Are we helping the kids?: How does race and equity teacher professional development impact practice?

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Dedicated to the students of Dakota Elementary

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Abstract: In this year-long study of an academically low-performing, diverse, public elementary school in Wisconsin, I interviewed and observed teachers and school leadership to evaluate the effectiveness of race- and equity-focused teacher professional development on teacher practice. Results of the qualitative study were compared against quantitative data from the school's historic standardized assessment data. I found that while the school had made progress toward improving achievement scores and teachers' cultural responsiveness, the impact was not equitable across all subgroups, leaving room for future growth. Discussion includes several suggestions for future professional development at the school.

Key terms: race, equity, culturally responsive practice, teacher professional development, teacher teams, self-reflection, achievement gap

Chapter 1: Introduction

"And rarely do they have the opportunity to examine the central aspects of their own or the predominate American culture: Often they believe that 'culture is what other people have; what we have is just truth.' Because these teachers' own cultural backgrounds remain unexamined, they have no way to challenge their intrinsic assumptions" (Ladson-Billings, 1994, p. 131-132).

Introduction

Ladson-Billings' six mindset shifts for culturally relevant teachers and schools focus heavily on teacher education and professional learning both about equity strategies for instruction and about the children requiring instruction each day (Ladson-Billings, 1994, p. 131-136). As shown in the quote above, Ladson-Billings recognizes that teachers, often White females (AACTE, 2013; Grissom, 2011), take culture for granted and assume that "culture is what other people have; what we have is just truth" (p. 131). Schools have no hope of closing the achievement gap (or as Ladson-Billings calls it, the "education debt" (Ladson-Billings, 2006, p. 3)) because of American education's "stubborn refusal...to recognize African Americans as a distinct cultural group" which means that there is no literature available to "address their specific educational needs" (1994, p. 9). As she goes on to explain in *The Dreamkeepers* (1994), culture is key to academic success. It is essential for teachers to connect to students' culture, background, and interests because "students are less likely to fail in school settings where they feel positive about both their own culture and the majority culture and 'are not alienated from

their own cultural values" (Cummins, 1986, as cited in Ladson-Billings, 1994, p. 11) (Ladson-Billings, 1994, p. 11).

Culturally relevant practice (CRP) is a term made popular by Ladson-Billings in the early 1990s (Gay, 2010). Ladson-Billings defines CRP as a theoretical model "that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate" (Ladson-Billings, 1995, p. 469). CRP and the larger umbrella of multicultural education that CRP falls under is shown to improve academic outcomes for all students, but is especially engaging for historically minoritized populations (Johnson-Davis, 2006; Gibson-Bell, 2015; Hammond & Jackson, 2015; Sleeter, 2005). Banks and Banks (2010) write:

Multicultural education is an idea, an educational reform movement, and a process whose major goal is to change the structure of educational institutions so that male and female students, exceptional students, and students who are members of diverse racial, ethnic, language, and cultural groups will have an equal chance to achieve academically in school (2010, p. 1).

Without CRP in schools, students from minoritized groups will not have the same opportunities for academic growth as their majority-group counterparts. While it is widely recognized that CRP is a "best practice" in education, especially in diverse schools or schools where the demographics of the student population do not mirror the demographics of the teacher population (Ladson-Billings, 2005), getting CRP to be part of the curriculum and pedagogy is a challenge. Ladson-Billings (2005) says, "The real problems facing teacher education are the disconnections between and among the students, families, and community and teacher educators" (p. 229)

meaning that the mismatch between the students and the teachers before them creates a profound cultural divide that impacts students' academic progress.

Some of the most notable consequences of utilizing a multicultural or CRP approach within the elementary classroom are increased student engagement (Gay, 2004, p. 41), improved standardized test scores (Banks, 2010), and decreased incidence of racist and deficit thinking about people of color (Sleeter and Grant, 1986), which could impact teacher practices. This proposition of CRP improving educational outcomes is the premise of this research study.

My question

Knowing that CRP is an essential equity strategy that diverse schools can especially benefit from in closing the achievement gap, the central focus of this research study was to investigate the following questions:

How does teacher professional development around race and equity impact academic achievement for students of color?

Sub-questions within this focal question are:

- How are teachers taking up new learning from professional development within their classrooms?
- Does teacher participation in race- and equity-focused PD change the way that they plan and implement their lessons?
- Has professional development-based race and equity learning positively impacted achievement data for students of color since its implementation?

Question rationale

The average student population at my focal school (Dakota¹) over the four years studied in this research was made up of 43.3% Black students, 24.9% White students, 14.0% multiracial students, 12.4% Hispanic students, and 5.9% Asian students. The Measures of Academic Progress exam results for Dakota and the state of Wisconsin for 2015 shows 32.3% of the school's White students met proficiency levels for literacy while only 7.1% of Black students and 15.1% of students of two or more races met proficiency levels (Department of Public Instruction, 2016). I believe that this is due to Eurocentric bias in education that disenfranchises, undereducates, and expects less of students of color. This theory is supported by many, including the National Educators Association (2017), who said that major teacher-related factors for opportunity gap include "Insensitivity to different cultures; Poor teacher preparation; [and] Low expectations of students" (2017). Ladson-Billings (2007) said this about racial inequity in education:

Rather than focusing on telling people to catch up, we have to think about how we, all of us, will begin to pay down this mountain of debt that we have amassed at the expense of entire groups of people and their subsequent generations (National Writing Project, 2007).

As Delpit (2013) points out in her analysis of Rippleyoung's dissertation which examined the scores of Black and White infants on the Bayley Scale of Infant Development² and controlled for socioeconomic and demographic differences, "There is no achievement gap at birth" (p. 3) and that "if black and white babies were born with the same degree of good health, and the parents

¹ Pseudonym used.

² "The Bayley Scales of Infant Development (BSID) measure the mental and motor development and test the behavior of infants from one to 42 months of age" (Encyclopedia of Children's Health, 2019).

interacted with the babies to the same degree, black babies would surpass white babies on all aspects of the Bayley Scale [of Infant Development]" (p. 5), which, Delpit argues, may be entirely mitigated by inappropriate schooling, making what we know as the achievement gap. Delpit insists that Black children are simply not being taught (p. 8) because the makeup of America's teaching force is mostly composed of White women who are perpetuators of deficit thinking about Black children. Delpit refers to America's condition of assuming Black inferiority by describing Americans as racism-breathers; that is as people who are unaware of the racism that surrounds them and becomes internalized. Delpit says:

We don't try to be [racism-breathers], we aren't usually conscious of the racism we've breathed. We just go about our regular lives. We are so unconscious of these realities that we seldom see how even our language is embedded with racist overtones (p. 12).

Delpit implies throughout *Multiplication is for White People* (2013) that the racism-laden air around Americans and schools, in particular, creates an environment in which Black students are assumed to be inferior and are expected to fail or at least struggle. Low expectations for Black students is a self-perpetuating cycle that makes teachers in fact teach students of color less, which explains why they underperform on assessments.

Other researchers have studied the effect of culturally responsive pedagogy in educational outcomes. Johnson's study of first grade classrooms (2006) found that, "culturally responsive pedagogy produced higher levels of engagement, participation, and task production, made manifest in stronger academic outcomes" (p. 155). Gibson-Bell's research (2015) extended this knowledge to look at how teacher understanding of students' cultural differences impact their learning via behavior finding that teachers, "should rely on more culturally inclusive

understandings of their students' behaviors and conceptions of knowledge" (p. 210). Leventhal (2012) studied the mindset of teachers in diverse schools and "found the vitality of teacher introspection is key to improving student achievement among underperforming culturally diverse students. The mindsets of teachers are the incubators for the degree of quality in the skillsets teachers apply in their classrooms" (p. 139).

School staff at the study site receives 90 minutes of professional development (PD) each month, which includes a focus on racial equity and academic rigor, especially for historically underserved populations. This study investigated the school's professional development to see if it: 1. Is implemented in the way intended, and 2. Impacts teacher practice in a way that equalizes the educational experience in order to 3. Impact achievement scores. This study was conducted via interviews, participant questionnaires, and observational field notes. It also included school-wide MAP scores both historically and currently and between classrooms that offer a range of race and equity-responsive teaching strategies to see how different teachers are successful with the same PD material. It included teachers who both feel successful at using race- and equity-responsive strategies and those who do not.

Purpose and goals

This study aims to affect the way that the school site and school's district implement PD.

Finding a discrepancy between PD content and teaching practices would have given me a

jumping-off point to investigating where the breakdown is happening (the way PD delivers

information, the teacher's delivery, in the mode of instruction, or if it is in an unknown source).

Talking to these teachers provided insight into the most effective changes. If the study had found
that teachers are implementing the PD learning, students are receiving it as intended, and it is

still not having a positive effect on the academic achievement of students of color, I would have been able to examine what other obstacles are in the way and how the school system and environment can work to fix them.

The purpose of this study was to determine how the teacher PD that is offered within one school (Dakota Elementary) impacts teacher practice. Specifically, *if* PD increases equity in education by using culturally responsive practices and interrogating Whiteness by examining how the race- and equity-related professional development affects student academic outcomes. As stated in Dakota's School Improvement Plan, which deeply considers the gap in academic outcomes for our students of color, the school's "Area of Continued Growth" directly addresses using an equity lens to support "all students, particularly our African American students as we work to close our existing achievement and opportunity gaps" (School-Based Leadership Team (SBLT), 2017).

Through interviews, teachers and staff will reflect upon their instructional practice. This reflection may make them more thoughtful about their practices and may improve their practice. By reflecting upon the current practices of a real school district and a racially diverse school, current practices used to educate teachers and close the achievement gap were evaluated for strengths and weaknesses. Outcomes helped determine future steps for race- and equity-related teacher PD.

How will the study take place?

I began the school year with Dakota. I attended a "Welcome Back Days" professional development session (during which all school staff were in attendance) at Dakota Elementary and spoke about the purpose, objectives, and processes of the study. Following the initial PD, I emailed the staff asking for participants in the week before the academic year begins. I focused

on two grade-level teams (kindergarten and first grade) and limited the intensity of the study to these teams to better allow for more in-depth conversations and relationships with staff while protecting their time investment in the study. The study included two survey/questionnaires (30) min each), one pre-screener (10 min), three interviews (30 min), up to one observation of teaching (30 min), and three observations of planning (45 min). The initial screener survey verified participant eligibility for the study (participant works at study site and works with students). Information from the initial participant screener was obtained as an initial interview. Prior to each interview I asked the potential participant screener questions, recorded answers, and then proceeded onto the pre-study questionnaire if the participant was eligible for the study. Pre- and post-study questionnaires were completed at initial and final interviews (September and spring). The same questionnaire was used both times. The two questionnaires were about participant experiences with professional development (one at the beginning of the year and one at the end of the study). Interviews focused on the participants' experiences with PD and reflections on their teaching, professional development, and planning. Interviews were audio recorded. Principals and instructional coaches engaged in interviews and observations. Instructional coaches are part of grade-level planning and were observed there and also during their planning of professional development. Observations of principals occurred during PD planning as well. School leadership was involved in interviews and assisted in planning teacher observations. Base interview questions remained the same for all interviews with each staff member. Questions changed according to the direction of the interview. These "flexible and evolving" (Creswell, 2013 p. 239) questions changed as needed and as guided by the participant.

School leadership helped organize and plan observations of participant-teacher planning time. The additional observations of teaching and planning were a combination of classroom

teaching at various points throughout the year and team planning at monthly facilitated planning time. Observations focused on race- and equity-centered planning and teaching and only included staff; no students participated or were observed. All participants could opt out at any time. All participants were in contact with the principal investigator as a third party through which to express concerns anonymously (about Emily Braun).

Data was stored on secured computers without any names connected to it. All names associated with data were kept in a separate list in my notebook which was locked in a file cabinet in an area away from the collected data. Notes were electronic and kept on my personal computer, under password protection. Pseudonyms were used in notetaking and observations. Any written data was kept in a locked file cabinet. All electronic data was kept in an electronic, password protected BOX folder. To maintain participant anonymity I have limited the teacher team information to which teachers belonged on the team while masking other identifying information such as age and years of teaching service in order to protect identities.

Forms and necessary documentation

I created several forms and protocols in order to collect qualitative data during the study. Essential forms include the pre- and post-study questionnaire, initial participant screener, observation protocol for research, and list of interview questions for beginning and end-of-study interviews. In addition to qualitative data collection, I also examined quantitative data from student academic achievement as assessed by the Measures of Academic Progress (MAP) test. This data was stored in the student achievement data sheet. Additional necessary forms that I created for the study include a recruitment flyer, paired with a recruitment email, and a recruitment script for use during initial "Welcome Back Days" introductions to staff. Finally, I

created a participant consent form, parent notification form to go home with all students in order to alert families of the study's presence at Dakota, and a staff notification form to be given to all non-participating staff who may be within auditory range of interviews or observations (due to sharing a space).

IRB and ERC approval.

I completed the process of obtaining approval by the UW-Madison Institutional Review Board (IRB) in May 2018. The nature of the study requires that the study also obtain approval by the school site's school district through their External Research Committee (ERC). Approval from the school district's ERC was obtained in May 2018.

Positionality

I am a former (and future) kindergarten teacher. During the year that research was conducted at the school site, I was on leave. Prior to the study, I spent seven years teaching at a similar school site and still consider myself a member of that school community. Because I am familiar with the school setting and goals of the school's professional development I am uniquely qualified to study this particular population and can work with their school goals to better help them and generally understand the effectiveness of PD at the school. In order to maintain a professional distance from the participants, research interviews (both individual and dyadic/team) were conducted in a private room at the location of the participant's selection. Collection of sensitive information about participants was limited to the amount necessary to achieve the aims of the research and participants answered only questions they felt comfortable answering. Additionally, I began each interview with a reminder to the interviewee that they

should not "name names." They could use titles such as "student, co-worker, friend" but should not identify another person to avoid turning that person into a research subject, who would require consent to use their information in research. Additionally, I worked to establish an environment of trust including clear communication about the non-evaluative nature of the observations and interviews. This was especially important because I had been a teacher previously and had continually worked to cultivate a relationship of trust and collaboration with staff in the school in the past. Teachers and staff were allowed to opt out of interviews and observations.

In analyzing data from interviews, observations, and achievement scores I was aware of my own position and privilege as a White woman. While I have more inside knowledge of the school and its functioning due to my role as a teacher there, I am not able to speak on behalf of the entire staff or make suggestions that encompass the needs of all staff because I am White. Singleton and Linton (2006) name this saying:

In typical discussions, White educators fill the room with ideas for improving the achievement of students of color, but their ideas often are not welcomed or supported by their colleagues of color. This is because such ideas reflect the distance between the White educators' racial experience and that of their colleagues, students, and families of color (p. 128).

I, in being cognizant of this complex issue cannot claim to be the expert in all areas of the school or what it needs. Instead, my findings point to several suggestions of ways to restructure the school to make it more ready and able to listen to the voices of staff of color and those who have smaller distances between their experiences and those of staff of color. In creating a culture shift

at Dakota, the staff and the PD offered can better evolve to address the needs of the school organically. While I was present as an observer, I recognize my limitations as a White woman.

My personal interest and history.

Although culture and culturally relevant pedagogy have been shown as key factors in creating educational equity and helping to close the academic achievement gap for students of color, how they are implemented, discussed, and communicated to teachers is unclear and varies from school to school. As a teacher at Dakota Elementary, I have experienced many varieties of professional development related to race and equity. In the seven years that I taught kindergarten I developed a deep understanding of the societal and institutional barriers present for historically minoritized groups because members of many of those groups were present in my classroom. Inspired by the lack of knowledge around equity practices, I returned to UW-Madison in 2013 to pursue my master's degree in Curriculum and Instruction. I wrote my thesis on the best practices for multicultural education in the primary grades. During graduate school I undertook several extracurricular learning experiences including becoming a professional member of the Anna Julia Cooper Society to further my understanding of the history of education for people of color, including assisting in the creation of an annotated bibliography of all Cooper-related written work at that time. Much of my coursework focused on multicultural education and later, toward culturally relevant pedagogy and critical race theory.

After earning my master's degree, I decided that my work at the university was not finished. I felt that my personal growth in understanding my privilege and role as a teacher of Black and Brown students was not finished. I also knew that while I understood how to use culturally relevant practices in school, I needed to dig deeper to figure out how to give these

skills to other teachers at my school while also pushing my own understanding. After earning my master's degree I immediately started a doctoral program in Curriculum and Instruction, with a major focus of teacher education and multicultural education and a minor in Educational Leadership and Policy Analysis (ELPA).

During my seven years teaching I have repeatedly self-selected or been nominated to multiple committees and leadership roles within my school, specifically focused on CRP and equity practices. I was a member of the first cohort of the school district's Equity Fellows. I have been a member of the Race and Equity Committee for five years, which is responsible for planning staff PD, race-centered book clubs for the school, designing small group discussions, and works with the school leadership team to push the school's improvement plan and mission towards a lens of race- and equity-centered education. My involvement with the Race and Equity Committee and time spent planning PD for staff is what has motivated my study of the issue present in this work. As a planner of the PD, I kept coming back to the effectiveness of the work; wondering if the team's message was coming across, and if it was, was it being used in the classroom? But my most important question, and the one that drove me to conduct this study was: How is all of this work impacting the kids? Are we closing the gaps or are we just doing a lot of work to show that we want to? Ultimately, no PD could be considered a success if it does not improve academic outcomes for students of color. If the PD that Dakota gives its staff is ineffective at reaching all students, what PD would be more effective? These are the questions that drive the heart of this study and are the ones I hope to answer.

Chapter 2: Literature review

Chapter focal question: What does post-NCLB (2001) literature say about professional development for in-service early elementary school teachers in urban schools?

Following the No Child Left Behind Act of 2001 (NCLB), education in America was fundamentally changed. The act was a reauthorization of the 1965 Elementary and Secondary Education Act (ESEA) whose focus is, as the long title says, "An act to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind" (No Child Left Behind [NCLB], 2002). At its inception, NCLB was an equity strategy to close the racial achievement gap. The focus of NCLB was, "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments" (2002, sec. 1001) specifically with respect to historically "disadvantaged" populations. The act laid out 12 actions to achieve this goal, including, "significantly elevating the quality of instruction by providing staff in participating schools with substantial opportunities for professional development" (2002, p. 1440). The results of NCLB have been mixed at best (Banks, 2005) the goal to close the achievement gap having not been accomplished in any sense. Banks says that while one of the initial goals of NCLB was to focus attention on the achievement gap by forcing districts and states to disaggregate data by race, in reality the act forced many teachers to "focus on narrow literacy and numeracy skills rather than on critical thinking" (Banks in Sleeter, 2005, p. ix) which in turn resulted in test results that either remained the same or went down in states where NCLB was accompanied by high stakes testing (p. ix). In 2015, Wisconsin was ranked worst state in the country for Black Americans in measures of unemployment, child

poverty, incarceration, and child well-being (Schneider, 2015; Taylor, 2014), with Dane County being called out as "home to some of the widest Black/White disparities of any place in America" (Race to Equity, 2016, p. 1). Academic achievement for students of color has not improved in the years since the passage of NCLB. According to the National Assessment of Educational Progress (NAEP) and their "Nation's Report Card," the White-Black gap for 12th grade students in math has not changed in a statistically significant way in the time between 2005 and 2015, and the gap between White and Black 12 graders in reading from 1992 to 2015 has actually gotten worse (National Assessment of Educational Progress, 2018). These test scores suggest that the implementation of NCLB in 2002 did not have the desired effects on student outcomes or the racial achievement gap closure. However, in reviewing NCLB and achievement gap work, Hanushek (2009) says:

Research has found teacher quality to be the most important element of a good school, and this underlies the NCLB requirement that all schools have only "highly qualified teachers." Unfortunately, there are severe measurement problems that make previous interpretations of this requirement hollow at best and harmful at worst. Teacher quality is not captured by characteristics such as master's degrees, teaching experience, or even certification — things that states typically monitor (Hanushek, 2009, p. 803).

We know that teacher quality is important (Hanushek & Kain, 2007; Hanushek, 2009), and perhaps the most important factor in student outcomes, but how do we make teachers *good* at teaching? And even further, as Alem (2008) asks, "Can the achievement gap be closed?" Alem insists that:

As long as our textbooks, curricula and educators continue to deny or minimize the contributions of people of color, the achievement gap between Whites and [non-Whites] and the feelings of powerlessness and invisibility will continue to persist [w]ithout inclusive curricula and pedagogical reform, our classrooms will continue to be places of frustration and alienation for most students of color, and the achievement gap will continue (Alem, 2008, p. 45).

Compounding the gap in academic achievement between White and Black students is the fact that Black students do not have teachers who look like them or can relate to them. According to The United States Department of Education, "compared with their peers, teachers of color are more likely to (1) have higher expectations of students of color (as measured by higher numbers of referrals to gifted programs); (2) confront issues of racism; (3) serve as advocates and cultural brokers; and (4) develop more trusting relationships with students, particularly those with whom they share a cultural background" (United States Department of Education, 2016, p. 2). The role of teachers of color is especially important when considering that, "The elementary and secondary educator workforce is overwhelmingly homogenous (82 percent white in public schools)" (United States Department of Education, 2016, p. 3). Therefore, the majority of the United States' teaching force has a lot of ground to cover to develop culturally responsive practice to reach their students of color who are currently being underserved.

Context — What is teacher professional development and how is it used?

If current curricula, textbooks, and educators are the source of the achievement gap persistence (or at least its non-closure), then it stands to reason that something must change within these current systems if we expect the achievement gap to close. Since teachers are the

administrators of the curricula and textbooks but their authority typically does not extend to the selection of the texts and curriculum, teachers' practice seems a logical place to begin this change. Teacher professional development is not a new concept. Robinson's study of a teacher "vacation course" in London in the 1920s and 30s discusses the course's activities and outcomes in educating and reinvigorating teachers. Robinson says, "The general course consisted of keynote lectures by leading educationists, designed to present each subject in its wider context and to introduce novel approaches to traditional subjects. It also looked at the implications for education of wider topics" (Robinson, 2011, p. 565) which even at this point included teacher-differentiated content; "courses covered most of the subjects of the school curriculum and were organized according to a strictly prescribed and organized timetable, to allow members to move between sessions, according to their own individual needs" (p. 565). (More on teacher differentiation in a moment.)

Traditional models of professional development have been variable over time, across school districts, and within school districts. Elmore (2004) writes:

In practice, professional development covers a vast array of specific activities, everything from highly targeted work with teachers around specific curricula and teaching practices through short, "hit-and-run" workshops designed to familiarize teachers and administrators with new ideas or new rules and requirements, to offsite courses and workshops designed to provide content and academic credit for teachers and administrators (2002, p.4).

In other words, professional development can be a nebulous idea even to people within the same district or school.

City, Elmore, Fiarman, and Teitel (2009) claim that one of the problems of practice in education is that teaching is a solitary activity and this leads to a lack of consensus about the definition of quality teaching (City, Elmore, Fiarman, & Teitel, 2009, p. 3). Without a common goal, there is little hope for improvement, regardless of time and effort spent on professional development. Therefore, before beginning to revise current practice around professional development, it is imperative that schools and districts develop a coherent vision of what quality instruction will look like and must commit to a consistent format that will allow staff to engage fully in new learning, avoiding the exhaustion that comes with the cycle of new initiatives.

