm that has occurred between parties in the building.” For students to succeed, they must understand how their teachers evaluate them. Positive rapport between teacher and student thrives through restorative practices and promotes a positive classroom atmosphere.

The discussions revealed that fostering cultural competence is crucial for creating an inclusive and equitable learning environment. By developing cultural competence, educators can better support the academic success and social-emotional well-being of all students, regardless of their cultural background. Furthermore, participants suggested promoting diverse representation in leadership and decision-making positions to ensure

that the school's policies and practices are inclusive and responsive to diverse cultural backgrounds. Diverse leadership can help to create a school culture that values diversity and promotes equity for all students (Ladson-Billings, 2021).

Site Initiatives to Address Barriers to SCL

Ladson-Billings (2009) espouses that to create a safe and welcoming learning environment, teachers must celebrate the history and culture of African Americans while recognizing how that impacts how Black students show up in the classroom. Mattie agrees and says the district delivers on their mission and vision with this approach: “Even when students don't make their best choices, even when they don't show up the way that we want them to, they're still gifts from God, and they still deserve our best.”

Booker shared: There are two different roles that we have that are unique to [our district] and are aligned with our superintendent's vision. [First], we employ what are called well-being specialists. [They] function in the capacity of the equivalent of a walking counselor or social-emotional support for students.

Instead of focusing on discipline, they support students who are challenged by navigating school and life.

Booker added: These specialists work in tandem with the “SWART unit, which is an acronym for Safety Wellness and Restorative Team who walk our hallways and are assigned to specific floors in the building. Both roles function with the need, the social and emotional needs of students in mind, but they are both rooted in a fundamental focus on building and maintaining positive relationships with students and serve as a listening party if needed.

Mattie offered that students need a multitude of teaching methods and should not be treated as a monolith:

Their needs are varied, and there's no one-size-fits-all approach. So, we have to be multitasked [and] multifaceted in our approach to effectively meet their needs.

And we have to always be changing and evolving and getting better because [the students are] changing. Some things are proven to be timeless. Other things need some refreshing. That is what I think being student-centered is about.

Mattie also emphasized that two elemental cultural competence practices are promoting respect and empathy for others and addressing issues related to power, privilege, and oppression in the educational setting. “High school students are very well-versed, emotional human beings. The old notion of, you do what I say because I'm the adult” doesn't work because many students function in adult roles in their families, caring for siblings, parents, and other elders. Mattie continued, “So you have to build that relationship first before you get the respect. It used to be that you're a teacher, you just got the respect [but now] you gotta earn the respect.” Mardi said that effective practice of cultural competency requires buy-in from the entire community:

The culture and climate [are] only stabilized through buy-in [that] comes from ideologies and philosophies that are embraced by the majority of the school community. You'll never have a hundred percent, but if the majority of the school community, including staff and students, that's what builds a culture to maintain the client.

A second global consideration for literacy educators is students' self-efficacy.

John Hattie (Fisher et al., 2016) defines self-efficacy as “the confidence or strength of

belief that we have in ourselves that we can make our learning happen” (p. 45). Fisher et al. (2016) suggest that students with high self-efficacy understand complex tasks as challenges rather than trying to avoid them, experience failure as opportunities to learn, which may require additional effort, information, support, and time, and quickly recover a sense of confidence after setbacks. In contrast, students with low self-efficacy avoid complex and difficult tasks (as these are seen as personal threats), maintain weak commitment to goals, experience failure as a personal deficiency, and slowly recover a sense of confidence after setbacks. In turn, Black students have low self-efficacy due to a lack of success in coursework that results from over-testing, thereby causing withdrawal from academics (Gul & Rafique, 2017).

Voice and Choice

The phrase “voice and choice” emerged several times in dialogue with participants. All three of the administrators mentioned dialogue around the voice and choice of students and how that contributes to students’ self-efficacy. Booker also submitted that “the discourse approach also gives students a greater sense of agency and voice and choice in their learning” by “allowing students to set goals for their learning [and encouraging them to] monitor their own progress.” Mattie offered, “We leverage student voice often where students have voice and choice in the learning and in the processes that happen in our schools.” Mardi stated, “There’s a shared understanding that all voices in the room should be heard, will be heard. And that builds the culture.” All administrators interviewed understood the importance of students having a say in their learning, pacing, and goal setting. However, similar to the language within the syllabi, admitting the importance of student agency does not ensure its practice.

Carmen believed that students should be stakeholders in deciding the rules and procedures (norms) within the classroom setting. When students have a vested voice in their behavior expectations, they are accountable for individual and collective behaviors. Carmen confirmed, “Students [should be] coming up with classroom norms, procedures, a way to behave in the classroom, their expectation for each other, and the course.” According to Carmen, the goal is for teachers to “Hold students accountable for the things that they said” and have students “hold each other accountable.” Carmen believes that when students help decide on classroom norms and expectations, they should not only have a measure of control but also the trust of their teacher. The teacher should not hold all of the power in decision-making. To do so is contrary to best practices in student-centered pedagogy.

Carmen commented that student-centered learning takes training and offers, “You have to actually train the students on how to become those type of learners versus the kind that passively set and just write stuff down and then rote memorization and recall type of thing.” Therefore, an impediment to utilizing collaborative curriculum and student-led practices is that it requires a lot of front-loaded scaffolding and student training as well as the corresponding professional development for the teachers.

Thomas stated: To support students as they take on more responsibility, it's important to provide clear guidance and support. Such support could include scaffolding activities that gradually build students' decision-making skills or [provide] opportunities for them to practice in a structured environment. Also, it's important to create a classroom culture that values respect and collaboration, where students feel comfortable sharing their ideas and working together.

A barrier to achieving greater self-efficacy is when students lack a sense of agency and ownership of their learning. In our secondary data, history, language arts, science, and math syllabi covered the theme of student confidence and agency, which we understand equates to giving students voice and choice as part of the curriculum.