According to educational policy researchers King and Bouchard (2011), there are five factors that affect the school's capacity and instructional quality: Teacher's knowledge, skills, and disposition; the professional community; program coherence; technical resources; and principal leadership/distributed leadership (King and Bouchard, 2011). Of the five interdependent factors, "There is relatively high consensus that the factor with the most immediate and powerful influence on student learning is the quality of instruction that teachers provide" (p. 654). Additional research says that instructional quality can be built up by training teaching staff in curriculum and classroom management; by developing a strong professional community with collaboration and teacher influence; and program coherence throughout the school. Researchers have consistently identified teacher knowledge, program coherence, collaborative communities, sustained efforts, data driven training, coaching, and differentiation as central to impactful professional development (King and Bouchard, 2011; Texas Instruments, 2004; Bayer, 2014; United States Department of Education, 2004).

Teacher professional development should be individualized or self-selected by the teacher in order to ensure that their learning is engaging and useful for their work. Hawley and

Valli (1999) say that, "Professional development should involve teachers in the identification of what they need to learn and in the development of the learning experiences in which they will be involved" (Hawley & Valli, 1999, p. 123) This emphasis on differentiation harkens back to Robinsons' (2011) study of teacher learning in London nearly 100 years ago. Professional learning can progress and facilitate teacher growth. How teachers and staff go about their professional development and professional learning is varied and best practice is debated. Creator of the *Framework for Teaching*, the preeminent teacher effectiveness evaluation tool, Charlotte Danielson (2016) herself explains that in order to improve teacher practice, there are several key requirements for best professional development; she says that teacher need to be fully invested in their learning and must be willing to be reflective. They must have trusted community in which to take these risks, but they must also be pushed to step outside of their comfort zone and continue to learn. Finally, she says that professional learning is an ongoing process that is often most useful when it is not a mandate. She says, "When teachers work together to solve problems of practice, they have the benefit of their colleagues' knowledge and experience to address a particular issue they're facing in their classroom" (Danielson, 2016, par. 14).

Context — What is Culturally Responsive Practice and where did it come from?

Culturally Responsive Practice (CRP) is an idea coined by Gloria Ladson-Billings in 1994 given to describe teaching that "empowers students intellectually, socially, emotionally, and politically by using culture to impart knowledge, skills, and attitudes" (Ladson-Billings, 1994, p. 16-17). Ladson-Billings developed this concept as an offshoot of Multicultural Education, a term that had been floating in the educational ether, arguably since the days of

Plessy v. Ferguson in 1896, and was put into a modern context by scholars such as Banks and Banks (2004, 2010), Gay (2004), and Sleeter & Grant (1986, 1987). In a description that is representative of many scholars' definition of multicultural education, Banks and Banks (2010) say that multicultural education is a "process whose major goal is to change the structure of educational institutions so that male and female students, exceptional students, and students who are members of diverse racial, ethnic, language, and cultural groups will have an equal chance to achieve academically in school" (Banks & Banks, 2010, p. 1). Banks adds that:

Multicultural education is defined as an educational reform movement whose major goal is to restructure curricula and educational institutions so that students from diverse social classes, racial, and ethnic groups, as well as both gender groups, will experience equal educational opportunities (Banks, 2008, p. 135).

This definition suggests that multicultural education requires a social change rooted in power dynamic shifts.

Ladson-Billings' choice in vocabulary was not purely semantic. As Ortiz states, multicultural education and culturally responsive practice both "denote an approach to education that recognizes and affirms the cultural differences in our nation. They consider the importance of language, race, ethnicity and the role that each of these elements play in forming the social landscape, both in school and society. These terms, however, "are not one in the same'" (Ortiz, 2012). Ortiz continues, "Where multiculturalism focuses on the classroom practices, culturally responsive education encompasses all levels of the academic arena, including administrative practices" (Ortiz, 2012, p. 15). A common critique of multicultural education is that it, "lacks intellectual rigor, is not founded on sound theory, and does not address the real causes of underachievement by minorities" (Sleeter, 1995, p. 1) or that it is such a broad term that it

"means different things to different people" (Sleeter & Grant, 1987, p. 31-32). On the other hand, culturally responsive practice has come into vogue as a term because it has a tighter focus that centers on individual students and cultures. Hawley and Nieto (2010) identify this, partially, as listening to student experiences and prior knowledge, using it in learning tasks, and building off of it (2010).

In a search on the term Culturally Relevant Pedagogies, other titles for the responsive teaching practices that engage students of multiple cultural, racial, and linguistic backgrounds come up. These titles include, "culturally appropriate" (Au & Jordan, 1981), "culturally congruent" (Mohatt & Erickson, 1981), "culturally responsive" (Au, 2009; Cazden & Leggett, 1981; Erickson & Mohatt, 1982; Lee, 1998), and "culturally compatible" (Jordan, 1985; Vogt, Jordan & Tharp, 1987)." For the sake of this paper I will use the terms interchangeably, though I recognize that many researchers define sharp differences among them.

Research tells us that culturally relevant practices positively impact academic outcomes for students of color. Love and Kruger (2005) found, "researchers indicated that successful teachers of African American children (a) draw on African culture and history, (b) promote the location of self in a historical and cultural context, (c) help students create new knowledge based on life experiences, and (d) treat knowledge as reciprocal" (p. 87). Schellenberg and Grothaus (2011) say that researchers have linked culturally relevant practices "to the development of background knowledge, intrinsic interest, and higher order intelligence, and to greater academic achievement and a heightened motivation toward learning" (Schellenberg & Grothaus, 2011, p. 49). Finally, Griner and Stewart (2012) say:

Culturally responsive practices in schools and classrooms have been shown to be an effective means of addressing the achievement gap as well as the disproportionate representation of racially, culturally, ethnically, and linguistically diverse students in programs serving students with special needs (Griner & Stewart, 2012, p. 585).

CRP and its impact on student achievement has been heavily researched and research has consistently shown a positive correlation between the two. However, the methods by which teachers become culturally relevant practitioners is much less clear.

What does the literature say about the intersection of culturally responsive practice and professional development?

The intersection of culturally responsive practice and professional development has been heavily researched since the early 2000s. In fact, Kennedy (2016) says, "The topic of PD is very popular. There could be thousands of articles written about it almost every year, but the vast bulk of these articles do not present experimental evidence" (Kennedy, 2016, p. 949). Much of the focus has been on reviewing professional development and classroom observations (Kennedy, 2016, p. 949). The primary focus has been on understanding the correlation between teacher professional development and improved outcomes for students of color through CRP. However, as Kennedy finds, there is little consensus around what makes teacher professional development consistently most effective (2016). Her analysis of studies focused on professional development fell into very strict categories due to the large number of studies on PD. Kennedy required that the PD program studies she analyzed must focus on the PD only, last more than a year, focus on student achievement data, follow teachers (not their students), and must control for teacher desire/motivation to learn (i.e. — control groups) (2016). Kennedy's findings pointed to an understanding that no matter what content was taught during PD, "program design features may

be unreliable predictors of program success" (2016, p. 971), meaning that there is no cure-all, best strategy for effective PD and that it depends on many factors. Finally, Kennedy reminds readers and researchers that ultimately, "Mandated PD creates a problem for PD developers, which is analogous to the problem teachers face: Attendance is mandatory but learning is not" (p. 973).

The What Works Clearinghouse (WWC) did a similar review of literature on teacher professional development in 2007 (on which Kennedy based many of her queries). In this review, the review's lead author, Yoon (2007), found that of the nearly 1,300 studies that addressed teacher PD, only nine met WWC's rigor standards and could be evaluated. Within these nine, Yoon did draw a few conclusions about best practice for teacher PD, mainly: "teachers who receive substantial professional development — an average of 49 hours in the nine studies — can boost their students' achievement by about 21 percentile points" (Yoon, 2007, p. i). However, Yoon also noted that, "Because of the lack of variability in form and the great variability in duration and intensity across the nine studies, discerning any pattern in these characteristics and their effects on student achievement is difficult" (p. ii), thereby showing that while PD seems to be producing positive academic outcomes for students, the content of the PD, the goals of the PD, and the methods of disseminating professional learning are varied and best practices are undetermined. PD within schools for practicing teachers is in response to the academic achievement gap shows that predominantly White teachers are undereducating their students of color. Van Den Berg's (2017) meta-analysis of pre-service teacher training found that these teachers, "come from different cultural backgrounds than their students, and...seem to lack the skills to respond to diversity in the classroom effectively. This raises the question of how the cultural mismatch can be overcome" (Van Den Berg, 2017, p. 2). Van Den Berg's goal was "to

explore how pre-service teachers can develop culturally relevant pedagogy, so they can establish a classroom environment that suits the needs of all learners" (p. 2). Just how teacher candidates can develop this pedagogy is unclear, as Sleeter (2011) says, "Research on the preparation of teachers for culturally responsive pedagogy is...thin, and consists of case studies" (Sleeter, 2011, p.17). Van Den Berg (2017) finds that:

[P]re-service teachers can develop culturally relevant pedagogy by taking part in diversity courses offered in teacher preparation programs. It is most likely that they develop this set of skills when they participate in knowledge-based courses, or a combination of knowledge-based courses and field-based internships. In addition to this conclusion it is argued that the development of culturally relevant pedagogy is expected to increase most when the pre-service teachers take part in a community of learners (Van Den Berg, 2017, p. 35).

Much of what Van Den Berg is calling out as best practice for teacher training programs is what researchers have found to be best practice for PD learning (Kennedy, 2016; Yoon, 2007). This suggests that while there is clearly some disconnect between what is happening in a culturally relevant teacher preparation program and what happens in graduates' classrooms for their students of color, the theory about what would make a culturally responsive teacher is the same in pre-service and in-service teacher training.

A review of the literature on the intersection of CRP and teacher PD produced an abundance of results. The search terms "culturally relevant teacher professional development" yielded more than 191,000 scholarly articles on the University of Wisconsin library system. Limiting the search to a time span later than the enactment of No Child Left Behind (2001 to present) reduced the number to just over 140,000 articles. Limiting the search terms to early

elementary education with a focus on academic achievement reduced results to about 75,500 results. While 75,500 results is significantly less than the original 191,000, it is still far too many to investigate and examine for best practices. Clearly, the 75,500 results show that there is a research-based intersection of PD and CRP in schools. How elementary schools enact effective, culturally relevant teacher PD with the goal of closing the achievement gap is a slightly more nebulous search and area of educational research.

A more narrowed search of "elementary school teacher professional development" and "achievement gap culturally relevant" between 2011 and today (excluding secondary education) produced just over 20,000 results. Top results included several dissertations, case studies, and meta analyses of research. The research has not reached a clear consensus about best practice for providing teacher professional development that addresses culturally relevant pedagogy in order to close the achievement gap and boost academic achievement for students of color. There is little to no research that addresses student academic achievement as it changes (or fails to change) once teaching staff begins receiving PD with a focus on culturally relevant/responsive pedagogy. However, there are lessons to be learned from the research that is out there already. One especially salient piece, Boone's (2016) dissertation titled, "Who am I?: Culturally relevant pedagogy and the quest to transform teacher beliefs through professional development" pulled potential best practices out of a year-long study of elementary school staff attitudes and beliefs while undergoing culturally relevant PD. Included among the recommendations were the ways that professional development impacted teachers. They found that PD impacted teacher awareness of CRP, helped them find relevant materials and strategies, helped them build their own "culturally relevant analysis frameworks," and emphasized student individuality (2016, p. 126)). Additionally, they found how teachers were prevented from implementing culturally

relevant pedagogy (lack of knowledge of student cultures, lack of awareness of CRP strategies, lack of resources, and "misalignment of culturally relevant pedagogy to teaching curriculum standards" (p. 126)), and the characteristics of teachers who do implement a culturally-relevant pedagogy (they are knowledgeable of students' cultural backgrounds and "build meaningful relationships with students)" (p. 126).

While Boone's study provides clear recommendations for creating culturally responsive PD as something whose effectiveness is determined by the participants (via pre- and post-treatment interviews), it does not include student achievement data or connect the professional development experience for teachers to the students they serve. The What Works

Clearinghouse's study of culturally relevant PD by Yoon made this connection in nine out of the more than 1,300 studies they evaluated. Yoon examined the achievement data provided by the nine acceptable studies and determined that "The average effect size in science was 0.51; in mathematics, 0.57; and in reading and English/language arts, 0.53" (Yoon, 2007, p. 8). There was only one study that showed a negative effect in any of their areas of study, and the rest were either positive or not statistically significant.

The articles analyzed for their academic rigor, according to the What Works

Clearinghouse included nine programs within elementary schools and occurred between 1986

and 2003 (before No Child Left Behind took effect). The studied varied in their foci (some
centering on student academic achievement in math, others in literacy, others in science (p. 6))

and in their methods (some were randomized controlled trials, others were quasi-experimental

(p.6)). Most of the nine studies looked at teachers in their classrooms within single schools but
the sample size at each school site ranged from five teachers to 44 and from 98 students at a
school to 779 (p. 6). The results varied by content area focus with math having the largest

average effect size across studies at 0.57, English/language arts at 0.53, and science having the smallest at 0.51 (p. 8). The actual effects upon student achievement were sorted out in each study and included areas of instruction such as "fraction concepts" (p. 10) for math, "writing vocabulary" (p. 11) for language arts, and "basic skills" (p. 10) for science. Overall, Yoon says, "Average control group students would have increased their achievement by 21 percentile points if their teacher had received professional development" (p. 14).

While the results on student achievement suggest that the professional development was effective for increasing performance overall, the results are not disaggregated by race, which leaves the question of whether these studies worked to close the achievement gap unanswered. Additionally, Yoon says, "The professional development in the nine studies varied much more in content and substance than in form" (p. 13), indicating that while the structure of the professional development was at least slightly similar across studies, the content and teaching methods were not and cannot be generalized. Kennedy (1998) found that there were four main threads of pedagogy/philosophy behind how the professional development took place. These four threads included focusing on 1. Teaching behaviors to apply generally to all subjects, 2. Teaching behaviors to apply specifically to a certain subject, 3. Curriculum and pedagogy based on how students learn, and 4. How students learn and how to access student learning (Yoon, 2007, p. 12).

An additional search of the literature using the terms: "close achievement gap culturally professional development" that was limited to the years 2011-present produced about 45,000 results. Top results in this search more directly addressed issues of race and the racial achievement gap. Two articles, Billingsly's (2015) "Preparing teachers to close the achievement gap through use of culturally responsive practice: Changes in pedagogical practice" and Terry's (2016) "Knowing Your Who: A Qualitative Field Research on How Teachers Develop Culturally

Responsive Teaching Practices in an Effort to Close the Academic Achievement Gap of Students of Color" are especially useful in their findings and recommendations.

Billingsly (2015) performed a phenomenological qualitative study on teacher PD provided to public school teachers by their employers by comparing in-service teachers with preservice teachers on their perceptions of the culturally relevant training they received. The study focused on the goal of providing culturally relevant professional development in order to close the achievement gap. Achievement data was not analyzed but I did interview teachers to determine how their professional development impacted their teaching. Specifically, Billingsly asked teachers to, "think about a struggling student in their respective classrooms and share specific instructional strategies they found useful in supporting the student academically" (Billingsly, 2015, p. 53). Ultimately, Billingsly concluded that many teachers in the study:

[H]ad been provided a variety of professional development ...to support them in improving outcomes for students of color. This conclusion, however, contradicted the...assumption that teachers are not adequately trained to teach students of color in such ways as to close the achievement gap" (p. 59).

The most action-directed discovery in Billingsly's study came down to the very way that schools function: the curriculum. Billingsly said:

Forty-four percent of participants indicated that the curriculum used in their classrooms was not culturally relevant nor reflective of the student demographic served. Therefore, it is recommended that school districts adopt culturally responsive curriculum and prioritize budgets to support implementation (p. 62).

Terry (2016) studied middle school teachers who received culturally responsive PD and attempted to incorporate practices learned into their teaching. Terry's research relied on

interviews, surveys, and classroom observations. Contrary to Billingsly's ultimate conclusion, Terry found that, "participants expressed a lack of formal training in culturally responsive teaching. All participants shared that neither their employing school nor their school district offered any type of training as assistance to teach students of color" (Terry, 2016, p. 66). This contradiction suggests that teacher PD may be dependent upon several variables, such as teacher perceptions, school district, geographical location of the study, or any host of other factors. However, we can decidedly rule out the possibility that all teacher PD is the same or perceived in the same way.

Terry (2016) ended up with five emergent themes from her interviews, surveys, and observations around culturally responsive pedagogy (enacted after undergoing professional development) that were "generated from the data analysis phase of the study were as follows: (a) teachers need training, (b) student competence, (c) communication, (d) awareness, and (e) expectations" (p. 82). While Terry and Billingsly disagreed upon the level of previous teacher training in culturally relevant practice, they both found that teachers needed more of it, though neither of them connected improved student academic outcomes or closing of the achievement gap to the use of these trainings.

Terry directly addressed this hole in the research saying, "previously conducted studies authenticate the findings of this study, as they suggest that culturally responsive teaching skills must be taught, refined, and expanded upon through both formal and continual training" (2016, p. 85-86). This viewpoint is partially supported by Milner, Tenore, and Laughter (2008) in their paper, "What Can Teacher Education Programs do to Prepare Teachers to Teach High-Achieving Culturally Diverse Male Students?" Milner, et al (2008) discuss how teacher education programs need to include field experiences within diverse settings in order to shift how predominantly

White teachers see and interact with their students of color. They say, "The researchers stressed the necessity of teachers changing their negative thinking about culturally diverse students and considering the strengths of the students" (Milner, Tenore, & Laughter, 2008, p. 20) in order to raise teacher expectations of students of color. However, while this study connects the need for pre-service teachers to undergo culturally relevant training processes, it does not make the distinct connection between the use of such culturally relevant programs and students outcomes. They simply recognize that teachers need to undergo trainings in order to have higher expectations of their students of color, which, presumably would lead to higher achievement, but this claim is unsubstantiated in their research.

While the research is both plentiful and diverse in the ways that researchers have approached teacher PD and culturally relevant practices, the intersection of these two topics with the added focus on achievement outcomes for students of color is sparse. This research hole is a valid concern because Kennedy (1999) discusses the idea of the "problem of enactment, a phenomenon in which teachers can learn and espouse one idea, yet continue enacting a different idea, out of habit, without even noticing the contradiction" (Kennedy, 1999, p. 947), meaning that although teachers receive culturally relevant PD with the goal of improving student achievement, teachers' actual enactment of CRP may be missing or unenacted.

Additional gaps in the research impact this disconnect between teacher PD and student reception of the ideas learned in the PD. For example, a missing piece of the PD puzzle is if the PD is actually working to change teacher practice and impact student achievement. According to Billingsly's study the answer is unclear:

The majority of pre-service and in-service teachers acknowledged being provided culturally responsive training and indicated that the training opportunities were

relevant to the population they served...A significant number of the teachers who participated in the study revealed that the professional development they received did not often focus on how to teach skills or content (Billingsly, 2015, p. 59).

Therefore, while PD is often available for teachers and may even feel relevant to learners, teachers may not perceive it as especially useful and may walk away without any actionable steps to take next in their teaching in a culturally responsive way.

In other studies there are other problems. Kennedy (2016) considers who should provide the PD, and if the school-based or district-based instructional coaches are effective facilitators or if it should be teacher-led. Kennedy finds:

PD alters teachers' knowledge, which in turn alters their practices, which in turn alters student learning. If there is slippage in any one of these steps, we might expect effects to be diminished. Furthermore, when programs use coaches or other intermediaries to work with teachers, they are essentially adding yet another step to this process: They train the coaches, who then work with teachers (Kennedy, 2016, p. 960).

In essence, adding more people into the training process adds another level of potential re(or mis-)interpretation of the culturally relevant curriculum. Kennedy acknowledges this potential disconnect and says, "There is little discussion in the literature about the nature of PD expertise, how PD providers are selected, how they are prepared for their work, or how their efficacy is assessed" (p. 973).

Van Den Berg (2017) addresses the question of how pre-service training impacts CRP implementation and pedagogy by discussing how pre-service teacher training impacts the viewpoints of the future professional development participants, saying, "the results from this

study show that pre-service teachers can develop culturally relevant pedagogy during a single course when they are offered knowledge or a combination of knowledge and field-work" (Van Den Berg, 2017, p. 28). However, Van Den Berg also puts forth several suggestions for best practice in training pre-service teachers in CRP. Not surprisingly, Van Den Berg's suggestions are similar to the suggestions put forth in research on in-service teacher professional development, primarily that universities should:

Restructure the programs and curricula so that culturally responsive pedagogy principles are integrated in a way that enables pre-service teachers to develop this skill over time and in diverse contexts, such as courses, field-based experiences, and internships...[because] becoming culturally relevant is a time-consuming process (Van Den Berg, 2017, p. 33).

Van Den Berg's suggestion that reconsidering one's pedagogy for teaching is a long-term practice would indicate that even if teacher candidates undergo culturally relevant teacher training, there is still much learning to do once in the field; the process is more than a single training long. Teacher PD is a complex process without a clear best practice for instilling culturally relevant pedagogies that positively impacts student achievement. Kennedy (1999) sums up the problems of PD well in saying:

We need to replace our current conception of "good" PD as comprising a collection of particular design features with a conception that is based on more nuanced understanding of what teachers do, what motivates them, and how they learn and grow. We also need to reconceptualize teachers as people with their own motivations and interests. The differences shown here among PD methods of facilitating enactment strongly suggest the importance of intellectually engaging

teachers with PD content, rather than simply presenting prescriptions or presenting bodies of knowledge (p. 974).

Essentially, how long, how intense, how direct, how applicable, etc. the PD is does not matter if the teachers are not motivated to whole-heartedly participate. This whole-hearted participation comes when teachers 1. Have the option to not participate, and 2. Are not forced to digest an entire curriculum by-the-books but rather can engage in professional dialogue around it and adjust their current practice accordingly.

A final search of the UW Library system for academic articles that connect culturally relevant or responsive practice with elementary teacher professional development and are focused on closing the achievement gap by improving outcomes for students of color after NCLB (search terms: close achievement gap culturally elementary teacher professional development students of color, between 2011 and 2018) produced 33,724 results. Taking out all references to how school leadership, administration, school counselors, librarians, parents, or teacher candidates are impacted, fewer than 250 results remain. In narrowing these results to articles that focus on academic achievement to measure effectiveness, excluding any other confounding variable (talented and gifted identification, school garden use, looping, etc.) produced six potentially related articles (Martin, 2016; Cooper, 2013; Sanchez, 2012; Alford, 2011; Hennrich, 2011; Freeman, 2011). However, upon closer examination, each article could be ruled out as not relating to my inquiry around culturally relevant PD for various reasons. Three articles did not include achievement data to illustrate student growth after teacher PD (Martin, 2016; Alford, 2011 Freeman, 2011), all six did not directly connect a PD system to teacher practice (Martin, 2016; Cooper, 2013; Sanchez, 2012; Alford, 2011; Hennrich, 2011, Freeman, 2011), and one did not address urban elementary school settings (Sanchez, 2012). This leaves me with no article that specifically addresses the question of how culturally relevant PD for elementary school teachers impacts student academic outcomes, specifically, how it works to close the achievement gap.

Literature review conclusions and next research

Research shows that students of color do better academically when they have teachers who understand their cultural backgrounds and teach in ways that support it (Ladson-Billings, 1994; Love & Kruger, 2005), however our current teaching force is overwhelmingly White (United States Department of Education, 2016). We are underserving our students of color and failing them by failing to close the achievement gap. We know that PD impacts teacher practice (Kennedy, 2016) but we have no research yet to show how culturally responsive teacher professional development impacts student achievement, or if it increases academic achievement for students of color. Until we can answer this question, CRP PD is simply operating on hope but has no data backing up its utility. Further, if what we know about successful teacher PD is that it needs to be guided by the teachers and highly collaborative (Kennedy, 2016), how can schools and school districts design PD that does these things while keeping the focus on cultural relevance?