A history syllabus mentioned that the focus of the course is to help students grasp the ideas of community and individual cooperation and competition in terms of historical context and examine how society has succeeded or failed at working together. The assessment and understanding of how society functions supports the idea of student critical thinking rather than rote memorization of historical facts. An introductory Literature and Composition syllabus focused on students owning their learning through the following endeavors: obtaining a peer to help complete homework, reading independently outside of class, and working with peers to respond collectively to prompts. There is also a disclaimer that it is the student's responsibility to be accountable for work missed during an absence and to complete any make-up or late work.

Another Literature syllabus similarly places the onus on students to reach out for extra help. There was mention of a frequent seminar rotation that assisted students with missing assignments. However, the expectation is clear that students are ultimately accountable for their learning by meeting all course objectives.

A Biology syllabus presents that the purpose of the course is for students to acquire and apply their knowledge of science to real-world applications and also utilize logic and reasoning with scientific information. These syllabi have language that revolves around the idea that students should be able to learn and think for themselves rather than

sitting in lectures and receiving knowledge from their teacher, as described in Freire's (1970/1996) banking model of education.

Other history syllabi mentioned individualized education plans (IEPs) and stated that students who have them will receive grades based on what is in their individual learning plan. There was also a mention that any retake needed to be followed by a tutoring session with the teacher. The rules for this class centered on setting the students up for success by attributing norms to students such as maintaining a positive attitude, possessing self-respect, making responsible choices, and encouraging others to be their best. One syllabus also discussed the use of interactive lectures and small-group collaboration.

Three mathematics syllabi for algebra and geometry mentioned accessibility to all students, where instruction is given using resources that make learning available for students at multiple levels. These syllabi also say that students will 'apply their knowledge' and 'build' on skills related to mathematical concepts and frameworks. In these syllabi, we found keywords indicative of SCL practices such as reasoning, connecting, exploring, analyzing, investigating, searching, describing, and making informed decisions. Learning about math sounds more like an exploration for students to learn about concepts through inquiry and self-discovery. In these classes, an online math tutoring system is available to teachers to see real-time data that reports on mathematical skills by concept while also individually adapting to each student's level of capability. This tool ensures that learning is individualized and each student can move at their own pace and receive help when needed. There seems to be a lot of agency and ownership of

the learning within these math classes based on the wording and description from the syllabi.

Ensuring that students are granted the agency to express their voice and choice and make choices about their learning consistently is not something easy to monitor. Not allowing voice and choice directly impedes student-centered learning because, without it, students get lost in the shuffle and may disconnect from their learning. The consequence of students not being allowed to use their voice and make choices in their learning emerges as resistance and hesitance from students when immersed in a high-functioning SCL environment.

Student resistance to student-centered methods is a direct repercussion of not addressing factors such as student engagement, motivation, and the learning environment. For example, teachers may need to consider whether students feel comfortable and safe in the classroom or if there are any external factors, such as personal issues or cultural differences, that may be impacting their participation. The findings obtained in the study relate to students' resistance and inability to engage in SCL activities as a major barrier undermining the inconsistent implementation of SCL strategies.

Classroom Management.

Classroom management is a critical aspect of education, directly impacting students' achievement. The ability to organize and manage learning settings effectively is essential for maintaining order and creating a conducive learning environment. Teachers who exercise proper classroom control can keep students engaged and motivated, leading to better academic performance. According to Poulou et al. (2019), classroom management is critical to ensuring a successful teaching career.

Booker also offered: Students learn best through engaging in deep conversations and dialogue and grappling with the content with one another. The design of lessons should support opportunities for students to engage in what we call discourse around the content or discussions, as opposed to a sit-and-get modality of instruction where students sit and receive lectures.

To do this, teachers must create a supportive and engaging learning environment that helps students feel more confident and in control of their learning. This could involve incorporating more interactive and collaborative activities, such as group discussions, peer reviews, and project-based assignments.

Several participants strongly believe these activities can help students develop essential skills such as communication, critical thinking, and problem-solving while promoting a sense of community and shared responsibility. The educators also confirmed that providing personalized feedback and support is another crucial aspect of student-centered learning. Teachers should work closely with each student to identify their strengths, weaknesses, and learning goals and provide tailored guidance and feedback. Overcrowded and noisy classrooms can be extremely challenging for both students and teachers. When too many students are in a classroom, it can be difficult for teachers to provide individual attention to each student.

Furthermore, noise can be a significant distraction and make it difficult for students to concentrate on their studies. Such distractions negatively impact the learning experience and can lead to a decrease in academic performance. Some teachers were concerned about the noise when working in groups and saw that some teachers may need to be more hands-on before they let the students take over.

Stephen offered, “In the [classrooms] that I've observed, it takes a little more than that student; it is gonna have to be a little more hands-on before they allow for students to understand what's going on and take the room upon themselves.”

Thomas added, “It gets a little noisy because the kids are working,” and “A teacher as a facilitator, if it's a true facilitator, would just be there to really monitor what's going on in the classroom. [The work] would all be [on the] students.”

Elevating the voice of the student in the management and execution of classroom tasks can help students feel more engaged and motivated, as they can see the direct impact of their efforts and receive constructive feedback on areas where they need improvement. Thomas concluded that inadequate support systems can leave Black students feeling unsupported and unable to succeed in student-centered learning environments. This can include a lack of access to academic resources, counseling services, and mentorship programs that can help students build the skills and confidence needed to succeed in their studies.

Teachers may be resistant to changing their instructional approaches (Reid, 2014). However, it's important to be mindful that change can be difficult for many people, and it may take time for some educators to adopt new teaching methods. It's crucial that we continue to encourage and support educators in their efforts to innovate and improve their instructional practices, as this ultimately benefits the students they serve.

Evaluation and Feedback.

For student-centered learning to be successful, both teachers and students can benefit from continuous evaluation and feedback. Teachers providing evaluation and feedback to students on their work is a critical element of SCL (Cain, 2020).

Consequently, teachers also need input from administrators, counselors, parents, and students to understand how students are succeeding or struggling within their classroom framework.

Teacher Feedback.

When done correctly, evaluation and feedback can verify that teachers and staff are meeting the goals of student-centered pedagogy and practice. A barrier to student-centered learning can be teachers and staff who lack training, resources, and understanding of what a student-centered approach looks and feels like. Therefore, just as teachers should work closely with students to identify their strengths, weaknesses, and learning goals, so should administrators. Students and teachers should receive tailored guidance and feedback accordingly. On the student end, they can feel more engaged and motivated, as they can see the direct impact of their efforts and receive constructive feedback on areas where they need improvement.

However, getting around the impediment to student-centered learning means having checks and balances to ensure that all adults, teachers, and administration abide by standards that reach a student-centered approach. Booker mentioned how counselors help to support student dissent when there is an issue with a teacher. The counselors “advocate for our students with the administrative team and let us know when we need to potentially engage an educator who is either underperforming or is performing in a way that does not align with our expectations for the building.” Mattie spoke about teacher coaching: “We have what's called swivels, where they can set up a camera in their room, and it follows them. So it captures them teaching, and it's an instructional tool for them, not an evaluative tool.” Mattie also brought up that some teachers might need more

assistance and guidance: “And so you know, that's where that teacher might get more direct feedback, might have more, you know, administrative presence or even, you know, we put in an extra, like an aid to help.”

Booker reflected on John Hattie’s research (Fisher et al., 2016) regarding teacher self-evaluation and teacher efficacy:

There's been a great deal of work through John Hattie's research related to the effect of collective teacher efficacy. One of the most powerful tools that I have seen from a coaching strategy standpoint that can help affect teacher practice with the shortest turnaround is having teachers record themselves and then rate their own performance. There are protocols in place that enable them to do that, but oftentimes, teachers don't see themselves in practice, and when they do, it can be quite eye-opening for them.

This statement points to how important it is for teachers to observe and reflect upon their own skills and practices. Teacher self-reflection is strongly tied to self-evaluation. Student-centered learning is impeded when teachers are not reflective of their own practice and lack a voice in their own evaluation. Just as student voice is vital to drive learning, it is also important for teachers to do self-reflection as well.

Booker also mentioned that maintaining qualified teachers is crucial to delivering student-centered learning:

I'd like to place specific emphasis on teachers, the retention of educators who are properly equipped and trained to meet the needs of students, to simply retain teachers who, in many ways, are underperforming or who are ill-prepared to

center students in the work can be more detrimental than helpful to the trajectory of students in the long run.

Teachers who harm students and do not perform well are detrimental to student success. Therefore, retaining teachers who know how to run a student-centered classroom is crucial in being able to validate and affirm all students.

Student Feedback.

Feedback for students is a centerpiece of SCL to ensure they are grasping the material or establishing a system of peer collaboration. Teachers also use feedback on students to measure how well they understand concepts learned in the classroom and how they work together to solve problems. A 360-degree style of feedback can be used by parents and students to make sure that teachers are following the student-centered parameters and that the students are succeeding and thriving within the classroom environment.

Booker mentioned the different methods of assessment for students: There's evidence that shows that you can assess students for presentations as well, their oral prowess, their ability to discuss content through their ability to work effectively in teams as well, and to collaborate around finding a solution to a problem.

When students are evaluated and assessed in various collaborative ways, different skills are evaluated.

Carmen agreed and stated how evaluation is used: "Sometimes they'll have peers evaluate their diagnoses based on what they understand of the content." Carmen also mentioned applying evaluative techniques in the following manner: "They're kind of

walking through as they would in a hospital with their cohort to do a collective evaluation and conversation with the family and the patient about what they think treatment would be. So that's complex.” Having students use feedback, evaluation, and collaboration forces them to think in more nuanced ways and helps them apply learning to real-life scenarios.

Mardi said, “I think the best form of assessment for a student is formative. I tell you why because it invokes and provokes dialogue. When you ask questions that afford a student to investigate, to navigate, to infer, then you are challenging students at the highest level. Intentional questioning can also provide you with feedback on a student's depth of knowledge.

Booker discussed how evaluation is used for students and families to ensure that teachers are abiding by expectations that center on students’ needs:

And as these issues come to our attention through either classroom observations or feedback from students and parents in areas in which we're falling short, we work to address those areas and provide the necessary supports to move us down the continuum toward a more student-centered approach to the work.

Mattie added that schools need to be a source of affirmation: “It is validating, affirming, and seeing all students. So knowing that students are not widgets, they're unique.” Seeing students’ individuality and viewing them holistically is a more student-centered approach. However, retaining highly qualified teachers and removing any bias that those teachers hold can be a significant impediment to delivering SCL.

Comparing this to the curriculum, five of the syllabi contained language centered around the theme of cultural responsiveness. Literature and Composition curriculum had

a wide breadth of choices for literature that included an array of diverse voices, including Asian, African American, female, and Indigenous. One science curriculum guide mentioned that students can retake any summative assessment below 79%. It also touted a goal that students would be prepared to be global citizens through instruction that allows them to be empowered and prepared for future scientific careers that directly affect their reality and community, thereby allowing them to be contributing citizens.

History curriculum has built-in extra credit for attending a local history museum for at least an hour by validating their time and attendance at the event. Many of the topics in the history curriculum center around understanding historically marginalized identities such as African Americans, women, and Indigenous Americans). Topics include race, resistance, rebellion, racial empowerment, Black Wall Street and Tulsa, and women's suffrage. There are a lot of Socratic seminars, projects, and reflections on history that question ethics and draw parallels to modern society. Students are to know historical dates and facts and apply thoughts and ideas to how society works. Students study stories about building personal agency so they can become change agents. This philosophy mirrors the ideas of Culturally Relevant Pedagogy (Ladson-Billings, 2021).