Chapter 3: Methodology

Chapter focal question: How do teacher interviews and student data help us understand the outcomes of professional development in elementary schools?

The outcomes of teacher PD vary depending upon the type of PD. Research shows that effective teacher PD can have significant impact on student outcomes as shown in achievement scores (Yoon, 2007). In fact, according to Yoon's research, "teachers who receive substantial professional development — an average of 49 hours in the nine studies — can boost their students' achievement by about 21 percentile points" (Yoon, 2007, p. i). Kennedy's (2016) study confirms this finding saying, "The idea that professional development (PD) can foster improvements in teaching is widely accepted" (Kennedy, 2016, p. 945). However, Kennedy's study also asserts that:

There is little consensus about how PD works, that is, about what happens in PD, how it fosters teacher learning, and how it is expected to alter teaching practice.

The actual form and substance of PD programs is tremendously various, raising questions about why something so various is uniformly assumed to be a good thing (p. 945).

Therefore, it is important to understand both context and expectations when evaluating PD programs to determine their effectiveness. Kennedy wraps up by saying, "We need to replace our current conception of 'good' PD as comprising a collection of particular design features with a conception that is based on more nuanced understanding of what teachers do, what motivates them, and how they learn and grow" (p. 974).

In this study, the concept of PD is not limited to meetings that are conducted at the school and are presented by school leadership. In this this study, the concept of PD includes anytime that the school leadership works with staff to change their practice, this includes traditional direct instruction PD, coaching of teachers in their practice, book studies, and other interventions that the school leadership introduces to modify and/or improve teacher practice. Commonly, teacher PD is evaluated for effectiveness in two ways: by eliciting teacher evaluations and conducting pre- and post-training interviews, or by examining student achievement data and looking for changes. While many research articles use one of the two, I believe that in order to prove that student outcomes have indeed improved and to understand how, it is necessary to utilize both. There are research studies that do use both standards to determine program success (Kennedy, 2010; Wallace, 2009; Kutaka, 2017; Boone, 2010; Schaefer, 2015; Henderson, 2014; Pelusi, 2015), showing that it is often useful to reference both qualitative and quantitative metrics when evaluating PD programs and looking for effectiveness.

What makes teacher professional development effective?

Berliner says, "It is probably the power of context followed by deliberate practice, more than talent, which influences a teacher's level of competency" (Berliner, 2001, p. 466). In the school PD setting, context refers to how the PD is run and how teachers are motivated to participate or not. Deliberate practice in this case would be the use of PD as a way to hone one's teaching craft, meaning that according to Berliner, a teacher cannot hope to have an exceptionally high level of competency/efficacy without continuous professional learning.

Berliner concludes that the movement into high levels of competency includes several smaller steps along the way, as teachers acquire new knowledge via PD, begin to use it with scaffolds,

start to use it more independently, and eventually become experts in it (Berliner, 2001, p. 479). According to Berliner, this is part of an iterative process that develops the teacher from novice to skilled practitioner over time. Berliner says that "a reasonable estimate for expertise to develop in teaching, if it ever does, appears to be 5 or more years" (2001, p. 478). Essentially, becoming a great teacher takes time and dedication to professional growth. As Bronkhorst et al (2011) begin their research article, Feiman-Nemser (2001) says this about getting teachers to grow professionally:

What students learn is directly related to what and how teachers teach; and what and how teachers teach depends on the knowledge, skills, and commitments they bring to their teaching and the opportunities they have to continue learning in and from their practice (2001, p. 1013).

While researchers have various ways to evaluate whether a PD program is effective, there are themes of programs that generally fit into this category. Kennedy (2016) says that, "findings presented here suggest that programs addressing any of the four persistent problems [portraying curriculum content, managing student behaviors, enlisting student participation, and exposing student thinking] of teaching can improve teachers' effectiveness" (2016, p. 971) and that generally, PD that is teacher-directed, socially-motivated, non-mandatory, collaborative, and provided by individuals and small groups who are familiar with the day-to-day challenges of teaching is most effective (Kennedy, 2016).

Kennedy (2010) came to similar conclusions in her study of PD in a high-poverty school finding that PD is most effective when it is "customized rather than prepackaged, takes place over an extended period of time, and uses a range of research-based approaches (including a strong, ongoing focus on student achievement" (p. 386). This includes allowing teachers to

design and control much of the learning and teaching them the skills of designing high-quality curriculum instead of being given it. The high-quality curriculum that teachers developed in Kennedy's study was demanding for all students but Kennedy found that a, "cognitively challenging curriculum is especially important in a high-poverty context" (p. 386) because it helped to raise teacher expectations of students.

Wallace's (2009) study of teacher PD on student achievement is less forceful in the connection between quality PD and positive academic outcomes. Wallace says, "Teacher practices in mathematics and reading are some of the most important influences on student learning" (Wallace, 2009, p. 580), however, there are often mediating (and confounding) factors between the PD that teachers receive and the impact on student learning. In fact, Wallace finds:

The direct effects of teacher practice on student achievement, controlling for teacher preparation program, teacher characteristics, and professional development, are larger than the indirect effects of professional development on student achievement. Teacher practice has small to moderate direct effects on average student mathematics achievement across all data (p. 589).

This is not a ringing endorsement for teacher PD as a way to boost student achievement or close any gaps. In fact, Wallace is hesitant to assign much impact to teacher *practice* over student achievement, let alone how PD might impact that practice. Overall, Wallace determines that, "the effects of professional development on mathematics and reading practice are generally moderate, and the effects of professional development on student achievement mediated by teacher practice are very small but sometimes significant" (p. 591). So, while student achievement data alone cannot paint the complete picture of how PD is impacting schools, perhaps interviews with teachers and staff can help fill in the details.

How can interviews and observations complement achievement data in understanding student achievement?

Interviews with teachers may be the missing component in understanding how PD impacts teacher practice and student achievement in schools, thus determining whether or not culturally relevant PD also impacts student outcomes. Chism's (2016) study of K-2 literacy growth after teacher PD illustrates how achievement data can be the basis for inquiry but teacher interviews can form the backbone of the research. Chism used the focal school districts' standardized achievement score data to set the grounding for her study and to create a benchmark for comparison against the data she would collect for students after her study and intervention. Specifically, Chism identified both methods of effectiveness evaluation saying, "Hypothesis 2: There is a relationship between the number of hours that teachers participate in professional development and student achievement in reading, K-2 grade levels. Hypothesis 3: There is a difference between the teachers' ratings of the professional development experience according to Guskey's Five Levels of Professional Development (FLPD)" (Chism, 2016, p. 7). Chism's basis for inclusion of teacher interviews stemmed from literature around the effectiveness of teacher PD. This literature says that teacher beliefs and pedagogies impact their teaching (Hattie, 2012) and that their beliefs and pedagogies are influenced by PD (Guskey, 2002). Chism said that a mixed-methods approach was important because, "the researcher hoped to gain a better understanding of the research question and possible relationship between teacher professional development in reading and student achievement" (Chism, 2016, p. 56), and using both achievement data and teacher interviews made that relationship visible. Chism used achievement data and quantitative analysis of this data "to determine a whether a statistical difference between the teacher's ratings of the professional development experience...exi[s]ted" (p. 63). The interviews and survey data were used to create a qualitative view of "teacher perceptions on how teachers applied instructional practices, after participating in professional development" (p. 63). In the results of the study, Chism was surprised by the achievement data and was able to use teacher interview data to explain the results, leading to a more robust analysis and fruitful study (p. 93).

Why are teacher interviews useful?

The heart of teacher practice lies in self-reflection on practice; Rodgers' (2002) study of teacher reflective practice claims that "transformative growth comes through reflection on experience where such ideas and practices illuminate teachers' practice rather than usurp it" (Rodgers, 2002, p. 232). Rodgers says that reflective practice is a skill that must be learned so that it can become natural and eventually become organic to the teaching process (p. 232). Dewey's original theorizing about teacher reflection says that it is through reflection that we make meaning (Dewey, 1916, p. 140). Further, it is with disciplined and strategic thinking that one can truly reflect in a productive way (Dewey, 1933). Rodgers says:

The power of the reflective cycle seems to rest in its ability first to slow down teachers' thinking so that they can attend to what is rather than what they wish were so, and then to shift the weight of that thinking from their own teaching to their students' learning. The shift, when it happens, is a profound one that results in relief and even exhilaration when they finally see that, as one teacher said, "This isn't about me!" (Rodgers, 2002, p. 231).

Ultimately, the goal of teacher reflection is to improve teacher practice. Rodgers concludes that "Evidence from teachers' own accounts suggests that it does affect the ways they think about their teaching, their students, and their students' learning, as well as what they actually attend to — what they see — in the classroom" (p. 251). As Boody (2008) states, this reflection creates an atmosphere for change by allowing teachers to recognize their obligation to provide instruction specifically designed to push student learning.

Boody's (2008) study of a single teacher's reflective process led him to determine that, "reflection doesn't just happen, but is situated in a context. Much of this context is human; that is, teacher reflection is done by a human in relation to other humans....another aspect of the human condition is moral obligation to others" (Boody, 2008, p. 503). This moral obligation to students creates teacher motivation to improve practice, putting the human relation aspect into the work and binding teachers to delve into their thoughts and habits, taking a more human approach than data and achievement scores alone can sustain. While using achievement data may create the impetus for change via PD, it is the human connection and moral obligation to students that requires teachers to do the heavy emotional lifting of self-reflection. Therefore, achievement data alone cannot tell the full story of PD's effect on teacher practice and student learning but must also be buttressed by teacher interviews.

Teacher interviews allow researchers to see into the thought processes of PD participants as they progress through the training. Beijaard, Meijer, and Verloop (2004) say that teacher perceptions and reflection is critical in effecting change in practice. They argue that these concepts or images of self strongly determine the way teachers teach, the way they develop as educators, and their attitudes toward educational changes (Beijaard, Meijer, & Verloop, 2004,

p.8). Therefore, seeing into teacher thought processes is essential to interrupting old patterns and making room for change.

Non-directive interviews are an appropriate data collection method because their flexibility allows for the possibility of elaboration during participant-researcher conversation (Schweber, 2007, p. 68). Wilson, Onwuegbuzie, and Manning, (2016) define non-directive interviews as, "non-standardized interviews wherein questions are not usually pre-planned such that the interviewer leads the conversation and the interviewer follows what the interviewee says" (Wilson, Onwuegbuzie, & Manning, 2016, p. 1550). Small group or paired-depth interviews are also appropriate methods for data collection in this study. Wilson et al define paired depth interviews as, "one researcher interviewing two people together (Houssart & Evens, 2011) for the purposes of collecting information about how the pair perceives the same event or phenomenon (Arksey, 1996)" (Wilson et al, 2016, p. 1548). Morgan, Ataie, Carder, and Hoffman (2013) say that, "The crucial difference between individual and dyadic interviews consists of the interaction between participants in dyadic interviews, as the comments of one participant draw forth responses from the other" (Morgan, Ataie, Carder, & Hoffman, 2013, p. 1276), which creates an opportunity for more elaboration and greater depth.

Arksey (1996) also says about joint/paired interviews that "it often happens that joint interviews are used as part of a multi-interview research design, incorporating both individual and joint conversations" (Arksey, 1996, par. 5). In this case, the joint conversation is an integral part of the research because we know that much of the work of effective PD is the collaboration, communication, and joint reflection that teachers do in teacher teams (Kennedy, 2016). Engaging in paired-depth interviews will allow me to observe the collaborative relationship in action.

Additionally, Arksey points out that one of big benefits of paired-depth interviews is that "If

joint interviews are held after separate ones, factual data can be cross-checked" (Arksey, 1996, par. 9) which acts as a validity check. Wilson et al (2016) conclude that ultimately, joint interviews are helpful:

...Because they have the potential to lead to the collection of data in a more cohesive way whenever the participants form natural pairs in the context of the research question(s). Indeed, it can be argued that in such situations, compared solely to conducting individual interviews of each member of the pair, the use of paired depth interviews would lead to an interview process that is more continuous, iterative, interactive, dynamic, holistic, and, above all, synergistic (Wilson et al, 2016, p. 1565).

The natural pairing of teacher teams in the context of schools and PD creates an optimal situation for me to interview and observe teachers in their teams.

The use of interview as a form of data collection has deep academic precedence within the qualitative field and educational research (Morton, 2001; Görlitz, Schmidmaier, & Kiessling, 2015; Chien, 2014; Bronkhorst, Meijer, Koster, & Vermunt, 2011; Feryok, 2012). According to Bronkhorst Meijer, Koster, and Vermunt (2011), open interviewing involves the researchers giving the participant an introduction to the topic, including operational definitions key terms, and then asking the participant to respond to the introduction by posing some large "grand tour question" (p. 1123). This broad question allows the participant to respond in a way that illuminates their conceptualization of the topic. The authors identify why open interviewing is essential to create a full picture of the research problem saying, "open interviewing allows the informants to answer from their own frame of reference ([as cited in] Bogdan & Biklen, 2003).

Open interviewing also allows dealing with complex issues ([as cited in] Lichtman, 2006)" (Bronkhorst et al, 2011, p. 1123).

In this study, interviews are used for two reasons: to gain insight into PD and its effectiveness, and to increase teacher reflection. In social science studies, getting subjects to engage in "change talk" (subject verbalizations about change (Sayegh, Huey, Barnett, & Spruijt-Metz, 2017, p. 1) is highly positively correlated with change in the individual (Sayegh et al, 2017). In Sayegh, Huey, Barnett, and Spruijt-Metz's (2017) randomized controlled study of unemployed young adults who had not graduated high school at a "second chance" program found that for individuals with low preference for consistency, change talk led to increased rates of program retention (Sayegh et al, 2017, p. 1). This implies that in a school where staff has low preference for consistency (i.e. they are motivated to change their practice), talking about change could encourage participants to persevere and stay engaged through culturally-relevant PD opportunities. Additionally, in a study of motivational interviewing as an intervention for excessive drinking by Vasilaki, Hosier, and Cox (2006), researchers found that motivational interviewing was effective in changing participant behaviors and was especially effective with populations that were already motivated to change (Vasilaki, Hosier, & Cox, 2006). In the context of school PD, this research suggests that interviews with teachers who are already motivated to participate and change their practice via PD would make a positive impact on their growth and learning. Görlitz, Schmidmaier, and Kiessling's (2015) study of teacher PD with "feedforward" feedback used this idea of discussion as a way to learn, actually having teachers interview each other to promote professional growth. Görlitz et al say, "The idea is that reflection on the conditions of successful teaching situations will help participants to replicate these conditions in the future" (Görlitz et al, 2015, p. 535).

Interviews fit into the case-study methodology and undergird it, along with observation. For Yin (2014), a case study:

Is an empirical inquiry that investigates a contemporary phenomenon (the case) in-depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident. In other words, you would want to do case study research because you want to understand a real world case and assume that such an understanding is likely to involve important contextual conditions pertinent to your case (Yin, 2014, p. 16).

In Yin's definition, a case study is the best way to get into a "real world" context and examine it. This means that in order to fully comprehend the complexity of the context, it is also necessary to "bound" the case (Merriam, 1998), for if the context is not defined it is impossible for researchers to know if they have fully understood all aspects of it. In this research study, the bounded case is a single school, with the context of the school community (teachers, students, administration, etc.) forming the interview pool. In addition to being a defined context, a case study must also be flexible and evolving in how it transforms over the course of the study. This, Bartlett and Vavrus (2017) say, is why it is necessary to have an emergent design (the flexibility to change and modify based on findings (Bartlett & Vavrus, 2017)). In order to accomplish this goal, the case study must not rigidly hold onto preconceptions about results or findings but must be truly interested in learning from interviews and observations. This is why non-directive interviews are essential.

A secondary strength of the flexible case study is its bend toward "thick description" (Stake, 2010; Merriam, 1998) which focuses more on the particular and less on comparison or

generalizability. Bartlett and Vavrus (2017) argue that case study and thick description cannot be generalized (Bartlett and Vavrus, 2017, p. 905) but cite Stake in their defense when he said:

"I see comparison as an epistemological function competing with learning about and from the particular case. Comparison is a powerful conceptual mechanism, fixing attention upon the few attributes being compared and obscuring other knowledge about the case" ([Stake,] 1994, p. 242). Stake felt that comparison prompted the decomposition of cases into variables. He contrasted comparison to thick description, and he stated that comparison downplays "uniqueness and complexities" ([Stake,] 2003, p. 148-149) (Bartlett and Vavrus, 2017, p. 905).

For Bartlett and Vavrus, this particularity constituted a weakness of case study; in this research project, the "uniqueness and complexity" of the context (school, teachers, students, etc.) make the study worthwhile. The context is a study of a functioning school undertaking a real life problem with unpredictable results. This context underlines the nature of PD in schools that simply do not know how to best close the achievement gap and are trying what they are familiar with.

This moving-with-the-context feature of case study is exemplified by the comparative case study which, as Bartlett and Vavrus state, "Aims to understand and incorporate, at least partially, the perspectives of social actors in the study" (Bartlett & Vavrus, 2017, p. 907). In this case, the actors are the teachers and I hope to integrate their perspective into the research. Ultimately, the goal of the researcher is to understand the problem and at best offer useful solutions, and at least gain insight that is applicable to future research. Longhofer, Floersch, and Hartmann (2017), in their curated defense of case study say, "And the case study, across the disciplines, serves many purposes: explanatory, interpretive, understanding" (p. 190). While they

admit that a case study cannot possibly explain every situation or be universally illuminative, they cite Desmet et al (2012) to say "Many argue, as you will see, that a single case has significant explanatory power" (Desmet, 2012 in Longhofer, Floersch, & Hartmann et al, 2017, p. 190), and then go on to use Newton's theorization of gravity as the exemplar. In addition to showing that one case can contribute significantly to our knowledge base, Longhofer et al describe four additional reasons to use a case study approach (2017, p. 195). First, human science studies are too nebulous and rapidly changing to accurately predict or create totally closed systems for investigation with data (via randomized controlled studies, for example). Second, case study has a way of communicating with readers and participants on a human level, thus eliminating the curtain of academia that makes many studies under-accessed or -utilized. Third, the case study (and interview process, specifically) completes the research record with details that are otherwise intangible and do not come across with pure fact (i.e. when the emotion and connection is missing). Finally, case studies are engaging and it is because of their specificity (but human universality) that readers and researchers feel drawn in. As Longhofer et al say, "In these works of particularity and singularity, readers find little bits and pieces of the familiar, sometimes entirely familiar lives, events, places" (2017, p. 195).

Case studies are exceptionally useful as research tools when, according to Yin (2003), you are seeking to answer process-based questions ("why" and "how"), not questions with cut-and-dried answers, and also when the researcher cannot control or manipulate the case context (such as in a randomized-controlled trial (RCT)). The research context in this study suits the case study well in both of these instances — the undergirding question to address is how students are impacted by an outside factor, and the context of school is not a site for an RCT because of the ethical implications of such a study. Additionally, because the case study in question

incorporates multiple interviews with people of multiple perspectives (several teachers and staff members) it increases the credibility of the data collected (Yin, 2003). These interviews, in collaboration with additional sources of data (student achievement data, classroom observations) compound to create a fuller, more complete picture of the context, and a more inclusive answer to the research question. As Baxter and Jack (2008) say:

Each data source is one piece of the "puzzle," with each piece contributing to the researcher's understanding of the whole phenomenon. This convergence adds strength to the findings as the various strands of data are braided together to promote a greater understanding of the case (p. 554).

In this way, teacher interviews and students data each fill in one piece of the data puzzle.

Since, according to a constructivist standpoint, we create meaning by interacting with the world, Ritchie and Lewis (2003) argue that "case histories have a crucial role in qualitative reporting because of the generative and enhancing power of people's own accounts" (Ritchie & Lewis, 2003, p. 313). In essence, the interview participants and participants in the research study create the meaning of the study by reflecting upon it and understanding its meaning. This reflection and discussion, in turn, creates meaning for the researcher.

Case studies are generally a strong methodological choice when faced with a complex research setting without a question that can be answered with some fact (like a number, yes/no, best outcome, etc.). George and Bennet, in Starman (2013), identify "four advantages of case studies in comparison to quantitative methods: Their potential to achieve high conceptual validity, strong procedures for fostering new hypotheses, usefulness for closely examining the hypothesized role of causal mechanisms in the context of individual cases, and their capacity for addressing causal complexity" (Starman, 2013, p. 36).

On the issue of creating new hypotheses, Starman says, "Case studies are very suitable for serving the heuristic purpose of inductively identifying additional variables and new hypotheses. Quantitative studies lack procedures for inductively generating new hypotheses" (2013, p. 37) making qualitative case studies especially useful in exploring subjects without any clear prove/disprove question in mind, for example, questions of how and why. In addition, Starman argues that case studies can incorporate understandings of "equifinality," which is defined as obtaining the same end results via two or more different ways (2013, p. 37). In case studies, equifinality allows researchers to conclude that a certain outcome is in fact produced by the observed phenomenon, without claiming that the observed phenomenon is the only possible way to reach that outcome. In this case, equifinality is essential to the understanding of student achievement within a specific context and PD practices, without claiming that student achievement can only be impacted by teacher PD. While case study is a valid, useful methodological tool for research, Starman says that "Qualitative and quantitative results should complement each other to create a meaningful whole according to the object and purpose of the investigation" (2013, p. 30). In this study, the whole can be created with the combination of case study methodology and quantitative data via student achievement scores and growth.

What will student achievement data show?

Case studies provide a contextualized window into the classroom practice of teachers.

Qualitative researchers acknowledge that while case study allows them to answer the how and why of their questions, for coming to conclusions to more open-ended research topics, case study may fall short in painting a full picture of the research or research site (Starman, 2013; Baxter & Jack, 2008; Longhofer et al, 2017). This is when a quantitative lens may come in handy; it may shed additional light or further defend the qualitative conclusion. However, it has historically

been difficult to determine the best quantitative lens. In education, Kane, Taylor, Tayler, and Wooten (2011) says that there has been:

[A] lack of consensus on valid measures for recognizing and rewarding effective teaching. On one hand, a handful of districts have begun using student achievement gains (adjusted for prior achievement and other student characteristics) as a direct measure of teacher effectiveness... However, even supporters of such policies recognize their limitations. First, these estimates - sometimes referred to as "value added" estimates - are currently feasible only in a handful of grades and subjects, where there is mandated annual testing (Kane, Taylor, Tayler, & Wooten, 2011, p. 588).

Kane et al's observation supports the idea that quantitative data alone is also not a good, singular research solution. Kane suggests that while quantitative data is flawed because of its inability to isolate the effect of teachers on their students without turning to RCTs, qualitative data is also inherently incomplete, "Despite decades of evidence that teachers differ in their impacts on youth, our efforts at evaluating teacher effectiveness through direct observation of teachers in the act of teaching remains a largely perfunctory exercise" (2011, p. 588).

Kane et al (2011) utilize student achievement data (via standardardized test) to assess student learning. Their method of determining student growth on this test was to use both "an outcome test (end of year test in school year t) and a baseline test (end of year test in school year t-1)" (p. 595) and then use a value-added analysis of the data which allows them to determine academic growth over the course of one year by observing the change in student scores between the two years and taking into account the impact of teachers. Kane et al are not alone in their practice of using standardized test score data to determine growth. Bunns (2012) used the

Maryland School Assessment (MSA) in her study of student achievement and growth in elementary school students. Stachowiak (2013) used the Illinois State Assessment Test (ISAT) in her study of student achievement in Illinois elementary schools. Poortman and Schildkamp (2016) directly say that "The significance of data use for school improvement is recognized internationally" (Poortman & Schildkamp, 2016, p. 425). In their study of PD to improve student outcomes, Poortman and Schildkamp teach teachers how to effectively interpret standardized testing data so that they can adjust their instruction. The data used in the teacher's' work is a standardized test created by the Dutch Measurement Institute and taken by "all students in the Netherlands at a particular level" (2016, p. 429). Poortman and Schildkamp's use of a large scale, standardized test as a measure of student achievement follows the pattern of many other researchers.

This study's use of standardized test data is not only part of a larger research trend to do so, but is also one of the ways that teachers guide their instruction. Mertler (2002) says "two ways that classroom teachers can use the results of standardized tests are: (1) to revise instruction for entire classes or courses and (2) to develop specific intervention strategies for individual students" (p. 2). Mertler says that standardized data can be especially useful in "Content areas or subtests in which high percentages of children are performing below average indicat[ing] areas of deficiency" (p. 2). In Boegli, Whatley, and Ward's (1977) study of teachers' use of assessment data, they argue that more teachers should use standardized assessment data in instruction because of the data's ability to show an individual student's academic growth over a defined period of time. In fact, Boegli et al (1977) claim that standardized achievement tests contain "some of the most valuable data a classroom teacher has" (Boegli, Whatley, & Ward, 1977, p. 270).

Henderson (2014) studied teacher use of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment and Missouri Assessment Program (MAP) and found that "improvement of student achievement on the MAP test did take place as a result of the implementation of the DIBELS formative assessment to inform intervention instruction for students in reading" (p. 95). Henderson described the use of assessment data (such as DIBELS) positively, saying:

Early identification and intervention is one of the most important changes in reading education in the past decade. Identifying students who are not developing at appropriate benchmarks or milestones in reading by using formative assessments allows for intervention to be introduced before the problem is exacerbated...Early intervention is made possible because of research on screening assessments that identify children kindergarten through third grade who are at risk for reading problems (Henderson, 2014, p. 37-38).

Therefore, in Henderson's study, the use of formative, standardized assessment data drove the decision to adjust instruction and identify students who were not meeting expected achievement targets. This demonstrates that standardized student achievement data is a useful tool in evaluating student learning, both for teachers and for researchers.

Why are there few/no studies that connect student data and teacher interviews to culturally relevant PD?

Research recognizes that assessment data (even standardized assessment data) is useful in planning instruction to impact student achievement and to collect valuable measurements of that achievement. Research also recognizes that the process of interviewing teachers is an effective

way of collecting data on teachers' thought processes. However, there are few studies that connect student achievement data and teacher interviews specifically to PD. There are studies that connect student achievement data and teacher interviews, but there are no readily available studies that also link achievement data and teacher interviews to PD. In fact, Kane et al (2015) directly address this phenomenon saying, "there are relatively few studies relating student achievement to discrete, intentionally observed teacher classroom practices" (Kane et al, 2011, p. 589), let alone studies that connect these practices to where they were learned (in PD, presumably). Lest we assume that professional learning communities (PLCs) (i.e. teacher teams) may be the space where practices were learned, absent professional development and new learning, Pelusi (2015) says that in her study, the impact of PLCs "demonstrated a positive impact on instructional culture, teacher morale, and data driven instruction; however, student achievement was negatively impacted" (Pelusi, 2015, p. iii). This finding backs up the research about PD that says that one of the best indicators of effectiveness of PD is whether teachers are able to work collaboratively and steer the learning. The two statements about teacher learning and student achievement support each other and fill in each other's gaps. In the former premise (that CLCs and teacher teams are ineffective at improving student achievement) the fix to this problem would be to incorporate more instructional knowledge and build in more coaching support (p. 73). The latter premise (that using standardized assessment data improves student outcomes, especially when presented as new learning at PD) is remedied and made complete with the acknowledgement that the most effective forms of PD incorporate collaboration and team planning and reflection time.

Standardized assessment data, both from national tests such as DIBELS, and more localized or statewide tests like Measures of Academic Progress (MAP) which is used in

Wisconsin, can be effective ways to monitor student achievement and growth. Ball and O'Connor (2016) say that the MAP test, as a standardized predictive tool for academic proficiency, along with special education status, "explained 68% of the variance in third-grade standardized test performance" (Ball & O'Connor, 2016, p. 1) for the previous second graders who took that test. This means that researchers have also recognized the utility of standardized assessment data in educational outcomes. So why are there so few studies that link student achievement data, teacher interviews, and the culturally-relevant PD that teachers receive in order to increase that same student achievement?

In a search for research on "student achievement teacher interview cultural professional development" the resulting articles often touch on one, two, or possibly even three of the criteria above, but the combination of all four is rare to nonexistent. In the world full of teacher PD, best practice is known to communicate instructional methods and materials to teachers. In standardized assessments, researchers and teachers acknowledge that data can improve and focus instruction. Researchers know that interviews are useful tools for culling out the collective knowledge of a group of participants. Culturally-relevant practices are well-researched and empirically shown to be useful for engaging students. However, the intersection of cultural relevance, PD, and case study, as they work together to impact student achievement data, is an extremely under-researched topic. Its relevance is especially clear considering the implications of the work on closing the academic and racial achievement gap.

Chapter 4: Findings

Research focus statement

The goal of this research project was to examine the effect of race- and equity-related PD on the teaching practices of public school educators in a racially, culturally, and linguistically diverse school. In order to determine the effectiveness of such professional development, I interviewed and observed kindergarten and first grade teachers at Dakota Elementary School over the course of one school year and compared beginning-of-year data with end-of- study data to identify changes and growth. The focal school's historically low performance on standardized tests, specifically for students of color, gives an additional data point for determining growth. By analyzing standardized test scores for the years when race- and equity-focused PD occurred, I can see if student achievement was impacted by PD and if so, which students were affected. The guiding question for this study was: Does race- and equity-related professional development impact teaching practice? If so, how? And does this impact translate into effects on students, specifically Black, minoritized students?

The research process in situ

In the fall of 2018 I began interviews and observations at Dakota Elementary School. Prior to the beginning of the academic school year, I attended part of Dakota's "Welcome Back Days" staff professional development. I introduced the research project and represented the study at this PD session. All categories of staff (teacher, educational assistants, administrative, support, etc.) were present and were introduced to the project and invited to ask questions about it. Following the Welcome Back Days introduction, all staff received an email further introducing the project. Research began at this time.

Interviews focused on two grade-level teams that were selected for both their expressed interested in participating in the study and my familiarity with the teams and their curricula. As a former member of the kindergarten instructional team, my insider knowledge of the team's goals and content was beneficial for beginning the study on known terrain. Further, the close physical proximity of the first grade instructional team and the high levels of collaboration between the first grade and kindergarten teams made the first grade team preferable for study. There are four teachers on the kindergarten team and three teachers on the first grade team. One teacher on the kindergarten team is my long-term substitute and was not observed during teaching. All members of both teams are White women.

In addition to the two grade-level teams, two members of the school leadership were recruited and interviewed, the principal (who is Black) and a coach (who is White). Both leaders are women. As school leaders, these two individuals had large levels of input into the curricular choices and direction of the school, determining the content that teams would be planning. Further, both participating members of school leadership were current members of the school's Race and Equity team, which helped to plan much of the PD for the rest of the staff, and planned all of the race- and equity-related PD. The coach (Sandra) was selected because of her past and present work with the focal grade level teams. As a participant in team planning meetings, Sandra was able to speak at length about the planning processes that both teams participated in during team planning time several times over the course of the study.

Initial interviews were conducted at the beginning of the school year and in the weeks preceding the school year. All participants were interviewed in one-on-one settings at the time of their choice in the location of their choice. Interviews included the participation screener, explanation of the consent form, beginning-of-year questionnaire, and beginning-of-year

interview. Staff and leadership differed slightly in interview questions, with each set focusing more closely on the direct experiences and privileges each role assumed. For example, questions around the direction of the school and interactions between the school and school district were directed toward school leadership. Questions about classroom practice and planning were directed toward teaching staff. Staff were interviewed in spaces that provided a level of privacy and quiet.

All interviews were audio-recorded while I took notes. Following the interviews, interviewees were sent copies of my notes for clarification and as an opportunity to ensure accuracy. This open sharing of notes was also done to ensure transparency and build trust between with interviewees. Following open note-sharing, I listened to the audio-recordings and cross-checked my notes with the audio for accuracy. I then coded my notes using open-coding and sorted my codes into categories for future exploration in upcoming interviews.

Interview questions were designed to get participants talking and reflecting upon their past and current practices in their role. Guiding themes focused on culturally relevant practice, previous professional development experiences, teaching and planning practices, and participants' visions for the school's future and goals for personal practice.

Common interview themes - Beginning-of-year

Beginning-of-year (BOY) interviews were used to generate a baseline of staff practices, beliefs, and interests regarding culturally responsive practices and race- and equity-focused PD. Interviews included a BOY questionnaire that was uniform across roles and participants. BOY questionnaires were used as a control for end-of-study questionnaires (to be completed at final interviews). The BOY questionnaires included questions about practices and beliefs about

culturally responsive practices. Questionnaires were the precursor to BOY interviews. These interviews were conducted during the first month of school and initially followed a researcher-created format, however, as interviews got underway, it became apparent that questions would need to be more self-generative and specific to the interviewee. At this point, I began crafting interviewee-specific questions and focus areas for interviews.

Participants were willing to participate and were open to the research project as a whole, with many saying how excited they were for the results (Sandra³, personal communication, August 30, 2018; Mary, personal communication, August 29, 2018; Linda, personal communication, August 24, 2018). Sandra summarized her interest and motivation for participating in the study saying:

I think that this work is incredibly important. I think that the achievement gap that we're seeing is not because of a lack of effort from teachers, I mean, people are working their butts off and I think that we just need to know better so we can do better (Sandra, personal communication, August 30, 2018).

This desire to "know better" in order to drive better instruction was a common theme across beginning of year interviews, suggesting that staff had the desire to change practices but was struggling to find a place to begin the work. Many participants mentioned that the results of this study might provide insight into next steps for the school and their own instructional practice.

Why is CRP important?

Several participants identified the heightened level of engagement that culturally responsive practice brought to their classrooms, citing student excitement over texts and

³ Pseudonyms used throughout paper to protect participant identity.

activities that centered people of color, emphasizing that representation is essential for making students feel welcome and able to participate. A kindergarten teacher, Mary, recalled reading a book about Martin Luther King, Jr and experiencing the excitement of her class at reading a book about a Black person:

They're really excited about what they're learning, especially kiddos who don't usually see themselves represented. When they see themselves, like when we did a Martin Luther King, Jr. thing last year, they were so excited. One of my little kiddos said, "Oh, his skin looks like mine!" and was super happy about it (Mary, personal communication, August 29, 2018).

Teachers identified why engagement and culturally responsive practice is so important in increasing academic achievement, another kindergarten teacher, Pam, said, "If they're connecting with the book then they're more likely to really understand our focus and be able to answer the questions and then do the follow up work and transfer it into their own reading" (Pam, personal communication, September 7, 2018). Pam added that culturally responsive teaching is important "so that we can reach all the kids. They don't all come from the same background, they all need something a little different. They all need to feel important and valued, and that they have same future... school, jobs, anything" (Pam, personal communication, September 7, 2018). Pam's recognition of student's differing academic needs spoke to the universal participant recognition that teachers truly need to understand and know their students in order to be responsive to their needs in any way.

Additionally, participants recognized that culturally responsive practices highly benefit students of color but are not exclusively helpful to them. Kindergarten teacher, Donna, said that CRP is a good practice because:

It benefits all scholars in the classroom in a sense that it helps everyone understand that everyone is different, everyone comes from different places and we have to accept that and we have to learn how to handle that. We have to learn how to move forth, how to accept everyone for who they are and what they are cause that's what a community is. I think it really gets around the idea of community and how we all work together, we're all going to be together, and we all have to respect one another (Donna, personal communication, September 12, 2018).

For Donna, CRP is not just good practice for students of color, it is good practice for all students, much in the same way that high academic expectations, good teaching pedagogy, and good curriculum is good for all students. Since, "schools are not designed to educate students of color" (Singleton & Linton, 2006, p. 5), CRP is the way that teachers can start to level the playing field by making them a little less focused on "monolingual, White, middle-class and Anglo clients" (Singleton & Linton, 2006, p. 5).

The personal histories of teacher impacts their engagement - The motivation to learn is embedded within teachers' identities.

After recognizing the importance of culturally responsive texts and teaching, staff were highly reflective, citing their own educational experiences as the model of education they wished to get away from (Linda, personal communication, August 24, 2018; Mary, personal communication, August 29, 2018). Additionally, participants' personal histories deeply impacted both the way that they had engaged with CRP and with how they expected it to unfold for them in the future. The principal, Kim, said that she often struggled with knowing when to push work

around race forward, as a Black women. She recalled a time when she had been in another role in the district and her school was engaged in work with Glenn Singleton's text *Courageous*Conversations about Race. Kim said:

In my role, specifically as an African American female, it's been an interesting process leading some of this work. And so part of my work has been when do I lead and when do I let others lead? Which has been a struggle for me because I don't feel as though I have to turn it over if people are uncomfortable with me saying certain things because I'm Black. But at the same time I don't want them to stall [in their growth] so I have this internal struggle of is it about me or is it about moving people forward so we can move students forward? And so it's helped me in my internal struggle of knowing which part of this can I lead and people are going to hear it and which part does someone else have to lead? It reminds me a lot of...when we did the work with Glenn Singleton as a district and there was a lot of push back with his work and one thing that stands out in my mind is he had done a talk for teachers and I think they had to watch it in their schools but he was [teleconferencing] with the whole district. And I remember sitting there as a literacy coach and listening to some of the comments and things that people made about his delivery and what he was saying and the interesting thing is that that same night Tim Wise was at Edgewood and I went with a lot of other people to go see him speak. And to hear the different reactions that people had, like, "oh, if Glenn would have just said it that way it would have been more palatable and I would have been able to hear what he said" but Glenn was saying the exact same thing that Tim did but they didn't hear that because their defense

was up so much so I always remind myself of that incident and try to figure out is this a Tim Wise moment? When they need to hear it from someone else so that they're not being defensive but they can actually put down that wall and hear what needs to happen and know and do some honest reflecting...(Kim, personal communication, September 5, 2018).

For Kim, her position as a woman of color in a predominantly White-staffed school made her question her role in pushing equity work forward, pointing out how teachers and staff bring their own histories and perceptions about race. Pam reflected on society-at-large stating that she's not like "those people" (White supremacists or members of the KKK in this instance), but referring to overt racism as the example of what racism and oppression look like (wearing a white hood) (Pam, personal communication, September 7, 2018). As Singleton and Linton say, this statement is indicative of an "underlying feeling many White people feel towards people of color: *Stop trying to make racism my problem*" (Singleton & Linton, 2006, p. 28) and works to distance the White person from racism as their own problem that is entangled with the daily racisms experienced by people of color.

Motivation and passion can have powerful effects on staff members in their work toward equity, too. Singleton and Linton said, "These buildings [schools that do not have a passion for equity] are full of toxic adults who stave off meaningful reforms, and they are deadly places for the large numbers of children of color who typically attend them" but that "people can become anti-racist once they begin to develop an authentic need to include people of many races in their personal life...this will manifest itself as the driving and emotional force behind the [equity] work they do" (Singleton & Linton, 2006, p. 12). A first grade teacher and member of the school's Race and Equity committee, Nancy, referred to her own investment in equity work as

being highly personal and the driving motivation to keep her working toward justice (Nancy, personal communication, September 13, 2018). What teachers and staff bring with them to their teaching and professional development deeply impacts where they can go next. Beliefs about who they are as people fundamentally structures how they interact with their roles and what they perceive their task in implementing equitable practices to be. In addition to personal experiences, staff motivation can be driven by their understanding and internalization of the purpose of the work. Freire said, "One cannot be secure in one's actions without knowing how to support those actions scientifically, without at least some idea of the what one does, why and to what end...One must know whom or what one is for or against" (2005, p. 79), meaning that when teachers understand why Dakota is pushing forward equity work and have time to reflect upon their own beliefs, they can more deeply commit to equity because their own beliefs are tied to the beliefs of the community.

Themes from staff interviews suggested that staff were highly willing to engage in the work of increasing racial justice within their practices. A first grade teacher, Patricia, expressed apprehension at feeling comfortable pointing out her instructional teammate's low expectations of students of color saying that there are time when "I don't say what I should say" because she's not yet accustomed to confronting moments of discomfort or racism via low expectations of students of color. Meanwhile many other participants expressed fear of discomfort and fear of being considered racist or uninformed, all participants were highly engaged in independent and professional development-related learning. However, fear can be useful. According to Palmer, "The answer is not to avoid situations where you feel fearful; the more you try to ignore fear or to sweep it under the rug, the stronger it becomes" (Palmer, 2001, p. 5). Freire said that fear is productive and leads to action because "the issue is not allowing that fear to paralyze us, not

allowing that fear to persuade us to quit, to face a challenging situation without an effort, without a fight" (2005, p. 50). Freire said that fear is the result of insecurity in facing the obstacle but that seeking out the help of someone else, using auxiliary tools, and perseverance will alleviate this insecurity by building skills and confidence to face ones' fears.

In addition to fear, many participants referred to their own vulnerability throughout the process of learning, discussing, and trying on race- and equity-related practices. According to Kessler (2001), vulnerability in teaching is a precondition to being present in teaching and making real connections with students. For teachers, vulnerability means being invested in the learning (both teachers' PD learning and student's learning within the classroom) and being part of the learning community. According to Kessler, teachers who exhibit vulnerability make it safe for students to do so as well and this vulnerability feeds the community (2001, p. 122), which is an important component of CRP. Singleton and Linton said that when teachers engaged in courageous conversations to "speak their truth" and be "absolutely honest about [their] thoughts, feelings, and opinions, and not just saying what [they] perceive others want to hear" (2006, p. 60), they open the conversation up to make real change. However, often staff don't speak their truth "out of fear of offending, appearing angry, or sounding ignorant" (p. 60) which limits the conversation and makes it ineffective for change. For many participants, research and knowledge was a way to address their fear of embarrassment or vulnerability and many referenced their own research and interest in changing their practice when reflecting on their growth as professionals.

Across interviews, participants emphasized a sense of frustration and struggle within their own knowledge base around race- and equity-related practices. Since the majority of participants were veteran teachers at Dakota they had been through previous school years' PD and had varying levels of exposure to race- and equity-related PD. Dakota began placing issues of race

and equity into the center of PD more than eight years ago, according to Kim. This work started organically out of the staff's desire to begin the work. Kim said that staff members at the school were interested in pursuing a racially just school model and, with the support and encouragement of the school district, formed a Culturally Responsive Practices (CRP) committee. The committee worked with the school district to provide PD for staff until the district leaders took on different roles which led to less support from the district. Kim said that schools held onto parts of the practices and that over time the idea came back, eventually leading to today's Race and Equity committee. Today's Race and Equity committee (or team) is composed of 7-8 volunteer staff members from diverse roles across the school. The Race and Equity committee works with the School Based Leadership Team (SBLT) to plan PD. The SBLT is a paid staff leadership group that is composed of 17 people in varying roles, the size of which proved unweildy over the course of this study. According to Nancy, a Race and Equity committee member, the goals and motivations of the Race and Equity committee are:

All about social justice work. It's about our own growth, that's not the priority, but about the recognition we will all be growing as humans in our understanding and our practices this area. It's also about the mission of the work with the population that we serve. We're there for a reason. We're there because we understand, to some extent anyway, the history and the disenfranchisement and the ongoing injustices that are getting in the way of our kids, and not just their academic success but their lives. So I think it's a real mission-driven work. And then also a lot of the people on this team have their own personal life story...we all have a different set of either family or identity or personal experiences that we bring (Nancy, personal communication, September 13, 2018).

The personal nature of the committee's work is reminiscent of the personal nature that is implicit in making change in practice. It is logical that the Race and Equity team is highly invested, personally, in the work of changing the school to be more equitable because without that personal connection there would likely be no true motivation to persist in the hard work. Echoing words that the staff had likely heard in previous years' PD⁴, the Race and Equity team recognized, after years of struggle in producing satisfying PD, that, "to be an effective organizer, you [have] to start small...people who've been getting their [butts] kicked for years need to know that they can make a difference. They need to know that they can fight and occasionally win" (Wise, 2011, p. 175, emphasis in original). This was the starting point from which the Dakota Race and Equity team began the new school year.

The goals of the Race and Equity committee, this year specifically, focus around bringing previous, universal learning about historical racism and institutional racism into teachers' and staff's daily practice. According to Patricia, this year's work is designed to help staff focus on what is happening in their classroom and why, and then to help them make strategic and specific plans to change their relationships with students to be more partner-like with high expectations for all students (Patricia, personal communication, September 17, 2018). Patricia said that looking at student achievement data would create a space in which staff could objectively identify and plan for student needs, which would build off of previous years' work and would prevent excuse-making. Patricia said:

We're going to look at our student data because...when you look at it globally you can kind of push it off, like "that's not me" but if you're bringing it back to you

⁴ In previous years the entire school district had engaged with work around Tim Wise's work. This quote calls out his book, *White Like Me: Reflections on Race from a Privileged Son*.

[your classroom data], you know, "these are my kids, this is what I have, this is what I need to do." Eventually you would get to the point where you would even reflect on previous students and how you performed with those students, but I think it's doesn't have to be negative. It can be positive and I think starting with a fresh class with fresh kids, it builds that hope (Patricia, personal communication, September 17, 2018).

In her own practice, Patricia said that data is what keeps her accountable and reflective. Patricia reflected on a time when she received a transfer student from another teacher along with the concern than the child, a Black girl, had a learning disability because she wasn't making the academic progress her teacher expected her to make. Patricia thought about the socio-political context and what she knew about educational inequity and that Black students are chronically over-referred to special education programs, and approached the new student with an objective lens, reassessing her reading ability to find that she had very specific and very correctable hole in her reading understanding. Patricia worked with the student in small group interventions for three months and the student closed her achievement gap. Patricia reflected on this student and said:

That was a situation to that, had this child not gotten this [objective assessment], I don't know what her path would have been. So me, being able to look at that objectively really got me thinking about how I need to make sure that everything that I do is objective in that way, and thinking about how I'm interpreting what a child is doing and not taking what anybody else says as the end-all be-all.

Acknowledging it, taking it in, but then also making a decision myself (Patricia, personal communication, September 17, 2018).

For Patricia, data helps to objectify the needs of students and takes away the bias that may be inherent in designing instruction. This is the goal of the Race and Equity committee for the year: to get teachers to think about their students from an unbiased perspective and with an asset-based outlook and then hold them to high academic expectations.

Overall, participants have described past PD as being helpful in moving them forward in their critical thinking and background knowledge on race and equity topics. Donna discussed her race and equity growth via PD positively, saying that it had been a long journey but had proceeded bit-by-bit. She said that it had "probably been a little piece here and there. When I've had those 'aha moments' it was a lot [related to areas of her own interest] (Donna, personal communication, September 12, 2018). She attributed her growth to this interest:

I think [I learned] because it was relevant, I could pinpoint kids either that I currently had in my classroom or kids that I had in the past so for me it was relevant, I could draw on a kid who I recalled from the past or currently. I enjoyed learning about the brain, I like learning about how the brain works and why things go haywire sometimes and how we help that. So it's a passion of mine so I think that too draws me in more, but I think just relevance in general - that is our population at this school here - so learning about the brain, learning about trauma, learning about stress levels and cortisol levels is very relevant to our building (Donna, personal communication, September 12, 2018).