Summary of Data

Bias and stereotypes of Black students can prevent them from feeling empowered as learners. However, student-centered learning plays a role in allowing Black students to be validated and understood. Participants' statements centered on their experiences with the change process to foster students' ability to cope and reflect the district's mission and vision.

The researchers found that implicit bias and the nascent development of culturally relevant pedagogy continue to affect Black students' access to relevant, student-centered learning opportunities in public secondary education.

In response, teachers need to be equipped to recognize and acknowledge Black students' cultural backgrounds, experiences, and perspectives and integrate them into the classroom. If not, Black students may feel disconnected from the material, leading to a lack of engagement and a failure to achieve academic success.

While the site faces similar pressures due to systemic issues and resource limitations, they present a consistent awareness of the barriers and are making concerted efforts to mitigate them.

Chapter Five: Discussion, Findings, And Recommendations

Interpretation of Findings

Chapter Five focuses on data discussion interpretation of the themes while generating the study's main conclusions in the following section. Chapter five ends with potential implications for practice for positive social change aligned with the study topic. We will present the themes that surfaced, how they relate to these frameworks, and most importantly, if and how the data provides evidence supporting our observations about the impediments to and disparities in delivering student-centered learning (SCL) for Black students.

By asking the question, "What impedes Black students from experiencing and gaining access to relevant, s in public secondary education?" we sought to understand how to achieve equitable delivery of education for students in public schools and determine who is behind the outcomes of student learning, particularly for Black Students. We felt it was critically important to hear from classroom teachers and district administrators how they measure equitable educational delivery.

Finally, recommendations for further steps and a conclusion are developed. We constructed our research to discover what impedes Black students from experiencing and gaining access to relevant, student-centered learning (SCL) opportunities in public secondary education. From this research question, many relevant themes were revealed in our interviews, which the researchers reflected on and analyzed below.

Theme 1: Systemic Issues

The researchers found that systemic issues explained by Critical Race Theory (Bell, 1993) continue to have a profound impact on Black students who are seeking

relevant student-centered learning (SCL) opportunities in public secondary education. These issues are complex and multi-faceted and can manifest in several ways.

One such manifestation is state-mandated curriculum and testing standards used in many public schools. The curriculum and testing standards often do not reflect Black students' cultural experiences and perspectives, making it difficult for them to connect with the material being taught. Pressures on schools to ensure that students perform well on standardized tests often lead teachers to focus on rote memorization and test-taking skills, which can be limiting for students who may benefit from more critical thinking and problem-solving opportunities.

Standardized testing is institutionally centered rather than encompassing content and structure that centers on students, especially Black students. On the other hand, student-centered learning would empower Black students and allow them access to higher-level thinking and problem-solving. The time needed for test reparation limits teachers' ability to adequately cover grade-level expectations (GLEs) and course objectives.

Consequently, time spent meeting these externally mandated requirements abate opportunities to create student-centered learning opportunities relevant to Black students. As such, students may not have enough time to fully engage with the material, which can further exacerbate the disconnect between the curriculum and the students' lived experiences.

The time taken to focus on helping students prepare for biased standardized tests is a barrier to the pursuit of student-centered learning endeavors. Any project or activity unrelated to a test-taking skill gets cut from the curriculum. As one teacher mentioned, a

significant barrier to implementing SCL is the time it takes. Black populations are often judged against objective quantitative standards (Devine-Eller (2012), while student-centered learning takes more time and is evaluated from a qualitative point of view. Because of testing restraints concerning timing, teachers do not have enough time to implement student-centered learning. The administration pushed forth that testing is rooted in white supremacist frameworks and promotes cultural bias. As a result, testing also promotes psychological issues and low self-esteem amongst Black students especially.

The participants elevated concerns about using EOCs, multiple-choice tests, and standardized tests for college admissions. They noted that, despite the increasing drive toward student-centered learning strategies, the curricula and assessments have not been entirely converted to reflect this pedagogical shift. They emphasized the importance of ensuring that students are well supported to achieve in both traditional and student-centered learning frameworks. By developing a diverse set of skills and knowledge, students can feel confident and prepared for any type of assessment they may encounter. Ultimately, this can lead to greater success both in academics and beyond.

Theme 2: Culturally Relevant Pedagogy

Two of our theoretical frameworks were Culturally Relevant Pedagogy and Liberatory Pedagogy. The main issues highlighted were related to the barriers to implementing cultural competence and student-centered learning and the site's initiatives to promote cultural responsiveness. The participants emphasized the need to recognize and integrate cultural norms for Black students into the school's policies and practices.

We found some of the barriers to implementing culturally relevant pedagogy at this site are associated with the persistence of racial and social biases that impact how teachers interact with Black students (Cole & Beck, 2022), leading to unfair treatment and adverse outcomes. For example, Black students may be disciplined more harshly than other students for the same infraction, leading to a disproportionate number of Black students being suspended or expelled.

Barriers to Implementing Culturally Relevant Pedagogy

The researchers found that cultural responsiveness and implicit bias continue to affect Black students' access to relevant, student-centered learning opportunities in public secondary education. When this is lacking, Black students may feel disconnected from the material, leading to a lack of engagement and a failure to achieve academic success.

The persistence of racial and social biases impacts how teachers interact with Black students, leading to unfair treatment and negative outcomes. For example, Black students may be disciplined more harshly than other students for the same infraction, leading to a disproportionate number of Black students being suspended or expelled. Implicit bias, on the other hand, refers to the unconscious beliefs and attitudes (Cole & Beck, 2022) that teachers may hold toward particular groups of students.

Teacher bias also impacts their ability to relinquish full control in the classroom. Giving students more control in the classroom is a powerful way to empower students and enhance their learning experience. This unwillingness to give over a level of control to students may branch from a desire for comfort and tradition, as some teachers may feel more comfortable with traditional teaching methods that give them more control over classroom activities.