Interest in race and equity topics was Donna's motivation to change her teaching practice.

Without some kind of personal investment or personal interest, Donna, like most participants, would have been much less likely to make real changes. Just as for students, teachers' learning

needs to be both "joyous and rigorous" (Freire, 2005, p. 5) and having motivation to learn undergirded by challenging concepts is what makes learning impactful.

Setting high expectations for all students, especially students of color.

Teachers and leadership expressed having high expectations for students, both explicitly and implicitly during interviews. According to Donna, academic rigor was one of the most essential results of race- and equity-focused PD. Donna said, "The biggest thing is having high and clear expectations for all scholars no matter what. I think that's the biggest way my teaching has transformed [while becoming more culturally responsive] is that I have expectations for all scholars and I really help build them to reach those expectations" (Donna, personal communication, September 12, 2018). Again, as Freire said:

[E]ducating involves a passion to know that should engage us in a loving search for knowledge that is - to say the least - not an easy task. It is for this reason that those wanting to teach must be able to...fight for justice and be lucid in defense of the need to create conditions conducive to pedagogy in schools; though this may be a joyful task, it must also be intellectually rigorous. The two should never be viewed as mutually exclusive (Freire, 2005, p. 7-8).

Teachers at Dakota commonly referred to the joy of teaching and getting students engaged and excited, and so academic rigor must also be part of the joy of learning. This expectation of rigor and academic challenge was the focus of a recent professional development series, suggesting that teachers used what they learned in PD in interviews and have internalized it enough to incorporate it into their practice and pedagogy. Staff discussed "warm demanders" (Linda, personal communication, August, 24, 2018), "Black excellence" (Sandra, personal

communication, August 30, 2018; Mary, personal communication, August 29, 2018; Kim, personal communication, September 5, 2018; Donna, personal communication, September 12, 2018), participation protocols (Linda, personal communication, August 24, 2018; Kim, personal communication, September 5, 2018; Donna, personal communication, September 12, 2018), and learning partnerships (Sandra, personal communication, August 30, 2018; Donna, personal communication, September 12, 2018) among others. This integration of knowledge and information communicated at PD hints at a topic that Kim brought up, that even if PD presents information it is not guaranteed that teachers will use it in their classrooms. According to Kim, one of the ways that the leadership group determines the focus of PD is to use "walkthrough data" to observe what is happening in classrooms. Kim said this about the utility of walkthrough data in informing PD content:

We also get data through monthly walkthroughs...And those are really important because it either focuses on something that we're doing in professional development that we want to do a temperature check on to see how it's being implemented or just general expectations that we have as a building and we wanna go through and see what the follow through is, what the consistency is because our story of what we have in our head can be a lot different than what you see happening in classrooms so we just want to make sure that what we think is happening is actually happening (Kim, personal communication, September 5, 2018).

School leaders and the instructional coaches use walkthrough data to determine if the learning that occurred during PD is happening in classrooms. This desire for feedback on behalf of

building leadership is similar to the desire for direct feedback that staff have in their work around culturally relevant teaching.

Challenges to implementing race and equity work learned in PD - Not knowing where to go next.

Mary cited a model of change that included reflecting on practice, making changes, observing how students reacted, adjusting practice accordingly, trying out new changes, observing students again, and repeating this cycle over and over (Mary, personal communication, August 29, 2018). Pam recognized that this intrinsic desire to grow and learn is what needs to propel teachers forward. She said, "I need more time to read books or articles, not even [during PD] but just in general. I think that I, personally, need to make it something I do outside of work too so I need that drive. But that comes from me, not PD. It has to be me" (Pam, personal communication, September 7, 2018). In addition to time and personal reflection, several staff members expressed their desire to have direct feedback on their teaching. One first grade teacher, Linda, expressed her frustration with PD saying:

I just want to keep learning; there's still this big question. One of my colleagues asked this question and I thought, yeah that's what I think too. She said, and it was a whole PD about what are you doing in your classroom and how could you be...what are the things that you're doing that could be adversely affecting your students and...but it feels like they never really name it. And maybe it's because it's hard to name it, but I remember she said, well, I want to know what am I doing that is adversely affecting...what am I doing that I need to change? What am I doing wrong that I need to change? And I don't know if it really...that's what

it feels like sometimes and maybe that's not what it is, maybe it's just this process of like continuing to look at yourself and think. But, and don't get me wrong, I don't think that PD is trying to make us feel bad, I think it's very encouraging but sometimes like, you know, put your finger on it. Tell me what I'm doing, exactly what I'm doing and what I need to do and I guess you can't really do that cause everybody's different...we're all doing different things in our classrooms. I would love for somebody to come in and tell me "Oh my gosh, you're doing this and this is what you have to do differently" but those are all things I have to be aware of myself (Linda, personal communication, August 24, 2018).

Many members of the staff at Dakota craved direction in their culturally responsive teaching and explicit feedback about what to do better. According to Nancy, a PD planner, this is logical based on the disconnect she perceives between what the Race and Equity team plans for PD for the year during the summer and what actually gets put into motion during the school year. Nancy said that about half of the team's summer work was "shot down" by building leadership during the summer and it has been a trend that during the year, the plans that make it through to PD time get "circumvented" for one reason or another. Nancy said that this leads to a lot of last minute planning that doesn't feel connected or well done and:

It's hard for some people on the receiving end, I imagine, to see that direct link between that PD content and what they're actually doing on a daily basis. So how is this information I just got, what am I going to do with tomorrow in the classroom because we don't have that core organizing principle that we're working off (Nancy, personal communication, September 13, 2018).

In addition to needing clearer links between PD and classroom practice, staff indicated a desire to have feedback on the practices from PD that they did try out. This longing for feedback and direction stems directly from teachers' drive to continually improve. Donna stated that her desires for future race- and equity-related PD would be:

I think, time to apply what we want to do for practices, having time to actually apply it or sit down and plan out how you want this to look in your classroom...and somebody observing me and noting what they notice and what could be improved with race and equity practices...I want feedback. We're supposed to give scholars feedback. I think teachers want feedback too so that they know the avenue that they can go down (Donna, personal communication, September 12, 2018).

All participants cited several areas of growth for themselves and all expressed deep personal connection to these areas of growth, some stating that they were constantly trying to improve, others that they know they need to keep learning and working, and others even going as far as expressing shame or embarrassment over their skills thus far. This deep-seated self-criticism is what encouraged staff to make changes to their practice, not any acknowledged outside factor. This suggests that teachers need to feel the need to change and need to see how they can make those changes; outside pressures to change will not be as effective at eliciting change as teachers' own internal pressures to do better, which are generated from their observation of students and reflection on their own practice.

Additionally, Pam reported that her lack of knowledge was preventing her from fully engaging in PD. Pam cited her own identity and educational experience as the reason that she often struggled to feel open to the topics presented during PD. She said:

Honestly, sometimes I get a little bit sensitive and feel like I'm personally being attacked, which when I say out loud, with everything that's going on in the world just sounds ridiculous and awful but I'm not like those people out there. I don't wear a hood. I'm here for the same reasons everyone else is. I want good things for kids and to teach them. So sometimes I feel little bit sensitive but I try not to. I know that it's important what we're talking about and we do play a big role (Pam, personal communication, September 7, 2018).

Getting past the personal defenses that teachers put up is a necessary first step in getting all staff to engage in PD around difficult conversations and push them toward internalizing new ways of thinking about themselves in order to begin trying on new ways of teaching as presented in PD. Seeing themselves as the main conduit between the curriculum and student learning, while recognizing that their own experiences and responses affect how they teach is a necessary component in getting teachers to take on the challenge of changing their teaching practice.

We've come a long way but we still have a long way to go.

According to participants, teachers' observations of students drives their teaching. This observation stems from getting to know and understand students, their needs, their interests, and their strengths. Interestingly, many participants identified culturally relevant practice as knowing students well and being interested in them as human beings (Kim, personal communication, September 5, 2018; Sandra, personal communication, August 30, 2018; Mary, personal communication, August 29, 2018). If teachers know their students well and know how to change their teaching to meet student needs, and they define culturally relevant teaching as knowing and responding to their students and students' cultures, why do teachers still crave explicit answers

about culturally relevant pedagogy and creating an equitable educational experience for all students? Perhaps this is because, as Sandra said, culturally relevant teaching should be the lens through which teachers see all of their work, that it is not just one component. Sandra said that past PD has:

Been about learning race and equity issues broadly. And I think that that's a huge, huge component of being a culturally responsive teacher, is having that awareness but then I also think knowing that having rigorous instruction, great relationships, and community within your classroom is also all part of culturally responsive instruction (Sandra, personal communication, August 30, 2018).

Additionally, Kim said that because the staff had been working on building their awareness of student needs and their own personal bias, it was time to integrate the two in order to push beyond the comfort level of some staff members and make changes that would benefit the students. Kim reflected upon the beginnings of the Race and Equity committee (called the CRP committee at the time):

It was kind of the Sharroky Hollie⁵ piece of: you don't know what you don't know...some people know what they don't know and they don't care. So there was a lot of internal conflict about that as well as some people who thought that we were moving too slow because we wanted to make sure that people weren't offended but when our kids are having to adjust and sometimes be offended all the time but we don't want to make adults uncomfortable? So a lot of

⁵ Kim is referring to the work of Dr. Sharroky Hollie, author of *Culturally and linguistically responsive* teaching and learning: Classroom Practices for Student Success, which had been the focal text for previous years of staff professional development. This idea is present in Singleton and Linton's text Courageous Conversations about Race and may also be from Kim was drawing her idea.

conversations were had about how we're moving as a school and now we're situated in a place where we're able to hold both things at the same time so we're learning about things and we're still learning how these narratives are happening in different environments for students of color and how do we interrupt these narratives and what's it going to look like in my classroom (Kim, personal communication, September 5, 2018)?

While Dakota had made significant strides in getting staff to understand their own histories and that part of being a culturally responsive practitioner was responding to students, it was time to begin building on their knowledge of history and marrying that knowledge with the practices they used in their classrooms.

Additionally, several staff members felt that although they had been given resources to understand themselves and understand the context and history of racism, they struggled to grasp where to go next. Pam said:

I feel like we've been given a lot of information lately, which is important, but it would be nice to have one or two really specific, clearly defined things [school leadership would] like to see in the classroom or that we should focus on. There's always so much that it's just overwhelming, it's not realistic. There's not enough time to do it and it's too bad that this work has to go so slow (Pam, personal communication, September 7, 2018).

While many staff members recognized that culturally relevant practice relies on highly connected and empathetic relationships with students, and that much of the work in having a culturally responsive practice lay in knowing students' backgrounds and cultures, many still expressed frustration with not having clearly delineated steps to take to *become* culturally responsive. This

frustration is left at the feet of the Race and Equity committee for future PD and for discussion of the direction of the school in pursuing academic equity; would they give teachers a rule book to follow or would they instead invest their time in teaching teachers how to be critical thinkers and design their own rule books?

Donna commented on the large changes to the structure of PD for this school year. She said that this year, instead of simply continuing the practice of doing a 30 minute race- and equity-related portion one Monday each month, led by members of the committee, the SBLT had decided to infuse race- and equity-related topics into the larger, full day PD sessions that would occur quarterly. Donna said that there would still be a 30 minute race and equity section of Monday PD, but that after that staff would have choice in attending a breakout session. She said that full day PD would be planned with a focus on race and equity topics in order to give the topic and race and equity committee more presentation time. This went in alignment with what the two building leaders said about the year's PD and the structure of race and equity learning at Dakota in general. All three (Donna, Kim, and Sandra) claimed that the changing face of the building's SBLT (to include the Race and Equity committee as a subcommittee) was a direct result of Dakota's shifting focus to include race and equity at the center of all planning and all work.

Donna's discussion of this year's PD time included the fact that when staff went into breakout groups, they got to choose their topic and stay within that learning group for several months. Donna said that this change to PD was not an accident, saying:

In SBLT, we talked about, do we just delegate out what we want people to pick? But then the whole part of collectivism is giving choice so that was something that SBLT grappled with, so not everything in our learning partnerships is race and equity. There is one, but then there's one about Bridges [the new math curriculum], and there's one about DD [Developmental Design - a behavioral program)]...so...there's not all of it, but then those full days we'll have more structured race and equity (Donna, personal communication, September 12, 2018).

Therefore, while the structure of PD for full days is highly geared toward race and equity topics, staff can choose their PD during breakout sessions for the rest of the time. Adding in the fact that not all options are race- and equity-focused means that staff can opt out of learning about race and equity for that time. This idea of choice connects directly with the school's struggle to determine how "fast" (Kim, personal communication, September 5, 2018) to go and how best to cater to the needs of individual staff members while recognizing that students are still encountering racism and inequitable education in the process. How much of the PD could be staff choice and how much needed to be determined by the leadership in order to continue to move staff along in their understanding of equity in order to preserve the dignity and educational achievement of students? How long could the Race and Equity committee and building leadership afford to wait?

Pam demonstrated a deep understanding of the context of educational inequity emphasizing that there could be no easy "fix" to this problem because, "it took so long to make it this way. Everything that has created it; hundreds of years maybe more that create this inequity, and it's not just schools it's everywhere so it's not a simple thing to reverse" (Pam, personal communication, September 7, 2018).

Beginning-of-year observation data

Beginning-of-year observations were conducted during the second and third month of school and occurred during the kindergarten (Team 1) and first grade team's (Team 2) facilitated planning times. This facilitated planning time is a device created by the Dakota leadership team to encourage specific planning strategies and procedures that meet schoolwide content and instruction goals. At Dakota, each grade-level and content-specific team meets bi-weekly to focus on planning and reflecting as a team. Each team meeting is led by an instructional coach (also called an Instructional Resource Teacher (IRT)), both teams in this study are facilitated by Sandra. Each grade-level teacher is present. Additional support personnel (bilingual resource teachers and specialists, special education teachers, literacy interventionists) who work with students at that grade level are also occasionally present. The agendas are collaboratively created by coaches, school leadership, School Based Leadership Team (SBLT) members, and the instructional team. Observations during BOY planning time focused on the ways that team members engaged in reflection and planning around the race- and equity-focused PD they had received, along with their attitudes and thoughts about CRP. Additional observations studied the actions and instruction of teachers on the kindergarten and first grade teams (Nancy and Pam). These observations occurred in the classroom and focused on the content and delivery of CRPfocused lessons, often lessons that were planned during facilitated team meetings. The goal was to determine how the planning and reflection during team meetings impacted what teachers taught during their instructional time with students. The final form of observation was PD planning team observation. This included members of the Race and Equity team and members of school leadership. These planning sessions occurred before staff PD days and focused on creating the material to be presented to staff at the PD session. Observation data collected during

these planning sessions focused on how staff discussed issues of race and equity for teachers, how they prioritized staff learning objectives, and how their ideas translated into concrete learning opportunities. Staff PD learning objectives were also key in understanding the direction of future PD and staff learning goals.

PD planning meetings

Beginning-of-year staff PD planning focused on setting the tone for the year and pairing it with a learning objective for staff. PD planners held four end-of-year goals in mind as they created the scope and sequence of PD learning around race and equity. The four learning targets were directed at increasing culturally responsive teaching, creating staff independence in learning about race and equity, building student achievement, and fostering partnership with students around learning. The topic of the first full day PD was intended to be holding high expectations for students and pairing that with feedback to push students to engage more deeply in learning. The team had a vision for the message they wished to send to staff but struggled to determine staff learning goals by the end of the PD session or where, specifically, to start with staff learning for the year. The team determined that incorporating more opportunities for feedback within lessons was the topic of PD and began grappling with how to approach this problem when one member posed a challenging question: Is this truly the work that is going to close our achievement gap? The question stemmed from the acknowledgement that the staff has historically compared the achievement data of Black students to all students, but it really should be compared to White students. By recognizing that there is a significant gap between two specific groups in the school, the team was able to deal directly with racism in the institution of education which shifted the focus of the group away from whether the team's work was

equitable or not and placed it on how the work would specifically target the achievement of Black students, and wouldn't simply help the successful students in the school become more successful. The team struggled with this question in several ways, from looking at how institutionalized racism affects school, to the teachers' role in differentiating instruction, to the purpose of whole group instruction. The group determined that their focus needs to be two-fold (and should encourage staff to have the same dual perspective): to acknowledge that Black students are achieving at lower rates than White students and to have high expectations for all students, but also to know that there have been many years of work to make this reality of inequity present in schools so to change it in a single year would be impossible. Ultimately, the team refocused their objectives for staff learning to center more clearly around increasing academic achievement for Black students and they decided that the way they would accomplish this goal would be to teach staff how to collect learning data regularly and then use that data to inform and adjust instruction. The team felt that a major barrier to student academic growth is that teachers are unaware of current student strengths and challenges within the day-to-day work of the classroom. They claimed that it has been the habit of the school to conduct large scale assessments (standardized or formalized) but that these large scale tests do not provide information about students rapidly enough to affect instruction within the lesson or within the week. By teaching staff to incorporate at least two learning tasks for students into their lessons (one in the middle and one at the end) the team hoped to help staff understand which students were actually learning and what they needed if they weren't. In addition to understanding student learning, staff would be asked to consider which students were learning and why, and to look at the pattern of successful versus unsuccessful learners in their class; were the White students chronically outperforming students of color? What about their teaching may influence the

success of certain groups of students? The team understood these learning objectives as the beginning steps in a long-term, year-length or more goal in changing how staff considered what successful teaching looks like.

The second observed PD planning meeting focused on refining and solidifying the plans that had been set in the first meeting. While the tone-setting first activity was unchanged, much of the focus had shifted in the time between meetings, though the reason for the shift was unclear. At the first meeting the focus was on getting teachers to understand the importance of utilizing feedback as an equity strategy and exposing the inequities that were present in their classrooms (focusing on achievement data). At the second meeting the focus has been shifted to focusing on implicit bias recognition as an equity strategy and as a way to combat racist/deficit thought patterns in teaching. The team started with the end in mind and planned for the staff PD to help staff link their understanding of implicit bias to high expectations and view data through that lens. Then they focused on getting staff to understand and recognize their implicit biases. This would be done to help them sort through the excuses that they make about why students aren't learning or are learning inequitably across racial lines. The team discussed how staff feel stuck and have been asking for lists of reproductive practices or other components of inequitable education so that they would see if they utilize those practices themselves. The team agreed that this was the crux of many issues of equity at Dakota; there are no checklists or easy answers for equity work. In fact, equity work could not even be prescribed down to a series of practices that would work for all teachers; the team focused on helping teachers reflect upon their own thought patterns around why students do not achieve and then discussing the implicit bias in these thoughts. After this, they planned to link the implicit bias conversation to a conversation about which students teachers hold high expectations for and why. Finally, they planned to link

teachers' high expectations (or lack thereof) to academic achievement data to help see how expectations play out in test scores and, thus, which students need extra intensive focus for instruction in overcome teachers' bias.

This PD design ended up being the precursor to the work that had been planned for the session. Instead of addressing feedback as a means for increasing student efficacy, the team took a step back and focused on first getting teachers to use the data they had to discover their own biases in instruction before moving into giving student feedback as a way to increase expectations, effectively slowing the pace of PD learning.

Grade-level team meetings.

Beginning-of-year grade-level team meetings focused on building team collaboration around student progress. Teams participated in an evaluation of their teaming practices and collectively submitted data to the school district, ranking their team from one to four (minimal to distinguished) on 22 components within the four domains of the district's "Great teaching framework" (MMSD, 2014). This process provided a metacognitive glimpse into each team's perceived strengths and weaknesses. Neither team determined that reflecting on CRP nor using an equity lens was a specific area of challenge for them. Team 1 discussed the places where a CRP focus showed up in the questions and agreed that it was present in their planning.

Both teams were facilitated by a school coach in their planning and used the team meeting time to both reflect on past teaching via student data and plan for future instruction via problem-solving and collaboration. One of the major concerns that came up for both teams was the balance between rigor and responsiveness; meaning that both teams were unsure how far and how hard to push students to learn grade-level material when it was clear in assessment and

observational or formative assessment data that not all students were learning at grade-level. In Team 1, the concern focused on following a prescribed curriculum with fidelity but acknowledging that the curriculum wasn't serving many students, either because they were bored with the material or because the material was too challenging/possibly developmentally inappropriate. Team 2 was concerned by the large portion of students in their classes who were performing well below grade-level on the assessment task. Team 2 grappled with the idea of teaching basic skills to help students catch up versus insisting all students learn higher level skills that were potentially too challenging for them to understand and integrate. Ultimately, Team 2 decided that basic skills could be embedded within the content area focus and within grade level tasks, while providing differentiated supports for different students. Team 1 decided that their best route forward would be to adapt the curriculum and activities it provided by remaining faithful to the learning goals and objectives in each lesson. Both teams found ways to remain responsive to the needs of their students and also make modifications to better teach to different needs. A concern from one Team 2 team member in regards to differentiation of expectations was which students typically received lowered expectations and why; including why the expectations needed to be lowered for these students (due to their underperformance on assessments). This question hung in the air and went mostly unanswered aloud but clearly spoke to race.

Each team spent a great deal of time collaborating informally around the individual needs of students. They spent time focusing on creating universal standards for performance on specific assessments and tasks. Team 1 spent time on math learning, setting expectations for independent work time behavior and ways to interact with students to promote the expected behavior. They also focused on learning the benchmark scores for their assessment and then spent time sorting

student data into three categories of scores (intensive support, below benchmark, and at/above benchmark). Team 2 spent time creating cut scores and norms for a writing assessment, including how to accurately and consistently evaluate student writing in a way that allowed them to design future instruction. Team 2 collaborated on assigning student work a score between emerging (level 1) and advanced (level 4), with most of the focus on what it looks like to be proficient (level 3) versus developing (level 2). Questions of academic achievement and race were not directly addressed by Team 1 other than obliquely through questions about rigor and expectations.

PD-related themes that had been present in staff interviews showed up in pieces and in overarching philosophies but were not commonly referenced during the team meetings. For example, participants said that a goal for PD in the past had been to get teachers to look at their lessons with an equity lens and create spaces for students to engage deeply via their home culture and personal interests. Neither team referenced this concept while planning but did refer to prior knowledge and when it hurt or hindered students (usually because they lacked it). Additionally, during interviews, participants agreed that learning partnerships for rigorous learning are an essential part of equity in education, but during observations student voice was missing from the conversation and there was no talk of partnership with students. The teams did discuss keeping high expectations for students and pushing their learning, but the ways in which they did so and the degrees to which they planned to do so were variable between grades and across content areas. In the end, both teams struggled most with keeping expectations for student performance high while acknowledging that not all students entered school with the same skills for learning. Both teams came to this conclusion using a PD-based equity strategy: feedback from formative assessment. The presence of a school coach promoted the use of assessment data to drive focused instruction based on trends and possible student grouping (based on the data). The coach (Sandra) helped both teams define the criteria for success and look hypercritically at the evidence before them to determine how students were learning the content and where the gaps in knowledge were. As a member of the PD planning team it is Sandra's job to push teacher teams to implement the equity strategies promoted in PD and help them do so in a way that is meaningful and useful for instruction.