Relinquishing control does not absolve teachers of their responsibility to facilitate the acquisition of knowledge. Instead, offering students the opportunity to express their needs and interests for their learning requires careful planning, clear expectations, and ongoing support to ensure that students can engage in a positive and productive way. Teachers and administrators, however, must be willing to break down their traditional views about trust and control within the classroom. Giving students agency and buy-in supports student-centered learning by placing students at the center of decision-making. Teachers who give up control can still find respect in giving their students a voice in structures within the classroom. Finding the right balance between structure and autonomy can create a learning environment that fosters creativity, curiosity, and a love of learning.

Participants stated that there are problems with relinquishing control, which can be challenging to deal with. It can stem from a variety of reasons, such as fear of failure, not trusting others, or feeling like one's identity is tied to being in control. All of the classroom teachers and two of the administrators felt that relinquishing control could lead to positive outcomes like increased collaboration, better decision-making, and decreased stress levels. It may take some time and effort to work through these issues, but with practice and a willingness to let go, it is possible to overcome the struggles of relinquishing control.

Teachers may be resistant to changing their instructional approaches (Reid, 2014). However, it's important to keep in mind that change can be difficult for many people, and it may take time for some teachers to adopt new teaching methods. It's crucial that we

continue to encourage and support teachers in their efforts to innovate and improve their instructional practices, as this ultimately benefits the students they serve

Initiatives to Promote Cultural Responsiveness

The researchers found that cultural competency is essential in creating a student-centered learning environment for Black students. Without cultural competency, teachers may struggle to provide the necessary support and resources for Black students to succeed academically. For example, teachers may not understand how racism and discrimination can impact Black students' mental health, which can lead to a failure to provide the necessary support and resources to promote their well-being.

It is necessary to recognize that students' perceptions of their ability to cope can significantly impact their engagement in SCL activities. Therefore, it is essential for teachers and administrators to create a supportive environment that fosters student self-efficacy. We found evidence that the district is placing a significant emphasis on addressing the experiences that students may encounter during the change process. The goal is to help students develop coping mechanisms that will enable them to navigate these changes effectively while also reflecting the district's mission and vision.

An important element of the district's approach is to give students a voice in their own learning by giving them choices in how they learn and what they learn. This approach, often termed "voice and choice," can foster student engagement and motivation, leading to improved self-perception and self-efficacy. Effective classroom management techniques can also create a supportive and safe learning environment where students are comfortable taking risks and learning from their mistakes. When

students feel safe and supported, they are more likely to engage in the learning process and make the most of the SCL opportunities available to them.

In terms of curriculum, culturally relevant and student-centered language was found across disciplines, as evidenced by the diversity of literary voices and by asking students to think critically about marginalized identities. Nine curriculum guides investigated included language centered around student-centered activities, pedagogy, or ideas. One social studies course description mentioned that students would use critical thinking skills in all classroom discussions. Literature courses boast activities involving PBL, Socratic discussion, public presentations, class performances, journaling, and independent choice reading.

Science curricula utilize students' experiences, interests, and learning styles to drive inquiry-based instruction so students can learn to: problem-solve, create, design, advocate, and challenge. Math courses use materials that focus on student achievement using a textbook that "empowers students to become creators of their mathematical knowledge by collaborating, communicating, and problem-solving with their peers." Clearly, these curriculums were designed with student interest and agency in mind.

The findings obtained in the study, however, indicate a level of student resistance and inability to engage in SCL activities as a major barrier preventing the consistent implementation of SCL strategies. While there could be various reasons for this, our participants point to a significant number of students who are unprepared and reticent to step into environs that require greater responsibility and autonomy.

In traditional classroom settings, students are usually passive recipients of information, with the teacher being the sole authority figure. In such a scenario,

transitioning to a more student-led approach can be challenging, and students may feel overwhelmed and unsure of how to proceed. All teachers interviewed revealed that a possible cause for resistance and disengagement could be students not being used to the level of autonomy and control that comes with student-centered learning. In traditional classroom settings, students are usually passive recipients of information, with the teacher being the sole authority figure. As Freire (1970/1996, p53) warns, “this negates education and knowledge as processes of inquiry.” Therefore, transitioning to a more student-led approach can be challenging, and students may feel overwhelmed and unsure of how to proceed. Teachers must identify these issues early on and work with students to create a supportive and engaging learning environment to help them overcome these challenges.

We did find evidence that the district is placing a significant emphasis on addressing the experiences that students may encounter when shifting from learning in teacher-centered versus student-centered environments. Their goal is to help students develop coping mechanisms that will enable them to navigate these changes effectively while also reflecting the district's mission and vision.

Disconnects between Teachers and Administrators

While the high school's vision, mission, and curriculum are aligned with student-centered learning methods and strategies, we found inconsistencies among teachers' and administrators' perspectives. Two of the teachers felt there were insufficient resources to adequately support the teacher training necessary to create an environment fostering student-centered learning. They feel they need more support to implement cultural competency practices such as incorporating multicultural literature, promoting diverse

perspectives, and engaging in difficult conversations about race and identity. On the other hand, the administrators consistently touted the various measures, training, and community resources available to support these activities.

Our research also uncovered a significant disconnect in the evaluation and feedback process for teachers utilizing student-centered methods. While teachers and administrators within the district have acknowledged the availability of resources and training, the current evaluation process still focuses on student performance on standardized tests. As a result, the evaluation process incentivizes teachers to teach to the test, which often consumes valuable instructional time needed for effective SCL.

Implications for Practice

Regarding student-centered best practices, there was consensus that student needs and goals must be at the center of educational delivery. Students have a vested interest and stake in their own learning process and must be given agency in their learning. Student-centered learning should also be structured to ensure that students are ready to apply their knowledge to the real world and to prime them to be leaders in their community. Many skills learned in a student-centered classroom can be applied to many vocational fields. Working and thinking collaboratively prepares students to work as a team and helps them apply problem-solving techniques to various tasks.