While teacher teams were not taking on all equity-related PD learning during beginningof-year team planning meetings (incorporating student home culture, learning partnerships), they
were engaging in critical thinking around student performance on assessments, which *is* a new
equity strategy. In order for teachers to have the skills to discuss their high expectations for
students and potentially adjusting them to be appropriate for students in their classroom, staff
needs to have a foundational understanding of how achievement data concurs with racial lines.

Both teams clearly struggled with how to change their standards based on what students knew,
which likely stems from previous PD around keeping high expectations for all students and not
watering down the curriculum or pitying students of color for underperforming. The staff's next
step, alongside the Race and Equity team, is to look at why students of color are
underperforming at Dakota and what specific steps they can integrate into their team planning to
incorporate student interest and strengths while keeping overall expectations high.

Classroom observations.

Beginning-of-year classroom observations focused on understanding how teachers were taking on the learning from PD and planned around in team meetings into their instruction. The PD thus far in the school year focused on providing feedback from formative assessment data

that teachers collect regularly to check their understandings of student growth, especially as it relates to assumptions around race and performance. Team planning meetings differed in their content focus (math and writing) but both centered much of their discussion and cognitive dissonance on holding students to high expectations and also being realistic in instructional plans to reach all students at a level they would be able to understand. Teams were planning lessons that assumed they knew where students were in their learning, and their use of student work and data helped to ground their assumptions and reduce stereotypical thoughts. Classroom observations focused on the question: How are teachers enforcing high expectations, collecting informal or formal data to accurately and fairly assess learning, and making accommodations or modifications for students based on perceived need? In addition, which students were teachers making modification for and why?

I observed one writing lesson (with Nancy) focused on getting students to be independent workers with their own ideas for writing topics. I also observed one math lesson (with Pam) focused on getting students to explore with number racks and build number sense. Both observed teachers modeled the desired student behaviors, asked students to share their prior knowledge with the task, and clarified objectives by asking for questions. Both teachers incorporated various participation protocols (in one classroom: shout it out, calling on raised hands, cold-calling students, students choosing the next student; in the other: calling on raised hands, students shout out, picking name sticks). Nancy included a great deal of cognitive press by requiring students to pay attention at all times, knowing that they could be called on at any time without raising their hand or being asked a direct question. This high level of expected engagement required all students to be on task at all times or risk demonstrating their inattention. While all students in this class were expected to be on task and participating, the level of support that the teacher

offered to students differed by the student. Nancy's team planning focused on this very quandary - how to adequately challenge students at a variety of instructional levels; Nancy is applying the team planning and PD content to her teaching. The students that Nancy chose to target for more intense support or more direct challenge varied across racial groups, however she tended to offer more scaffolding to English language learners, asking more questions and offering more language prompts for response. This raises a question of equity for students of color - does additional scaffolding provide equity or does it encourage helplessness?

Pam took up the team planning meeting work and PD differently, instead focusing on how to build in more student choice while keeping expectations high. Pam spent time in her lesson previewing math centers, modeling directions for the day's new center, and presenting the options that students could freely choose (and switch) between. Pam's whole group instruction was not highly differentiated for students (all students received the same questions and were called to answer by raising hands or shouting out) but independent work stations were differentiated by being choices. Pam assessed students and pushed their learning by circulating around the room during work time, working with a specific student for a specific assessment center, and questioning students about their mathematical thinking. She had previewed the questions she might ask students during her centers introductions and followed up by asking these questions during centers work time. The majority of students (all but 1-2) were engaged with the centers and were continually redirected when they were not on task. Two students (both Black) struggled to choose and remain at their centers. Pam checked in with them periodically. This raises the question of how Pam communicates expectations for students of color in her actions and if her push to get all students engaged is influenced by beliefs about student abilities or is more closely connected to the individual needs of students as determined by data. Pam did

add in a non-curricular center as a choice because she recognized student interest in the existing choices was waning. This concern came up at Pam's team planning meeting and was determined to be an acceptable equity practice because it worked to engage more students in learning while keeping other learning choices available. During observation the added center was used but not exceptionally popular suggesting that students liked it for the variety but did not find it very different from the suggested curriculum.

Both teachers engaged in differentiation to support students in different ways. Levels of academic press varied between the rooms and across the students that were pushed harder or scaffolded more gently. Further observation and interview data is necessary to interrogate the fine details of each teacher's motivation in differentiating instruction with groups of students. Racial trends would be of concern if Black students are consistently pushed less than other groups of students; this would connect Black students' underperformance on assessment data to the instruction that they have received. Alternatively, if Black students are receiving more push from teachers it is likely that there is some other step in the break down toward the achievement gap.

Mid-year interview themes and changes

Mid-year interviews were conducted in November and December 2018. These interviews were designed to gauge participant growth and change in perspective since the beginning of the year. Many of the same interview questions were used but there were additional questions that focused on any teaching that I may have observed. Participant teachers (Mary and Linda) were asked to reflect on their observed teaching and explain choices and moves they made with respect to practices learned in race- and equity-focused PD and specifically regarding CRP.

Division among staff.

Throughout the course of the interviews two distinct camps of thought emerged. One group of participants felt that the PD was on track and perhaps moving too slowly to accomplish the goals outlined during summer PD planning (more likely than not, this group was composed of members of the school's Race and Equity team). The other group of participants felt that the PD that had been offered thus far had not been sufficient to impact their day-to-day practice because it did not offer any concrete actions or steps for teachers to take in their daily instruction. These two groups were the same subgroups present at the beginning-of-year interviews and maintained the same membership over the course of the first semester and first PD experiences. During interviews it became apparent that these two groups became more distinct during one particular PD experience that seemed to polarize the school staff. Several participants said that during a full day PD session in October staff had been asked to reflect upon and discuss the central questions: "Why are our African American scholars achieving at lower levels than our White scholars?...How might bias be impacting our expectations for our African American scholars?" (Pam, personal communication, November 21, 2018). Participants, invariably described a highly uncomfortable conversation among the staff during which the discussion of a small group of staff was incorrectly translated (when a member of the discussion group shared out to the rest of the staff by summarizing the group's conversation in a way that other discussants felt did not capture the conversation) to a whole group discussion. Pam, a member of the discussion group said that the group had been discussing the ways that student trauma impacts teaching practice but that when the discussion facilitator called on her group to share out, another member of the discussion group shared the content of the discussion in a way that

made the group appear to be saying that poverty and trauma are linked and are excuses for students' underachievement, in a coded allusion to Black students' lack of academic proficiency. Nancy agreed, saying that during the PD staff were discussing trauma and a discussion group member made a comment that some staff took to conflate trauma with poverty, though this was not the intended message. This misinterpretation was especially pointed due to previous years' PD focusing on disassociating trauma from poverty, pity and, Black students, effectively casting the members of the misrepresented discussion group as ill-informed and even racist.

Mary said that the fallout from this misinterpretation led to "people react[ing] negatively like rolling their eyes, getting upset, whispering about this table [of staff]" (Mary, personal communication, November 19, 2018), and ultimately resulted in the misunderstood staff members disengaging with the PD for the rest of the day or longer. Pam said:

We put in our [PD] exit tickets how we were uncomfortable speaking in front of the group or even with people at our tables because we sort of fear being judged and looked down upon for our thoughts and ideas, and that's not what [Dakota] is about...I still feel like I'll sit there and listen but not going to share out. I'm not generally a talker anyway, I learn better by listening and then it takes me a little while to come up with things that I would say or my opinion. I've shared my opinion before and have been told it was White privilege thinking so I just stopped sharing (Pam, personal communication, November 21, 2018).

Participants said that upon learning of the staff hostility, PD leaders reached out to the affected staff members to elicit feedback and plan steps to repair the disjunction. However, according to the participants the solution provided by PD planners for the following PD session did not repair staff unity and instead placed blame on the outcast staff members. Pam said the reparative PD

focused on "how we can have positive intentions and still say things that have negative impacts? So now I feel like it's being turned back on us but the whole thing is, it's not what we said; [a member of the group] turned our words around" (Pam, personal communication, November 21, 2018). PD planners were initially unaware of the rift created during PD and only became aware of it when reading staff exit tickets and then consulting with members of the school SBLT (Kim, personal communication, November 28, 2018; Sandra, personal communication, November 30, 2018). For PD planners and building leaders this invisible rift signaled that the staff was not communicating their needs around PD to the school leadership. Kim said:

We have to be open and honest because if I hadn't asked that last question [about the PD] at our meeting we would have moved forward with PD like everything was great because it was only that one sentence of a comment that I picked up on. But again, when I said it, people were like, "oh yeah, at my table..." Wait a minute! (Kim, personal communication, November 28, 2018).

Sandra echoed the sentiment and said that there may have also been a racial tension within the staff during the aforementioned PD session. To Sandra, this tension signaled lack of communication among staff and also implied that the way PD is planned needed to be more inclusive of staff input. Sandra said:

In debriefing later it came out that some of our Black staff felt that the PD was not for them, the one about having the uncomfortable conversation. So that's partially, too, why we just need to bring everybody in, to make sure that we're going in directions and doing what everybody thinks we need to be doing (Sandra, personal communication, November 30, 2018).

The inclusion of voices of staff of color also came up in one other interview, explicitly, and came from a member of the group writing the alarming exit slip response, indicating that staff from both sides of the issue recognized the need to include more diverse perspectives in planning PD. PD planner Sandra said. "I'm really hopeful [about] bringing in more voices or just having more authentic conversations about our PD because there was space for it before but it will continue to help drive us forward and move our school along" (Sandra, personal communication, November 30, 2018).

Mary discussed the incident and recalled the event as highly uncomfortable, so much so that she was unwilling to mentally engage in the PD learning for the rest of the day and instead fixated on the misunderstanding. Mary said:

[The goal of that PD (implicit bias awareness) was not met] definitely for the people who felt like they were being judged, like me, for example. It was very difficult for me to sit through the rest of that PD and not just... I don't remember what happened after that. I don't remember that PD because I just felt like people were just judging me. They didn't like me. It was just a very uncomfortable feeling because, I wasn't the one who spoke, someone else spoke but I was sitting near them so all the sudden we were grouped and people were looking at us funny. And it was like, that's not what we were saying, but that's what they took it as so it was just a very uncomfortable day...That was one of the first things we talked about so then we sat there the rest of the day just kind of, like, uncomfortable feeling in ourselves. It was a rough PD (Mary, personal communication, November 19, 2018).

Mary said that following this incident she felt unwilling to take risks and share out at PD anymore because she felt that in an already challenging conversation about race, she would not be considered fairly for sharing her thoughts or taking such risks. This PD exchange highlights the continued need for staff to feel as though they are in a safe space when discussing and interrogating personal issues, such as biases. Mary discussed her own journey through interrogating her biases and said that she was pursuing her own research and personal development outside of staff PD by reading news articles and working through the Harvard Implicit Association Test (Greenwald, Banaji, & Nosek, 1998). However, during PD at the school, her participation would be muted to be safe, so as not to risk judgement for "saying the wrong thing" (Mary, personal communication, November 19, 2018).

At mid-year interviews, the staff remains divided along the lines created during that PD session, which has created a rift in the culture of the school (Nancy, personal communication, November 12, 2018) and has generated distrust among staff, lessening the likelihood that staff would engage in taking social risks during challenging conversations at race- and equity-related PD. However, as Sandra noted, "talking about race is uncomfortable, but we also really need people to share so that we can move forward" (Sandra, personal communication, November 30, 2018). This left the school at an interesting crossroads where staff cohesion had been damaged, which, according to Sandra signified that PD planners were getting good feedback "because it's a sign that we're going deeper" (Sandra, personal communication, November 30, 2018) and not simply working at the surface level.

After reflecting upon the most recent PD experiences, school leadership recognized the two distinct groups of PD attendees and said that this division was why PD planners allowed for participant choice in PD topic. The current model of PD includes breakout sessions that staff

self-selected at the beginning of the year. Group foci vary from race and equity (called Black Excellence), behavior, math, and technology. The majority of staff chose to participate in the race and equity group. Kim said that staff choice in PD topics was intentional because, "some people might not be at that place to move forward, some people might be a little bit ahead in their background knowledge and experience so we wanted people to be able to select" (Kim, personal communication, November 28, 2018). However, staff choice was not always possible and race- and equity-focused PD was obligatory during full day PD sessions and during team planning meetings. Kim recognized that during these compulsory race and equity PD sessions:

[Staff are] really learning as a staff how to sit in discomfort. We know that we're gonna be in some situations where some things are gonna seem really hard and difficult because they're hard conversations to have. It's a conversation that requires you to be reflecting and to look at yourself especially when you're talking about bias...you know, what biases do I have and then how does that show up in my classroom or how does that show up when I'm meeting with the student one-on-one if I'm a support staff person, how does that show up when I'm interacting with parents if I'm in the office or I'm the parent liaison or community resource person? So how are these biases showing up and then how might that be impacting our students' sense of belonging, how is that impacting them academically, and how is that impacting their self-identity?" (Kim, personal communication, November 28, 2018).

Kim pushed even further and questioned how staff might internalize the investigation into their own biases in a negative way, asking:

Do I become defensive and shut down and say, 'well that ain't true' or do I sit with it [and recognize that] I'm uncomfortable with it because I don't believe that's how I am as a person, and so then how do I move on from that?" (Kim, personal communication, November 28, 2018).

Ultimately, the Kim believed that this discomfort within one's self would be one of the keys to closing the achievement gap at the school because, as she said, it would require honesty to truly investigate one's own teaching and determine if they were employing biased thinking when teaching students; if they were truly providing high quality, rigorous instruction; if they were expecting high levels of achievement from each one of their students and not making excuses for those who underperformed.

Differing thoughts about the direction of PD and how hard to push for growth.

Other salient themes that emerged during second round interviews focused on frustration with PD and feelings of falling back into old PD habits that encouraged staff docility and discouraged critical thinking. Nancy said about PD and PD progress throughout the year:

It's starting to feel more and more like it's kind of lectur-y, like it's information or ideas being given to us and we're really not talking as a group and not having uncomfortable moments and if you don't do that, how do you push through them?...If we're going to talk about bias and societal issues and how that's really playing out in our school it's going to be uncomfortable and that's ok... I also noticed...there are some key people in our school who should be actively involved in this work who aren't, who just sit there...I'm thinking of many of the African American staff members, including our principal....it's kind of a big hole in this

work; I wanna hear what you think, and what are your ideas? And what are we doing right and what are we doing wrong? (Nancy, personal communication, November 12, 2018).

This sentiment was shared by PD planners and other staff members, both as a direct request for more input from staff of color (Pam, personal communication, November 21, 2018; Sandra, personal communication, November 30, 2018) and as a general request from all staff and teacher leaders within the building (Kim, personal communication, November 28, 2018). As a result of this gap in knowledge, PD planners and school leadership began to focus on drawing out the feedback from staff members who were part of the SBLT and considered how these staff members should be acting as leaders for equity within the building (Kim, personal communication, November 28, 2018).

While the two groups had been present since the beginning of the year, the two factions of staff grew apart further during the October full-day PD session. Many staff wondered if PD was still on the path that had been laid out during summer PD planning (the original plan focused on the concept of feedback (personal communication, October 22, 2018)). One group of staff felt that PD was moving too quickly and did not provide enough actionable steps for teachers to take in their classrooms (Pam, personal communication, November 21, 2018), or that the PD learning was on the right path but actually needed to be conducted at a slower pace in order to fully build staff members' skills in a way that would impact practice. Linda said that what she needed from PD was more time to discuss the learning and research presented within her PD group. She said that it seemed that the point of PD this year was to get staff talking about race on a regular basis so that it would be less uncomfortable. However, she felt that the 20 minute discussion blocks were far too brief to allow for deep conversation to begin. She said:

I just think we need practice at [having uncomfortable discussions] and first just practice even getting comfortable with it because some of these issues run really deep. You know, 20 minutes is not [enough]...and feelings are going to come up and you need time to, you know you can't just [stop and say], "Ok guys, time's up" (Linda, personal communication, November 14, 2018).

Donna agreed, saying that the focus of PD was not the issue, but rather that it felt as though PD planners were trying to cover too much ground too quickly and in doing so were only giving staff a cursory understanding of the content. Donna suggested that in order to make PD effective PD planners should be:

Picking one thing each semester, like feedback first semester and then whatever it might be second semester. Having more literature, having more videos, having application time to have people come in and observe you; just more feedback as adults, like we want feedback as adults, so it could be the whole gamut of things, like more literature, more video watching, seeing, being in practices as teachers, having people observe us as teachers and then give feedback so that there's more conversation and more growing in that particular skill or topic (Donna, personal communication, November 26, 2018).

Overall, opinions of the content and pacing of the PD differed. Several participants agreed that in order to do the challenging work of discussing race, staff needed to spend significant amounts of time being uncomfortable and having uncomfortable discussions but that their PD experiences often did not push them into discomfort or even actively avoided it. Nancy, "I almost feel like we're not supposed to be uncomfortable. So there was discomfort [at PD]; it shouldn't even

matter what talking about, we're not always going to agree on things and that's ok. We shouldn't just chop off the conversation" (Nancy, personal communication, November 14, 2018).

Keys to closing the gap: High quality instruction, holding high expectations for students, and staff getting what they need to move forward.

Patricia agreed that the staff needed more time to sit in discomfort and learn to have challenging conversations, but for her, the challenge in these conversations originated in facing teaching challenges and shortcomings, not in discussing race as an abstract concept. Patricia reflected upon her own professional growth over the year saying that for her, the concept of Black Excellence had to expand to include all aspects of the student, but starting with academic proficiency via honest reflection about her teaching practices. Patricia said that staff need to take time at the beginning of the year to set honest goals for student learning that requires each student to make at least one complete year of progress, which eliminates the common excuse pattern of claiming that because students start the year below grade level they will not make very much growth during that year. She said that part of the problem in having teachers set goals for student learning, currently, is that:

That's just part of the confusing part about teaching reading; you don't move through the levels at the same rate. Different levels you move through real fast and then some you slow down, so I do think there's a place for instructing teachers about really high quality, differentiated reading instruction that can be objective because I think that's one way to fight our bias; being very objective of what you're observing a student doing. So really being good at observing what they're doing and then being able to figure out what they need next. [Being

objective means looking at scores] and what they're doing as a reader; are they using first sound, can they break a word apart, are they using meaning and syntax, are they using one or the other, all those kinds of things. The better I've gotten at that the more I've been able to move kids quicker because I feel like, "Ok. Now I really am seeing what you're doing" and I feel like I have a lot to learn still, but I feel like when I get better they move faster (Patricia, personal communication, November 14, 2018).

For Patricia, this process of eliminating excuses for student academic stagnation is a challenging equity conversation with high leverage results because in increasing student academic proficiency she is closing the achievement gap and extinguishing racist thought patterns that allow teachers to use bias to determine which students can make appropriate growth during the year by insisting that each student progresses at least an entire grade level from whatever starting point they had. Kim agreed that honest reflection upon instruction was one of the keys to student growth, emphasizing that:

It's gonna take us being honest with ourselves as far as what our biases are. It's going to take us being honest with ourselves and our instruction that we're providing. Are we just saying that it's rigorous when it's not? Do we really have high expectations for all kids especially for our African American kids or are we using situational things that our students come with and empathizing with them so much that we give them a pass on some things that we should not be giving them a pass? (Kim, personal communication, November 28, 2108).

Kim believed that holding staff to high expectations to present rigorous instruction was one of the steps but that it must be paired with support from families and the community. In essence, Kim agreed that equity was a challenging goal but extremely worthwhile and necessary, and that in order to achieve educational equity, teachers, families, staff, students, the school district and the community needed to work together. She said that this work starts with the school leadership team and needs to be pushed forward by the team into every corner of the school. Kim said equity work is about:

Continuing to go back to that shared leadership, truth, honesty, trust. And the ability to know that you're in a safe space to be uncomfortable...I take that back; a brave space to be uncomfortable. We're not saying safe space anymore because that insinuates something where [everyone is comfortable all the time]...but a brave space to have these conversations" (Kim, personal communication, November 28, 2018).

And to Kim, having a brave space starts within the school leadership meetings but must extend out into the school and community.

Getting the voices of staff of color in planning PD via shared leadership.

At midyear staff felt conflicting requirements to move forward. One faction needed more direct instruction on how to use equity strategies in their teaching, along with more transparency in the goals and direction of PD (Pam, personal communication, November 21, 2018). Another group felt that the focus needed to be on the opposite: getting steeped in discomfort and getting used to discomfort within a safe space (Nancy, personal communication, November 12, 2018), a safe space that for many no longer existed. Another group, primarily the school's PD planning group, felt that much of the focus should be on teaching specific instructional strategies that increase academic rigor for all students which would inherently increase educational equity

(Patricia, personal communication, November 14, 2018; Kim, personal communication, November 28, 2018; Sandra, personal communication, November 30, 2018). Yet another group felt that the entire process of planning PD needed to be evaluated because the process was opaque and the faces that typically presented PD topics were White. Pam questioned the ability of PD planners to consider the perspectives of people of color fully because the small planning group was composed of White women (Pam, personal communication, November 21, 2018).

Beginning-of-year goals versus mid-year goals.

Meanwhile, other staff questioned the direction of the PD as compared to the beginningof-year goals that PD planners set in place. For Donna, the goal of a feedback-related year
seemed forgotten. Donna said that in the fall, she had set her personal professional development
focus (via the Educator Effectiveness requirement of Professional Practice Goal) to center
around feedback. However, as the year wore on she felt uncertain whether she would receive the
support she needed from PD and professional learning to progress in her goal. She said, "I feel
like we are all collectively longing to know about feedback. It's been on the table but we haven't
dove into it enough yet. That's my PPG [Professional Practice Goal] too, feedback, which is fine;
I have a take on it how I want it to go" (Donna, personal communication, November 26, 2018).
However, Donna hadn't received support in pursuing this new concept and was, "curious to
know more about race and equity practices around feedback and how I can bring that back into
the classroom in the right manner" (Donna, personal communication, November 26, 2108)
because at this point PD had moved away from feedback as topic.

Not all participants agreed that the focus of PD had shifted away from feedback. Kim directly disagreed saying that feedback was being incorporated into the facilitated team planning

time that grade level teams engaged in each week and it would also soon be incorporated into staff full day, quarterly planning sessions around curriculum (Kim, personal communication, November 28, 2018). Sandra said that PD was right on track for the year and was having good outcomes for teachers. She said:

I feel like there's two parallel things or multiple parallel things that we're working on [in PD]. We're trying to work on mindset because that impacts everything you do, and that I feel like that's harder to see in action. The other thing we're working on is instructional practices and that's a lot easier to see in action. The really exciting thing about this was that for the last walkthrough that we did for this...which was aligned to having tasks and looking at if they're visible or not and having criteria for success...out of the 12 classrooms [we observed] every single one had attempted a criteria for success, whether it was orally, or we saw a lot of people trying to take on the rubric in the upper grades. It's really exciting to see that come to life and kind of so quickly (Sandra, personal communication, November 30, 2018).

For Sandra, two major equity strategies were increasing instructional rigor and holding students to high academic and behavioral expectations; both of which were evident in the PD instruction around criteria for success and learning tasks. In witnessing teachers taking on this new instructional strategy so quickly, Sandra felt encouraged that they were eager to take on the practices taught in PD, suggesting that staff were willing to take on other, harder to observe learning from PD as well.