Classroom management is a critical aspect of education, directly impacting students' achievement. The ability to organize and manage learning settings effectively is essential for maintaining order and creating a conducive learning environment. Teachers who exercise proper classroom control can keep students engaged and motivated, leading to better academic performance.

Evaluation and feedback are essential components of student-centered strategies. Teachers who provide timely and constructive feedback can guide students to better understand their progress and identify areas where they need to improve. This can help to build their self-efficacy and self-perception, leading to increased engagement and better outcomes. Teachers can use various assessment methods to provide feedback, including formative assessments, peer assessments, self-assessments, and summative assessments.

The reluctance of some teachers to allow students to take control of their own learning activities is a concerning issue that affects the implementation of student-centered learning (SCL). This reluctance may stem from a desire for comfort and tradition, as some teachers may feel more comfortable with traditional teaching methods that give them more control over classroom activities. Although only a small number of respondents mentioned this issue, it's crucial to develop relevant strategies that can help address it and promote the successful implementation of SCL. By doing so, teachers can provide students with a more engaging and effective learning experience that can help them succeed in their academic pursuits.

Therefore, feedback for teachers is just as essential to the effective delivery of SCL. We recommend a thorough review and readjustment of how teachers are evaluated and offered feedback to better reflect the effectiveness of student-centered learning. This would require an in-depth understanding of the student's perspective and voice to ensure that students' needs are at the center of this process. By doing so, the school district can ensure that student-centered teaching methods are appropriately evaluated and teachers are provided with the necessary support to deliver these methods effectively.

The researchers hope that our study could become a measure for other schools to use to determine whether they have high levels of student efficacy and agency within their building or school district. Our study would help schools understand if they are genuinely implementing student-centered learning and look at ways to educate children other than state-mandated directives and test-driven instruction. Schools that are invested in using DEI and culturally relevant pedagogy could look at our study to measure the success of all students and see if every student is being validated, heard, and valued within their school community.

Other Recommendations

It is necessary to take a comprehensive approach that prioritizes culturally relevant and student-centered learning opportunities to address concerns about curricula and assessments. Such an approach will require the engagement of several stakeholder groups, including policymakers, educators, parents, and community members. This may involve rethinking the curriculum and testing standards to better reflect the experiences and perspectives of Black students, as well as providing teachers and students with the necessary time and resources to engage in this type of learning. Taking a more holistic approach can create a more equitable and inclusive educational system that benefits all students.

Schools must prioritize the development of culturally responsive and inclusive teaching practices. This includes providing professional development for teachers on cultural responsiveness and implicit bias and incorporating cultural relevance into lesson plans and materials. Schools must also work to develop a more diverse and inclusive teaching staff that reflects the student population.

There must also be a concerted effort among teachers and school administrators to recognize and respond to the unique needs of Black students and create a culturally responsive and inclusive learning environment. By developing cultural competence, teachers can better support the academic success and social-emotional well-being of Black students and remove the systemic barriers preventing them from fully engaging in the formal classroom experience.

This research underscores the importance of addressing student engagement, motivation, and the learning environment. For example, teachers may need to consider whether students feel comfortable and safe in the classroom or if there are any external factors, such as personal issues or cultural differences, that may be impacting their participation. The participants emphasized that it is critical for teachers to create academic spaces that help students feel more confident and in control of their learning.

Creating such an environment could involve incorporating more interactive and collaborative activities, such as group discussions, peer reviews, and project-based assignments. The classroom teachers said these activities can help students develop essential skills such as communication, critical thinking, and problem-solving while promoting a sense of community and shared responsibility. Conversely, an impediment to utilizing collaborative curriculum and student-led practices is the need for student and teacher training to build efficacy for both groups. Based on the findings, teachers must consider issues that may hinder students' active participation in classroom activities. By taking these steps, teachers can help to create a classroom environment that fosters active participation and encourages students to perform at their best.

Suggestions for Future Research

Future researchers could modify our interview schedule to conduct a pilot study on barriers at a similar test site with similar characteristics. A five-question survey could be used that mimics the major themes of our research: bias and stereotyping, student efficacy, systemic issues, resources, and cultural responsiveness. Researchers could compare ELA/social studies, math/science, and the differences in responses between classroom teachers and other district faculty. Given that our qualitative study enjoined a limited sample from a small site, we recommend employing a quantitative study to measure the depth of the disconnect within individual schools and across districts. The differences of opinions and disconnects could be more significant and appear differently at another site with a bigger population size, diversity of opinions, and include teachers of various disciplines. By coincidence, the teachers in this study all teach science.

Conclusions

The fundamental tenet of the theoretical framework, Critical Race Theory, is that racism is permanent and pervasive in our society. This helps explain why the systemic issues presented by our participants continue to have a profound impact on Black students who are seeking relevant student-centered learning opportunities in public education. These issues are complex and multi-faceted and can manifest in several ways.

One such manifestation is the state-mandated curriculum and testing standards used in many public schools. The curriculum and testing standards often do not reflect Black students' cultural experiences and perspectives, making it difficult for them to connect with the material being taught. Pressures on schools to ensure that students perform well on standardized tests often lead teachers to focus on rote memorization and

test-taking skills, which can be limiting for students who may benefit from more critical thinking and problem-solving opportunities. (p. 100)

Standardized testing is institutionally centered rather than encompassing content and structure that centers on students, especially Black students. Also, the context and phrasing of problems and writing prompts tend to negate Black students' history and lived experience. To address concerns about curricula and full access to student-centered learning, teachers must take a comprehensive approach that prioritizes culturally relevant and student-centered learning opportunities.