At this point in the year, staff were frustrated and disconnected as a school. Several participants had suggestions for PD instruction but felt that the process of planning for PD was

either too ambiguous or too complex to join. However, staff typically knew what didn't work for their own learning during PD but did appreciate the work being done to address equity and acknowledged how challenging but worthwhile the work was for the school. PD planners and school leaders felt that their general direction for the school was on track, suggesting a third line of division within the school building, or perhaps, suggesting that the pace of PD was intentionally moderate to mediate the distance between the other two groups.

Mid-year observation data and changes

Mid-year observations occurred in December 2018 and focused on the ways that teachers and the team's coach interacted around race- and equity-focused content from PD sessions. Mary and Linda were observed in their teaching practice. By now, teams had participated in several whole-school PD sessions around race and equity and had planned together more than 10 times over the year. Growth and changes from BOY observations and interviews were the primary focus.

Grade-level team meetings.

According to mid-year interviews with school leadership, one of the foci of facilitated team planning time would become feedback and incorporating more ways for teachers to give students feedback during their lessons. In Team 2, feedback was not discussed directly but was referenced via learning tasks. Learning tasks were a central focus of the team lesson planning and it was guided to be this way by the team coach. At Team 2's meeting, the teachers questioned the necessity of having students participate in writing tasks that they felt were developmentally inappropriate for students at their grade level. Team 2 referenced the grade-

level Common Core State Standards (CCSS) and pointed out that the tasks that had been held up as best practice during a district-level training on literacy were actually not standards at their grade level, instead students merely had to demonstrate competency within the task (they did not have to also write about their process in completing the task, as the teachers felt that district leadership had described). Sandra brokered a mediation between the district's exemplar and what the standard said, assuring the teachers that their practice was appropriate for the goal (Sandra, personal communication, December 3, 2018).

In Team 1's meeting, feedback was present at the teacher-level and was used mostly in the form of assessment and recognition of student growth, or lack of growth. At Team 1's meeting the teachers focused on how students were making progress within the learning objectives and new math curriculum. Teachers used assessment data to concentrate on the growth that their "focus students" were making in comparison to the rest of their students and discussed the ways that they were giving extra support to these students. These additional supports included additional small group work time with the students, having the students spend time working with tutor volunteers, and differentiated instruction. During the observation of teaching, feedback played a larger role than in the planning session. During the observation of teaching this teacher (Mary) asked students to reflect upon their own work during that content area that day. Mary asked students to reflect upon the class' work during that day's station work and name some things that the class did well, and then some things that they needed to improve for the next day. In this class' case, the feedback was broad and student-created; students were asked to reflect upon their own work habits and determine if they were positive or negative. At the end of the reflection period Mary also weighed in and agreed that the class had been working hard (personal communication, December 18, 2018).

While the idea of feedback continued to show up in PD planning, it was less apparent in the day-to-day workings of both grade level teams and teacher practice; feedback did not show up as "feedback" explicitly. The connection between learning tasks, student data, and feedback was less apparent during both team meetings than it was during PD planning meetings. Instead, both teams of teachers were focusing on the data they collected about student achievement and it appeared that they would be working toward using this data to provide specific feedback to students later in the year, if all went according to the PD planners' sequence.

Team 2's planning meeting focused on how to keep teachers' expectations high for all students when faced with a class with overall low academic skills. The teachers reflected on their work with "focus group students" (students that they had selected at the beginning of the year as part of their Educator Effectiveness Professional Practice Goal. These students were the four to five lowest-scoring students of color or special education students on each teacher's beginningof-year (BOY), such as AIMSWeb, PALS, and text reading levels (personal communication, December 18, 2018)) and questioned how to engage students for whom the whole group lesson was too challenging to be appropriate. They agreed that small group instruction was targeted to the needs of these students but worried that their large group work left students behind. The coach, Sandra, referred to the idea of criteria for success to answer this question and asked teachers to consider their own criteria for success for the lessons they plan; how does it look for all students to be successful within the lesson and within the objective? Sandra pushed teachers to keep their expectations high for all students and use their small group time to cater to the needs of specific students to help them reach classroom-wide goals, using high expectations as an equity strategy but not addressing feedback and how it could be used to give students ownership over their learning.

Outside of instructional practice, teachers at the Team 2 meeting felt a deep level of inequity in school practices, across roles in the school, and across schools in the district.

According to the team, much of the hand-holding by the district and the school PD planners (including the facilitated team meeting time) was an attempt to push staff skill and teaching level but felt like distrust in their abilities to teach and plan. Team 2 asked for more time to plan and collaborate during PD, more time to work with staff across roles in the building and be treated as professionals who would work harder if not constantly being told how best to do their job. They argued that the data already proves that the PD they currently receive is not closing the achievement gap, perhaps it is time to let teachers be professionals and be trusted to do their work as they know how.

The two grade-level planning meetings were quite different in both their goals and their management, even though they were in response to the same PD and were facilitated by the same person. At Team 1's meeting the focus was on getting teachers familiar with the curricular content and prepared to teach it, after grounding themselves in progress that their students had been making, specifically their focus students. At Team 1's meeting teachers worked to reflect on their practices and how they were teaching for equity in the way they were targeting their instruction toward students from historically underserved populations. In Team 2's meeting the focus was on raising achievement expectations for all students and thinking/planning specifically for students who were underperforming. Team 2 focused on learning tasks and getting students to demonstrate knowledge. Team 1 focused on understanding where all students were in their knowledge. Both of these foci were steps along the way to providing feedback but neither addressed it directly.

Classroom observations.

Observations of teaching practice following one of the grade-level team meetings focused on how the observed teacher incorporated the learning objectives outlined during team planning during her lesson. Grade-level team planning had focused on shared reading lessons and incorporating student learning tasks to demonstrate understanding of the transferable skill, making connections within the text. The team's (Team 2) planning centered on how to hold all students to high expectations while acknowledging that the students in the grade level, or at least large pockets of it, had a low level of critical thinking skills. Team 2 decided that in order to keep expectations high they would expose all students to high-level thinking and complex tasks and offer more support to struggling students in small or guided group settings. During the observation of teaching in the classroom, the learning focus was on making connections within the text and the learning task was to have students talk to each other to make connections with the text about their home and the homes shown in the text. During the lesson, students were all exposed to high-level thinking of making connections within the text but the way that the learning target was presented became unclear during the lesson and the teacher (Linda) had to spend a significant amount of time redirecting students to stay on task and engage in the correct discussion with partners.

While it appears that the lesson's stated learning objective (I can make connections to the text.) was directly addressed and met with the lesson, many of the students had to be helped through the discussion questions with direct teacher oversight, lowering participation expectations. There are three main, possible explanations for why Linda needed to personally guide so many students through the process of thinking about their own connections with the text: the directions or steps to complete the activity were unclear to the students; the activity was

too challenging for the students to take on independently; or the students did not actually need guidance but had been conditioned to expect it. The first reason would point to a need to build clarity around the discussion prompts and possibly make the link between the activity and the learning objective more obvious to students. During the lesson it was clear that the protocol for having partner discussions was familiar and most students jumped right in. However, the content of discussions was what Linda circulated to correct and clarify.

The second reason (that the activity was too challenging for the students) may have been what Team 2 was describing during their team meeting. This concern stemmed from teacher observation during student work time. All teachers on the team agreed that several activities that would have been successful in years past could not be expected to go well with this group of students because of their low academic skills. In this case, Sandra suggested maintaining the exposure to challenging thinking and challenging topics for all students, but providing additional supports and scaffolds so that each student could meet the challenging expectations during small group work time.

The third reason (that students had been conditioned to wait for help from the teacher) points to the need to continue to have challenging activities and discussions as a whole class while the teacher reinforces her belief in student abilities to complete the task. Linda did use affirming language with the class throughout the lesson, insisting that their "brain[s are] curious...all you need to do is pay attention to the thoughts that are popping up in your head" (personal communication, December 5, 2018). At one point in the observed lesson, Linda questioned a student on the upcoming independent task, who claimed to not know the answer. Linda pushed and said, "You do know cause you were listening" (personal communication, December 5, 2018), reinforcing a belief in student abilities. Linda also set up expectations

around her beliefs in student abilities in handing out the discussion topic paper saying, "Remember I said I will never give you a sheet you can't read on your own" (personal communication, December 5, 2018), which told all the students that the teacher believed they could read the paper.

In the second teaching observation, the teacher (Mary) modeled several math centers for the students and presented them as choices for workspaces during the math time. Students were expected to move freely between any centers they chose as they saw fit. In her explanation of the activity, Mary reminded the students of the behavior expectations several times and in several ways (telling, asking students to say it, call-and-response, modeling) before dismissing the students one-by-one to make a learning choice. During the work centers Mary circulated around the room, answering questions, checking on student understanding of tasks, and offering support to students who needed it (either because they were off task or because they requested help). Much of the student work during this time was quiet and productive; students followed the behavior expectations and routines set in place by the teacher at the beginning of the lesson (and had clearly practiced these expectations before, as was evident in their responses to Mary's reminders about what the expectations were at the beginning of the lesson). Most students moved freely between activities and some completed their work at each center, while some did not. Mary did not pressure students to finish their work at any center before moving onto another center but simply reminded them to keep working and that if they switched centers they could only join another center with fewer than four students already at it. While all students were engaged in the work for the entire 45 minutes that they switched between centers, their work at each center was completed to varying degrees. The goal of the lesson was unclear but appears to have been exploratory and if so, the lesson accomplished the goal to expose students to various

math activities. How Mary will track student progress and completion of assignments appears to be through the work that is turned in, which is also how she will assess student learning on the content for the day which will depend on student completion of work, which varied. All students were held to the same behavioral expectations during the lesson but were offered varying levels of support in their work, which Mary said was intentional and based on the needs of each student. The overall goal of the lesson, as created during Team 1's meeting time was focused on learning tasks and feedback, which was only obliquely addressed during the lesson, via Mary's one-on-one interactions with students and her questioning of their knowledge in the tasks they had selected.

PD planning meeting.

Following a full-day PD, the school's Race and Equity team met to plan the following three PD sessions. The team acknowledged that they had been faced with significant challenges in teacher reception of recent PD and asked how they could course correct in order to both stay on track for the end-of-year PD goals they set during the summer and be responsive to staff needs. The first item that the team discussed was the staff media study, which had been an integral component of whole group race and equity work during PD. The team debated whether or not the media study was necessary because several members of the group perceived staff disinterest or disengagement with the activity. This led the group to consider the goals of the media study and whether the objective (to build staff independence in learning about race- and equity-related topics) had been accomplished. Throughout their planning meeting members continually returned to ask questions about the goal of PD and the direction PD needed to take in order to get staff to make the growth the team desired. The team determined that the most

important outcome of the first semester PD was creating independent learners who felt personally invested enough in topics of race to continue to learn about it outside of PD (which, team members hoped would slowly change the culture of the school to create a culture of openly discussing race and learning more about it). Team members debated several suggestions for how best to create independent learners and ultimately decided that at the next PD, staff would all be asked if they see value in the media study and if they independently pursue topics of race and equity.

The team also made a short outline of upcoming PD topics: stereotype threat and learning partnerships, both through the lens of student feedback (to link to current learning and to connect learning for staff). It was during the discussion of future PD planning that the team struggled to make decisions about learning content and determined that it would be best to seek input from the school's SBLT. At this point Kim countered and said that it was both the right and the responsibility of the Race and Equity Team to make decisions independent of the School Based Leadership Team, both for time-saving reasons and to establish the Race and Equity Team as building leaders. Team members overwhelmingly agreed with this argument and made a plan to prepare content for the next PD and to make a concrete outline of the scope of PD for the rest of the year, seeking feedback from the SBLT only after they had made their plan clear, to hopefully prevent the SBLT from changing the goals and direction of PD.

The topics discussed by the Race and Equity team were quite separate from the topics discussed by grade-level teams. While the Race and Equity team focused on the theoretical perspectives that create racist and prejudiced systems that operate in schools and society, the grade-level teams focused on the day-to-day implications of those systems and ways that their teaching either upholds or critiques them. Whether or not this was the Race and Equity team's

hope for PD, this was how teachers took up their PD learning, showing a disconnect between PD and practice due to the Race and Equity team's focus on theoretical foundations of antiracism while grade-level teams focused on everyday teaching practices that are the results of those theoretical foundations. The grade-level teams were trying to take up antiracism but were not engaging with the topic in ways that would fundamentally change their teaching practice, just some of the ways that fix the daily instances of it.

End-of-study interview themes and changes

End-of-study (EOS) interviews were conducted in January and February 2019. These interviews included an EOS questionnaire that was an exact duplicate of the BOY questionnaire participants completed during their first interview. Questionnaires were used to compare participant-recognized changes and to get participants to reflect upon their teaching during the course of the entire study. Participants were not given copies of their original answers from their BOY questionnaire but were asked to speak about their current attitudes and practices. Interview questions focused on the practices and beliefs participants held around both the PD they had experienced during the year and how it affected them in their planning and teaching. Guiding questions framed the interviews but I tailored specific questions to specific participants before and during the interview in order to get more participant-relevant information.

What is Black Excellence: Stopping reproductive practices, creating independent learners, feedback.

Overall, participants across the study showed change in the depth of their answers regarding issues of race and equity. Participants generally moved from talking about overarching themes present in "culturally relevant pedagogy" as they defined it at the beginning of the year to

discussing the themes that had been presented as teaching for "Black Excellence" during PD. At the beginning of the year, CRP included using participation protocols, teaching with texts that represent the cultures of students in the class, considering how teacher actions unintentionally communicate bias, and reflecting on their own bias and privilege. Later in the year, teaching for Black Excellence included stopping the reproductive practices that teach Black students to be dependent upon teachers while learning, using data to specifically target student academic needs, giving specific and informative feedback to students to make students as leaders in their own learning, holding high academic and behavioral expectations of all students, considering their own racial biases and how they impact teaching. Mary, in reflecting upon the study and her growth over the year said:

I feel like the first interview we did, I didn't know what I was talking about when it came to race and equity, I felt like "I think I know, I think I'm answering these" but thinking about it now, I don't know what I was talking about. My understanding of race and equity has gotten better, like knowing what it is, how to implement it into my own life and my teaching life...that's due to PD, building relationships with other staff members who are helping to open my eyes to different things, and even team planning focusing on other things, and obviously the students too. Last year my class demographics were a lot more Caucasian, this year I have more African American kids, so it's noticing that and saying that I need to make myself a better teacher for everyone in this class (Mary, personal communication, January 10, 2019).

Mary illustrated her personal growth in PD topics and reflected upon how her prior knowledge of race and equity had been insufficient but was becoming more robust to better support her new

class. Linda stated that her learning during PD had infiltrated the rest of her life, seeping into her social media via podcasts and newsletters and even into her day-to-day conversations and book choices. Linda said, "I take it and I apply it to my whole life... I'm having conversations with my son, you know that I'm bringing it back home with me...we had a conversation the other night about...cultural appropriation" (Linda, personal communication, February 1, 2019). Linda said that much of the change in her teaching practice, "[has] to do with changing me. I think a lot is changing attitudes about teaching and learning and people and language and cultures" (Linda, personal communication, February 1, 2019).

Not all participants were as enthusiastic in their support of PD's efficacy for the year.

Nancy said that PD "this year hasn't helped me. It's enhanced things, personally, but it hasn't affected things as far as planning. I haven't changed things as far as how I plan" she added later, "I wouldn't say [I've] changed the content of my teaching as result of PD" and then went on to say that the overarching goals of the year's PD had fallen apart, saying:

I feel like things are choppy. I know how hard people work, I know it's important but when people are scrambling the day before [PD] to decide what we're going to do and there's no through line with the work over the course of the year. That concerns me (Nancy, personal communication, February 8, 2019)

To Nancy, the current PD was "more theoretical rather than action-based" (Nancy, personal communication, February 8, 2019) and that, combined with the lack of cohesion made the year's PD unhelpful to her teaching. She also touched on the continued shifting PD focus that had abandoned the Race and Equity team's summer scope and sequence.

Deviation from original goals - current foci of PD: Black Excellence and Staff awareness via media study.

Throughout the final interview process, two main, year-long goals of race- and equity-centered PD emerged as central foci for participants' understanding of race- and equity-related PD: Promoting Black Excellence by stopping reproductive practices and providing students with feedback to become more independent learners, and making staff more aware of their own biases and culturally aware.

Black Excellence as a topic came up in nearly every interview throughout the entire study. The common definition revolved around:

Making sure that African American students aren't being left behind; that we hold them to high academic standards and make sure their test scores come up so they're becoming proficient or at least closing the [achievement] gap...If you look at the scores of our White students there are more students who are proficient or become proficient throughout the school year and less African American or students of other races. They're not performing as well, not achieving the same level for some reason (Pam, personal communication, January 11, 2019).

For various participants, the implementation of PD around promoting Black Excellence looked and was perceived differently. Most participants could provide a definition of the term that was very similar to the one offered above, but how it showed up in teaching practices was highly variable. Few participants made the explicit connection between Black Excellence and the following concepts: ending reproductive practices, feedback, and creating independent learners. However, according to PD planners, these terms were highly supportive of the year's overarching Black Excellence theme (Patricia, personal communication, January 9, 2019; Kim,

personal communication, January 17, 2019), and fit into the year's four main goals of PD that the team created in summer planning. Each PD session included slides that explicitly linked back to, and often directly named Black Excellence as the referent topic. Kim expanded the understanding of Black Excellence to refer to the work of the school district and Dakota, specifically in the recent past, as Black Excellence, and throughout the district in various ways for much longer, saying that:

That's where Black Excellence comes in because of the strategic framework that was just introduced by the district, which is something we've been trying to do. We didn't name it Black Excellence but...we've been try to do something like that for multiple years, providing opportunities for our African American scholars but also instilling in them their excellence that they already have and then building upon that excellence...it wasn't just articulated [as Black Excellence] until this year... to say just flat out "Black Excellence," that's relatively new for the district; we've been using a lot of "cultural practices that are relevant" and "how can we best support our students," that's the language we've used. But to flat out say, Black Excellence, that's new...of course there are people who have been in the district for a while would argue that. [Gave specific examples of culturally relevant practice being using in district in the 1980s]...they would say it's been done and they did it a long long time ago, when I was in high school, but as far as the district to pick it up as a district thing, that's new (Kim, personal communication, January 17, 2019).

The expansion, cohesion, and uniform urgency of the school district to take on Black Excellence as a mission for the school year gave Dakota leadership renewed purpose and clarity to continue pursuing it as a school goal and also refine what it meant in practice for teachers.

While PD planners and some staff members could articulate exactly what Black Excellence meant and looked like in practice, not all participants felt as confident with the concept. Linda said:

I just I think a lot about Black Excellence but I'm not sure yet how it's affected my teaching or what I'm doing different with it, but I know I think about it and have a lot of questions about it and am doing some reading about it... I think it's a good thing, a really really good thing I just don't fully understand what to do with it (Linda, personal communication, February 1, 2019).

Linda revisited Black Excellence throughout the remainder of her interview and again stated:

I feel like there's this thing when we talk about Black Excellence; there's this urging about how important it is and we've talked about how important is for us to have language to talk to parents about it and I still don't feel like I have the language to talk about it (Linda, personal communication, February 1, 2019).

So while staff may strongly believe in the mission of the race- and equity-related PD work and be actively taking it on outside of PD time, perhaps one of the largest barriers preventing staff movement around implementation is that they don't truly understand what it means to promote it in practice.

Ending reproductive practices. Patricia defined reproductive practices as the practices teachers and schools have that "predict who will succeed and who won't" according to racial

lines (Patricia, personal communication, January 9, 2019). Nancy defined it as, "examining everything we're doing" and stated as an example:

What does literacy look like? What do guided reading groups look like? What does it look like in my class and everybody else's class? What effects are we having? But then taking *everything* that we do throughout the day, like what does recess look like? How is that impacting the rest of what the academic component of school looks like? And really making hard decisions about, just because we've always done things this way doesn't mean that they have inherent value for the kids that we're serving (Nancy, personal communication, February 8, 2019).

While the idea of ending reproductive practices seemed like an undergirding equity strategy,
Nancy said that the concept, while being introduced early in the year, had been forgotten as a PD
topic. Donna said, "Honestly, I'm vaguely remembering not much about it at all. I can't speak to
what it was or what the hope was for it" (Donna, personal communication, February 11, 2019).
However, Donna also spoke about reproductive practices during her interview without calling
them by name. While talking about giving students feedback (one of the overt Race and Equity
learning topics for the year) she said, "the biggest part [of PD that had impacted her practice] this
year...was breaking the cycle of learned helplessness...with high expectations and helping my
kids understand the importance of the work they need to do" (Donna, personal communication,
February 11, 2019). In other PD the repetition of learned helplessness directly tied into creating
dependent learners which generated the reproductive practices discussed in the PD this year.
While Donna touched on the content of stopping reproductive practices, she did not call this or
identify it as "ending reproductive practices", which was part of the problem for Nancy who

acknowledged the lack of clarity and cohesion for staff PD, which was creating more issues. She said:

That's part of the problem I'm feeling; we don't continue things on. We did a little bit of reproductive practices and then we kind of dropped it. For some people that was just an introduction, they hadn't thought about it before and then we drop it to move onto something else and people don't get to dig deeply. That's something as a school we should be tackling because clearly some of the things we do and always have done are not working. If they were working we wouldn't be looking at the gaps that we're looking at (Nancy, personal communication, February 8, 2019).

For Nancy, ending reproductive practices was both a PD topic and an equity strategy within the school's larger approach to instruction and critical thinking about PD planning; if staff were better trained to interrogate the ways that they have been conditioned to plan and teach, the staff as a whole would be more willing to critique habits and routines within all aspects of schooling.

Knowing students well and creating specific plans for their needs.

Giving students feedback. Ultimately, the goal of feedback, according to participants, is to help students become equal partners in their education and to help form them into independent learners by giving them skills to take agency over their own growth. Mary said that the goal of feedback in the classroom is to help:

Students to understand that feedback is necessary for everyone, it's not that they're being bad or didn't do something right, it's to make their work just go to that next level. Let's tweak this a little bit and then you're gonna just soar through

the rest of the reading, for example. So the goal of feedback is to help them to know what they have to do to get better at something (Mary, personal communication, January 10, 2019).

This theme carried through several interviews and was commonly connected to both academic rigor and race- and equity-related learning, though staff members who were unaware of the Race and Equity team's goals for the year often assumed it was strictly academic and failed to make the link between feedback and equitable education, which may impact how they use the strategy in their teaching.

Personal growth catalyst for classroom changes.

Several participants were quick to cite overt race- and equity-related learning as the clear examples of equity-related PD for the year and as examples of how the PD had affected their teaching practices. Kim said that, "some of the PDs made people uncomfortable, which is great because we know that in becoming uncomfortable you grow" (Kim, personal communication, January 17, 2019). Kim continued, saying that to her, the overall climate of the school had changed during the year:

In that we are discussing the right things, it's not as broad, [PD is] more focused so that people can [engage]... and I don't know if my relationships with people have changed so they feel more comfortable or just as a school community people just feel more comfortable kind of questioning and just admitting some things they don't know and it's ok to admit you don't know (Kim, personal communication, January 17, 2019).

Sandra said that part of the school's growth this year was directly tied to being comfortable with discomfort:

I think that we're getting to places of discomfort...think that's going to happen if we're really being open and vulnerable so I think it's made it more intense at points and harder but also think it's a sign that we're starting to go deeper and so I hope it continues...it's not about having comfort...One term I've heard is having brave spaces so that we can all feel...ok with being uncomfortable but not saying that we're comfortable with it, just acknowledge that discomfort is part of the process (Sandra, personal communication, January 25, 2019).