This may involve rethinking the curriculum and testing standards to better reflect the experiences and perspectives of Black students, as well as providing teachers and students with the necessary time and resources to engage in this type of learning. We recommend that districts review how they can restructure curricula to help students connect to concepts outside their cultural knowledge. We also recommend that writing prompts and projects that reflect the diversity of their students be included. Such an approach will require the engagement of several stakeholders, including policymakers, educators, parents, and community members. Taking a more holistic approach can create a more equitable and inclusive educational system that benefits all students. We trust that community advocates such as school board members will also review our research and use it to advocate at the state and national levels for changes in curriculum and testing.

Another significant barrier is the need to expand cultural competency training for classroom teachers to help better understand diverse backgrounds. Such training is necessary to connect teachers' approaches to instruction and the unique needs and learning styles of Black students. This includes reviewing educational materials that are

based on a Eurocentric perspective, which limits Black students' ability to fully engage with the content. Cultural competency training can help create a safe and inclusive learning environment for Black students, which is essential for effective student-centered learning. This requires teachers to be aware of the potential impact of their words and actions on Black students and to take steps to mitigate any potential harm. Otherwise, teachers can unknowingly inflict harm on Black students that may result in a sense of low worth, lack of interest or motivation, and decreased academic performance.

Black students often come from economically disadvantaged communities, which can make it difficult for schools to provide the necessary support and accommodations. This can include things like tutoring, technology, and other resources that are critical for student success. Implicit biases and stereotyping also pose a significant challenge when implementing student-centered learning for Black students. Teachers may hold preconceived notions about the abilities and potential of Black students, which can negatively impact the way they are perceived and treated in the classroom. As previously mentioned, this can lead to a lack of confidence and self-esteem, further hindering their academic success. Addressing these challenges and creating an equitable learning experience for all students is crucial for promoting student success and reducing achievement gaps.

Summary

Focusing on our research question, "What impedes Black students from experiencing and gaining access to relevant, student-centered learning opportunities in public secondary education," we gathered evidence that revealed several key findings about the barriers to delivering SCL in schools. We validated challenges due to systemic

racism that include standardized testing and curriculum, specific barriers to implementing culturally relevant pedagogy, including teachers' issues related to trust and control. We also learned there is a disconnect between teachers' perception of the available resources and frameworks to deliver SCL versus that of administrators.

For a school to implement equitable and effective instruction for Black students, SCL must be present in everything practiced by both students and teachers, and it must be present at every level and within every structure of learning. Implementing best practices for student-centered strategies can create an inclusive, engaging, and supportive learning environment for Black students within public secondary education. By giving students voice and agency in their own learning, employing effective classroom management techniques, and providing timely and constructive feedback, teachers can enhance students' self-perception and self-efficacy, fostering greater engagement and better learning outcomes.

The data gathered through the interviews has provided a detailed and comprehensive view of the multiple barriers that prevent the consistent implementation of student-centered learning and hinder Black students from accessing relevant and effective learning opportunities in public secondary education. The interviews have revealed a correlation between critical race theory, liberatory pedagogy, and culturally relevant pedagogy, shedding light on the need for an inclusive and equitable approach to education. The findings have also highlighted the disparities that impact race, including unequal access to resources and opportunities, and the importance of addressing these issues to ensure all students have access to quality education.

Leaning into the voices of classroom teachers and building and district-level administrators revealed various strategies that will help LEAs and policymakers promote equity in student-centered learning. Overall, the interview data offers a detailed and insightful perspective on the challenges and opportunities facing public secondary education and emphasizes the importance of creating an inclusive and equitable learning environment for Black students.

In conclusion, addressing Black students' self-efficacy in student-centered learning environments requires a multi-faceted approach that involves creating an engaging and supportive learning environment and providing personalized feedback and support. With the right strategies and support, students can overcome their initial resistance and embrace student-centered learning, improving learning outcomes and greater student satisfaction. Until Black students and other marginalized students have the opportunity to successfully participate in society as earners, learners, and leaders, we must continue to advance liberation in education.

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Appendix A: IRB Approval



December 26, 2023

Principal Investigator: Nicole Adewale (UMSL-Student)
 Department: Education EDD-Doctorate

Your IRB Application to project entitled AN EXAMINATION OF THE IMPEDIMENTS TO IMPLEMENTING STUDENT-CENTERED TEACHING METHODS IN PUBLIC SCHOOLS was reviewed and approved by the UMSL Institutional Review Board according to the terms and conditions described below:

IRB Project Number	2097533
IRB Review Number	395885
Initial Application Approval Date	December 26, 2023
IRB Expiration Date	December 26, 2024
Level of Review	Exempt
Project Status	Active - Exempt
Exempt Categories (Revised Common Rule)	45 CFR 46.104d(2)(iii) with limited IRB review 45 CFR 46.104d(1)
Risk Level	Minimal Risk

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. Enrollment and study related procedures must remain in compliance with the University of Missouri regulations related to interaction with human participants at https://www.umsystem.edu/ums/rules/collected_rules/research/ch410/410.010_research_involving_humans_in_experiments.
2. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
3. All changes must be IRB approved prior to implementation utilizing the Exempt Amendment Form.
4. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date to keep the study active or to close it.
5. Maintain all research records for a period of seven years from the project completion date.

If you are offering subject payments and would like more information about research participant payments, please click here to view the UM Policy: https://www.umsystem.edu/ums/policies/finance/payments_to_research_study_participants

If you have any questions or concerns, please contact the UMSL IRB Office at 314-516-5972 or email to irb@umsl.edu.

Thank you,
 UMSL Institutional Review Board

Appendix B: Sample Participant Recruitment Email

SUBJECT: Invitation to research study on Student-Centered Learning

Greetings!

My name is Nicole Adewale, and I am pursuing a Doctor of Education through the 2024 Social Justice in Education EdD cohort at the University of Missouri St. Louis. I am partnered in this dissertation journey with two other members of my cohort, Robert Bloch and Garry Gibbs. We are guided by Dr. Thomasina Hassler, our Social Justice Cohort Faculty Advisor.

Our dissertation title is “*An Examination of The Impediments To Implementing Student-Centered Teaching Methods In Public Schools.*” Through a qualitative case study, we seek to answer a single research question. What impedes Black students from experiencing and gaining access to relevant, student-centered learning (SCL) opportunities in public secondary education? To answer our question, we plan to employ a case study methodology based on primary data collected through interviews with school administrators and classroom educators. A key element of our methodology is the elevation of the voices of classroom educators to hear their perspectives on how these barriers are established and sustained.

Our commitment to data privacy and confidentiality is paramount, and we will do everything in our power to protect the privacy of individuals and ensure that the data we collect is used only for our dissertation. We have also enclosed an Informed Consent Notice, which discusses our request, risks, and procedures in more detail.

The interview will last approximately 60 minutes. We are happy to schedule this interview virtually via Zoom or in person at a public location convenient to you, such as a library or similar community space. Please offer two to three dates and times that work for you: Monday, Tuesday, Wednesday, Thursday, or Saturday. We would like to complete our interviews by February 14, if at all possible. One of our other researchers, likely Robert Bloch, will be your interviewer; however, I may join if possible.

With Gracious Thanks,
Nicole Reed Hutcherson Adewale
UMSL EdD Candidate

Appendix C: Informed Consent

University of Missouri–St. Louis Informed Consent for Participation in Research Activities

Project Title: An Examination of the Impediments to Implementing Student-Centered Teaching Methods in Public Schools

Principal Investigator: Nicole Adewale, Robert Bloch, Garry Gibbs

Department Name: College of Education

Faculty Advisor: Dr. Thomasina Hassler

IRB Project Number:

1. You are invited to participate in a research study. The purpose of this research is to understand what the barriers are to offering student-centered learning opportunities in K-12 environments for Black Students.
2. Your participation will involve participating in an interview to understand your experience on the topic. The interview will last approximately 60 to 90 minutes and will be recorded on a tablet or laptop.
3. There is a loss of confidentiality risk associated with this research. This will be minimized by storing any identifiable information included in interview recordings on a local hard drive. The interview will be transcribed and any identifiable information including names and institutions will be replaced with pseudonyms known only to the researchers. Once the transcription is completed all identifiable data will be destroyed.
4. There are no direct benefits for you participating in this study.
5. Your participation is voluntary, and you may choose not to participate in this research study or withdraw your consent at any time. You will NOT be penalized in any way should you choose not to participate or withdraw.
6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication that may result from this study. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection) that would lead to disclosure of your data as well as any other information collected by the researcher.
7. If you have any questions or concerns regarding this study, or if any problems arise, you may call any of the Investigators,

Nicole Adewale 314-220-2388, Robert Bloch 347-574-1727, or Garry Gibbs 314-922-4850

or the Faculty Advisor, Thomasina Hassler PhD, 314-516-5941.

You may also ask questions or state concerns regarding your rights as a research participant to the University of Missouri–St. Louis Office of Research Compliance, at 314-516-5972 or irb@umsl.edu.

Appendix D: Interview Protocol**An Examination of The Impediments To Implementing Student-Centered Teaching
Methods In Public Schools****by Nicole Reed Hutcherson Adewale, Robert L. Bloch, Garry D. Gibbs****Interview Protocol Outline:**

Thank you for agreeing to meet with me. I am a member of Team S.E.L.F., and our motto is Self-Empowered Learners Flourishing. We are conducting a study on the implementation of Student-Centered Teaching methods in secondary school settings.

I want to begin by reminding you that participation in this study is voluntary, and you can agree to opt out (or skip questions) at any point. There are no anticipated physical risks to participants, however, there is a small risk of emotional stress as we will be covering topics related to institutional culture, policy, and student achievement as it relates to racial and economic impediments.

While there is a minimal risk for loss of confidentiality associated with this research, we will protect participants' identities by storing any identifiable information, including interview recordings, in password-protected files. The interview will be transcribed, and any identifiable information, including names and institutions, will be replaced with pseudonyms known only to the researchers.

Do you mind if I make an audio recording of our discussion today? [YES/NO]. I will store the recording on a local hard drive and transcribe it using transcription software. I will then ensure that nothing in the transcript can identify you or the institution you work for. Once the transcription is complete, then I will delete your voice recording. Do you have any questions before we begin?

Appendix E: Research Interview Questions

1. First, tell me a little bit about yourself. Can you describe your role at [School Name] and what it entails?
2. In your own words, please describe student-centered learning.
3. Tell me about your experience with student-centered learning.
4. What, if any, difference have you observed in the availability of student-centered teaching methods for Black students compared to White students?
5. What, if any, difference have you observed in the quality of delivery of student-centered teaching methods for Black students compared to White students?
6. Does the culture or policy of your school encourage the use of student-centered teaching methods? If not, what kind of curriculum and teaching methods are used?
7. To what extent are classroom teachers given the latitude to determine how and when to use student-centered learning?
8. Who determines which students are able to participate in student-centered learning? (Prerequisites, student selection, teacher recommendation, etc.)
9. In what way does a teacher's length of experience affect the delivery of student-centered learning?
10. How does teacher turnover or retention affect the availability and quality of student-centered learning?
11. What are the factors affecting the ability of your school to shift from teacher-centered learning to student-centered learning?
12. To what extent do resources of your district or individual school affect the availability and quality of student-centered learning?

Appendix E: Research Interview Questions cont.

13. What are some effective curriculum delivery strategies used by teachers to help students with self-directed learning?
14. What alternative methods of assessment have you found useful beyond standardized testing to support student-centered learning (e.g., portfolio development, capstone project presentation)?
15. How do state and local mandated policies focused on high-stakes testing affect the availability and quality of student-centered learning?
16. To what extent does the lack of trust in students to participate in generating knowledge that meets class and district objectives prevent teachers from fully implementing student-centered learning?
17. What supports do teachers need for curriculum design and classroom management to ensure the success of student-centered learning?