PD planners, members of the Race and Equity team, and school leaders acknowledged the necessity and power in getting White staff uncomfortable and still willing to engage in challenging conversations, though other participants not in these groups tended to focus more on personal growth via knowledge of history and instructional techniques, whether or not they acknowledged them as equity strategies.

Awareness of academic rigor as an equity strategy.

While members of the PD planning team were quick to cite academic achievement and rigor as key equity strategies, other participants (those who were not members of the Race and Equity team) were significantly less likely to name achievement-related practices as equity strategies. Linda cited her use of participation protocols, culturally relevant literature, and the positive depiction of Black leaders and representatives throughout her curriculum as equity strategies (Linda, personal communication, February 1, 2019). Donna directly stated, "I want to pair [rigor] with high expectations...I don't necessarily view [rigor] as a race and equity thing, I

view it more as an overall thing; this is what we have overall for all kids, high expectations no matter what" (Donna, personal communication, February 11, 2019), implying that having the same expectation of rigor for all students was not directly a strategy that dealt with race but was an "equity piece" (Donna, personal communication, February 11, 2019). The common connection that non-Race and Equity team members made between academics and equity was in the discussion of their focus student group, which had been specifically chosen to include primarily Black students. In referring to their focus group, participants who did not otherwise connect academic rigor with equity often emphasized the need to demand more growth from focal students (Patricia, personal communication, January 9, 2019; Mary, personal communication, January 10, 2019). Nancy stated that the very idea of "rigor" was problematic for the school because the staff lacked a clear and common definition of it. Nancy said that even though she believes the staff could probably agree that rigor is in equity strategy, the way they view it is not shared. She said, "it's not enough to just say, 'here you're gonna do the harder packet'... I think that we don't have common definition of what rigor is" (Nancy, personal communication, February 8, 2019). So, even if the staff can agree that high expectations and rigor are equity strategies, the ways in which they are implementing such themes are not standard and are inequitable.

Creating independent learners. Patricia directly discussed student independence as an equity strategy (several staff did not see the explicit, causing them to misinterpret PD and fail to use push for Black students as an equity strategy). Patricia said that by reading the book,

Culturally Responsive Teaching and The Brain: Promoting Authentic Engagement and Rigor

Among Culturally and Linguistically Diverse Students by Zaretta Hammond⁶, she has spent more time:

Thinking about what skill am I try to teach and then how am I going to teach that skill in a transferrable way so they can independently use that. I think that's where we get a huge hang up. Kids are engaged during the whole group lesson, they're doing it with us, they can do it in this book but can they take it to another book? Really breaking that down. I think that sometimes people don't think that that's race and equity work but it so much is because we need to teach all of the kids how to do that and I think that's where personal biases come in is, like, am I really making sure every kid can do this independently and transfer that skill? (Patricia, personal communication, January 9, 2019).

While these main themes consistently showed up in interview data, they were not always apparent as equity strategies for the participants. Donna wondered whether her personal goal of building student independence via intersubject-area connections was an equity strategy. She said, "it might not necessarily be related to race and equity, but I really want to figure out ways to embed practices that we do in shared reading into centers...how to build more independent practice around it" (Donna, personal communication, February 11, 2019). Pam wondered aloud whether the gradual release of responsibility, and by extension, building student independence was an equity strategy, or if having clear directions and high expectations would be an equity strategy (Pam, personal communication, January 11, 2019), suggesting that teachers were not always connecting the PD learning with the larger equity landscape. Instead, several participants felt that while the PD that they had undergone thus far had been mostly helpful, the total amount

⁶ Hammond's text was used by the Race and Equity team for PD last year and this year.

of PD delivered thus far in the year was lacking and that while it represented a good start, there needed to be much more explicit instruction around the themes of feedback and reproductive practices and how they interact.

Staff awareness of biases.

The final goal of staff PD was to develop staff understanding of their own biases and privileges and how those privileges impact their teaching. Mary reflected that the overarching goal of PD seemed to be:

I think that you can't change your teaching until you change yourself...my first year I was just trying to survive, this year I've been really trying to harder on that because I know that's what [Dakota] is about and I know that I need to do better for my students. I think the goal is if you change yourself and you are researching on your own and you're changing your personal life and you're standing up to people in your personal life that might be saying the wrong things then you come back in the classroom and it's really easier to translate that in the classroom (Mary, personal communication, January 10, 2019).

Mary acknowledged that the personal work of identifying her own areas of race- and equityrelated weakness and bias was the important starting place from which her race- and equitybased learning could proceed.

Overall, participants felt fairly confident that the work done during race- and equityrelated PD was having the desired outcome of pushing staff to consider their biases and become more aware of the socio-political context of schooling, while also providing staff with strategies for improving their teaching practice (however, what the strategies were varied by the participant). A few participants, while feeling confident in the learning progress staff made, also questioned the path that the school is on. Sandra, in discussing the year's PD said:

Our mission as a school is to serve our students and to serve all of our students and to promote Black Excellence or elevate Black Excellence. I just feel like we have a limited amount of time so if what we're doing is not in service of that then that's a problem (Sandra, personal communication, January 25, 2019).

Sandra later continued questioning the focus of PD and reflected on their changes to teacher practice seen so far in the school year saying:

What we're seeing through exit tickets, through walkthrough data, through students outcome data, I would say it's all pointing to us making steps in the right direction...I'm excited to see [the results of this study] because I just think it's so important, PD time is so valuable, teacher time is so valuable and so we just need to make sure it's the best use of our time and we're doing what we need to do in terms of service of students success and achievement. I think that that is so important that we know what we're doing (Nancy, personal communication, January 25, 2019).

Even with academic achievement data as a referent, Sandra was unsure about continuing to proceed with the same PD work:

I'm excited about our movement this year, I'm really excited about our MAP data that's coming in, I think we're gonna see some significant gains for African American students...I feel like we're doing the right things. We've seen this steady growth with time, so if it's not the right things, why are we doing them?

It's that question of what more can we do? (Sandra, personal communication, January 25, 2019).

Sandra worried that the work being done in PD, while a step in the right direction, was not enough, without also considering: the right work to benefit whom?

Including diverse perspectives.

One suggestion that the Sandra posed was to rely more heavily on the collective knowledge of the school staff, particularly the SBLT, which coincidentally, includes a larger percentage of people of color than the overall staff, reflecting a sentiment by a staff member from earlier in the year. Sandra said:

I think that just having that space for more people to be part of the [PD] planning I think is really important. I feel like it's always a work in progress [to] just like continue to be intentional about and reflect and be responsive, I think that's the biggest piece...we can't just have this plan and move forward so it's like how do we respond? (Sandra, personal communication, January 25, 2019).

Sandra was obliquely stating that while the Race and Equity Team had set the outline for the year's PD during the summer, it was up to the school leadership team to determine if the scope of the plan was appropriate or having the desired effect, giving more staff opportunities to weigh in on the direction of PD from more diverse perspectives. While diverse perspectives seemed an appropriate way to encourage better PD, for Nancy the manner of collecting input and crafting PD from such varied and numerous sources was inhibiting the progress of the school's equity work. Nancy said:

SBLT spends way too much time as a group talking about PD; there are people who have that job so why do 17 people need to mull it over?...It feels bigger than it needs to be. Let's figure out what our focus is for the year and then backwards map it [to] fill in the pieces (Nancy, personal communication, February 8, 2019).

While Nancy was frustrated with the amount of time and collaboration it took to plan each PD, she was not speaking against the inclusion of diverse voices, simply against the extensive process of getting more than 17 people to agree on a single plan, which she felt diluted the Race and Equity team's original message and plan. Perhaps in this case, the solution would be to encourage more interested staff members with diverse backgrounds and perspectives to join the Race and Equity team, which could then completely take over the PD planning.

End-of-study observation data and changes

End-of-study (EOS) observations included one team meeting from each team (grade-level and Race and Equity) and one observation of teaching at each grade level (Donna and Patricia), and occurred in January and February 2019. This observation focused on the ways that teachers and their coach talked about PD topics and included them in their planning. It included the ways that they reflected upon their teaching and planning from earlier in the year. Observations focused on growth and change from the beginning of the year.

PD planning meeting.

End-of-study school leadership planning for PD focused on reviewing the progress made thus far in the year and plotting a course for the rest of the year, while keeping the group's summer goals at the forefront. The team reflected on what had been effective forms of PD thus

far and what may have made them effective. The team concluded that the format of the PD was a variable that had large impact on the success of the PD and whether staff internalized it's message; the group determined that Monday PD (90 minutes long and occurring after a day of teaching) was most successful when the PD allowed staff to engage in discussion around personal experiences and promoted new thinking instead of requiring tasks or work to completed. Meanwhile, full day PD sessions were better suited for launching new learning and allowing staff time to dive into planning and application of the learning via tangible tasks to complete and collaborative planning. The team also reflected on the remainder of the school year's PD goals and how they would fit into the limited number of PD sessions available. According to the group's goals set during the summer, the focus of the rest of the year's PD needed to center around learning partnerships, feedback, and stereotype threat. Additional topics and necessary motifs that would continue included the media study, more feedback work, and work within professional learning teams (choice-centered interest areas that varied by the learning cycle). There was debate between team members about including more Black history for teachers. The debate followed the same lines as previous team debates: are teachers and staff being let off the hook for doing their own learning and slowing down the progress of the group, or is it the Race and Equity team's job to initiate conversation and plant seeds of interest around topics that are unfamiliar? Ultimately, the team was unable to come to consensus about how much outside learning to expect of teachers and the privilege implicit in that choice, and paused the discussion. Members of color of the group tended to side on the necessity of staff to pursue additional knowledge about Black history outside of the school day, while White members tended to think it is the job of the Race and Equity team to provide the information. One member of color brought up that many of the tactics for improving the academic achievement of students

of color and closing the achievement gap were the exact same ideas that had been around for more than 30 years and said that in failing to innovate or change tactics, schools today are perpetuating this cycle. A tactical change necessarily requires staff to understand what has come before and what educational efforts have historically failed, meaning that while history is important, it is equally important to not use precious PD time regurgitating knowledge that teachers could have/should have learned independently (personal communication, January 14, 2019).

Classroom observations.

Observations of teaching focused on the content area that had been the focus of team planning time. At one classroom observation (Donna) the focus was on math and building knowledge of shapes, but the underlying race- and equity-related theme present was building student independence and maintaining high behavioral expectations. Much of the 60 minute observation included student redirections to refocus individual student attention on the learning tasks or to recenter the whole group and re-engage students in whole-group instruction. The focus on getting students to become independent learners within teacher-directed math center rotations drew upon the Donna's wish to slowly release levels of independence to her class while providing many examples of support and modeling along the way. Prior to releasing students to their independent work stations the Donna redirected and reminded the class of behavior expectations no fewer than ten times. Donna also engaged in the PD-promoted "gradual release of responsibility" which is built on the progression from the teacher demonstrating or directly instructing, to the class and teacher collaboratively completing a similar task, to the students finally engaging in the task independently. Donna also mentioned during the observation that the

teacher-selected centers were not part of the curriculum but were instead supposed to be student-directed. However, Donna felt that the unique needs of this class required more support from the teacher, which meant turning over the centers selection to her control. Donna felt that this was both a result of the students in her class having lower-than-average achievement scores and of the curriculum being developmentally inappropriate for the age group, in that it either assumed students could make larger jumps in content knowledge than they could, or assumed that students would stay engaged with the same tasks for longer than they actually would. Essentially, Donna felt that the curriculum presented student work stations that were either too challenging or too repetitive to be engaging to students. One of the consequences of dealing with this challenge of curricular mismatch meant that the teacher had to balance keeping academic expectations and engagement high despite the need for constant redirection, leading to a chicken-or-the-egg question around why behavioral interruptions occur: Is the content too rigorous which leads to misbehavior to avoid work or is the misbehavior the reason students can't engage in rigorous content?

The other observation of teaching (Patricia) centered on literacy and occurred during the daily reading block. This completed the teacher observations by ensuring that each grade-level teacher on each team had been observed once. Like Donna's observation, Patricia's observation included an element of the gradual release of responsibility, during which Patricia modeled a new skill (in this case finding the author's central message of a text), allowed the students to practice the skill as a whole class, and then expected students to apply the skill independently. During this observation, Patricia promoted high degrees of independence both in the way that students were expected to use the new skill and in the way that the classroom functioned for the rest of the reading block. The new skill (finding the text's central message) was the same skill for

all students, making the expectation that all students could and would learn the skill, but the way that students took up the learning in their reading was differentiated to pair with texts at the student's independent reading level. Students were given control over when their independent application task of the skill would occur (as long as it was completed by the end of the literacy block) but were held to the same expectation that at the end of the lesson all students would have completed the learning task (to write the central message of one of their independent reading books on a Post-it note). This structure encouraged independence and promoted high expectations without losing differentiation for student needs. Because Patricia built the entire reading block around the shared reading goal, all students had ample time to engage and determine their own best way to integrate the learning. The learning goal was stated clearly, students engaged with it as a class and then were expected to continue thinking about the goal and working toward it in independent work. Students were held to extremely high standards in independent work and guided work time, both behaviorally and academically. At the end of the block Patricia reconvened the group to reconsider the shared reading goal and see how it had been implemented.

During Patricia's guided reading groups students were both assessed for growth and possible movement into more challenging texts and held to high academic expectations. Students were given texts that were appropriate for their reading level, provided sufficient frontloading and scaffolding to prepare them for new themes and vocabulary in the text, and then were expected to engage in reading independently. Patricia's support during independent reading of the text was minimal and limited to error correction when the student required it, and then praise for exhibiting specific learning behaviors and strategies. While students were engaged in reading texts of varying difficulty, the expectation and belief in their ability to complete tasks well (or be

asked to redo them if they were done substandardly) was uniform for all students, demonstrating one way that differentiation could function in a classroom that had a wide range of student ability without compromising rigor.

Grade-level team meetings.

Team planning meeting observations focused on how the team focused on race- and equity-related teaching practices and how they considered (in)equity while making decisions and examining data. Team 2's meeting focused on problem-solving around students who were not making appropriate academic progress, despite receiving intensive literacy instruction via pullout model. Team 2's focus was on how to catch failing students up to be on pace with their peers and meet end-of-year goals while also examining why these students were behind in the first place. The conversation relied heavily on data (text reading level, primarily) and considered intangibles such as student temperament, behavior issues, and student motivation. In this group almost all students receiving interventions were students of color, however this fact was never addressed directly. Instead, student backgrounds (home languages, family set up, status as a new student in the school) were used to delineate differences between the group of underperforming students and their grade-level peers. Culturally relevant practice showed up in the way that teachers and coaches discussed student's language needs and ways to best support English language learners (ELLs) by directly addressing strengths and deficits present within ELLs' literacy via language, and ways to build upon their current strengths to raise achievement. CRP was also present when teachers were brutally honest about student progress and failures and how best to configure instruction to offer adequate academic push so that all struggling students would see growth. This included a discussion about how to collaborate effectively and which

additional resources within the school they could use to build student skills (regrouping students, using additional staff in the building to perform instruction, looking at intervention curriculum that could be used, even looking at how the school functions as a whole so that students who come into the grade are more likely to be on a level playing field and have made adequate growth in prior years to minimize the achievement gap).

Team 1's meeting focused on concrete planning of upcoming shared reading lessons and how to incorporate learning tasks into those lessons to work toward student proficiency on sight word knowledge and punctuation recognition. A productive tension in the team planning session was how to offer support and scaffolds to focus students while creating rigorous lesson plans that had concrete learning tasks. As the planning time became more focused on procedures and learning tasks, a back-and-forth emerged between the grade-level team and the coach, Sandra, about the goals of the lesson. Sandra's consistent questioning of what, exactly, the teachers wanted students to learn by the end of the lesson kept the team focused on the learning objective and ways to meet it, while allowing students to show their learning.

Sandra had been present at Team 2's meeting and was also present at this Team 1's meeting. Sandra observed Team 2 make suggestions about what Team 1 should do to increase student proficiency in reading but did not raise the suggestions with Team 1. Team 1's focus on sight words was a more challenging and advanced focus than Team 2's suggested focus of letter names. Perhaps the choice to let each team use their own data and determine their own planning foci was an intentional coaching choice to allow team autonomy and trust. The conversation about basic skill instruction (letter names, as suggested by Team 2) may be a more leadership-level decision that would require additional interventions and support for each grade level. However, the mismatch between what an older grade (Team 2) saw as the gaps in learning at the

younger grade (Team 1) and Team 1's planning work brings up questions about the cohesion of the school and the communication between grade levels.

Chapter 5: Discussion

The findings of this study are drawn from observation and interview data. In this section the changes observed and discussed are compared to the student achievement data for Dakota Elementary over the past several years that they have been implementing race- and equity-centered PD. Coming into the current school year 16% of students were proficient in reading on the MAP test (Sandra, personal communication, August 30, 2018), which demonstrates proficiency growth but slow growth at that. Comparisons of this proficiency rate against historical proficiency rates (prior to the school implementing race- and equity-focused PD) and then against proficiency rates during the implementation of race- and equity-focused PD helped me understand whether race- and equity-focused PD had an appreciable effect on student achievement data, and if so, which students are on the receiving end.

Interpretation of interview data

Interview data constitute the bulk of the research data and illustrate the self-described shifts in teachers' practice and beliefs. By analyzing the changes in interview data over the course of the study I was able to determine how teachers have adjusted their practice and whether changes were the result of race- and equity-focused PD. Analysis was done using open coding of interview notes, comparison of common interview themes, and comparison of these themes from BOY data to mid-year data to EOS data. Common themes across the year included discussion of "next steps" in teacher learning and teachers not knowing how to correctly extend their own learning or integrate it into practice; setting rigorous expectations for all students that coupled with support and joy in learning; and feeling that the school presented a divided front on the importance of equity issues and suggestions for better PD and staff engagement. Part of the uncertainty about next steps or how to integrate new learning into practice stems from teachers'

belief that they do not get enough or consistent feedback on their practice to know whether they are teaching in a responsive and challenging way. Freire said:

Evaluation of practice is necessary [because] the educators responsible for a program of study need to know, at each step, how well they are achieving their objectives...Evaluation is a process through which practices takes us to the concretization of the dream that we are implementing (Freire, 2005, p. 13).

Part of the feedback that teachers repeatedly asked for throughout the study was via observation of teaching from peers or supervisors. Kim repeatedly recognized that providing teachers with feedback was a missing component in her practice. Several participants suggested that they would like to engage in reciprocal observation of peers who would then provide feedback in specific and targeted ways, and could also provide feedback to the peers they observed. Hattie (2009) supports the use of feedback and teacher observations of each other, saying that feedback is one of the two most effective methods of accelerating learning (Hattie, 2009). Calkins and Ehrenworth (2016) agree, saying, "teachers benefit immeasurably from observing teaching together, talking afterward about what worked and what could have been better" because this often leads to "shared beliefs about effective methods" (p. 11). Throughout this study, school leaders (both Kim and Sandra) cited the use of "walkthrough" data and the positive implications it had on the practices of the teaching staff; saying that the staff, as a whole, was overwhelmingly receptive to learning from other teachers. In addition to coaching and feedback, many teachers promoted high academic standards and rigor within the curriculum. Scholars within the field of educational equity support this position and claim that high expectations with the scaffolds to reach them are among the best strategies for increasing equity (Stonehouse, 2008; Tyler & Boelter, 2008; Ferguson, 2003; Sleeter 2005). Delpit (2008) says that it is imperative to teach

minoritized students *more* in order to catch them up. Delpit says, "If children come to us knowing less, and we put them on a track of slower paced, remedial learning, then where will they be?" (Delpit, 2008, p. 116). Delpit says that by coddling students who show up to school less "school-ready" than their White peers, teachers are setting them up for protracted failure. Instead, teachers should push minoritized students to learn more and faster, in order to help them catch up with their peers; teachers need to have higher expectations for minoritized students. Participants who were also members of the Race and Equity team pushed forward this idea of adapting student growth goals to reflect how far students would need to go in order to meet proficiency standards for each grade level. Patricia referred to the text reading levels of students in her class and stated that for a student to simply grow is not enough; the student needs to be making adequate growth to meet end-of-year expectations (Patricia, personal communication, November 14, 2018). High expectations come from teachers having high skill levels within their subject area (including a rigorous, developmentally appropriate, and culturally responsive curriculum), having time to create good lessons, and having support in problem-solving and improving practice.

However, as Sleeter (2005) says, "High standards and standardization are not the same, yet they have been treated as if they were" (Sleeter, 2005, p. 3, emphasis in original). Sleeter says that it is essential for schools and teachers to have high standards (referring to "level of quality or excellence" (p. 3)) for student learning that include performance standards and content standards. However, the standardization of student learning (forcing all students to learn the same things in the same ways, and forcing teachers to adhere to "teacher-proof" curriculum by establishing overly detailed content standards) has led to teaching that focuses on standardized assessments and leans away from incorporating student interests or responsiveness to student

needs. Sleeter says that teachers should use high standards as their guide in creating student learning objectives but that teachers also need to have high levels of autonomy in determining how to reach those objectives, based on the students in her class, because "there is no single 'how' of multicultural curriculum" (2005, p. 8). Instead, teachers need to have the latitude and support to adapt and modify curriculum to meet student needs, which also speaks to the question of how to accommodate varying student proficiency levels within one class; this cannot be proscribed in a single curriculum.

The rigorous expectations espoused by the Race and Equity team, alongside race scholars, can be supported by the work that teacher teams do in collaboration. By providing feedback after planning and observation, staff can both act as experts in areas of skill and work as learners in areas of growth. The feedback that teammates give each other around teaching holds all staff to high standards for instruction and also ensures that all staff are keeping equitably high expectations for all students in their class. Hargreaves and Fullan (2012) support this hypothesis saying that when all teachers on a team act "like pros" it enables each teacher to excel, but that being a pro means using the critical feedback other teammates give you to improve (p. xiv), while also using the team construct to create a cohesive set of standards to push all teammates' learning and practice (Hargreaves & Fullan, 2012). Teachers at the school site asked for more collaboration time, in a way that is authentic and directly useful to their practice. Feedback from peer observations not only creates a natural cycle for reflection and teaming, but is precisely what several staff members asked for in interviews.

Finally, staff members at Dakota discussed their own suggestions for better PD along with varying representations of what equity means to Dakota and how it is manifested at the school. Several participants reported what felt like a divided front on what equity looks like at

Dakota, saying that the Race and Equity committee has one ideal of what equity will look like, the school leadership has another, and the staff has yet another. Race and Equity team memberparticipants discussed the contradiction of having a school district that is putting equity work at the forefront of focus for the year, but a school and school leader who relegate it to a separate portion of PD and school life in general. The school leader, Kim, maintains that equity is the focus but with oppositional directives from the district office (about literacy, about trauma, about other topics that come up during the year and need to be added into the PD schedule) the focus is diluted. The Race and Equity team's goal of putting equity work at the center of every decision the school makes and referring to equity in each instructional choice is similar to the school district's stated goal. This year, Dakota's school district focused on doing anti-racist work, which Singleton and Linton define as actively fighting "racism and its effects wherever they may exist" (Singleton & Linton, 2006, p. 45). It was unclear throughout the study how the district intended that directive to look or act in schools. This lack of clarity around what should be the driving force of all work in the district implies that work at Dakota around equity is necessarily unclear as well. Participants across positions at Dakota spoke about the need to define the purpose of the school and reidentify goals. Participant-members of the Race and Equity Team and school leaders easily and consistently named the race- and equity-focused goals of PD that had been designated during the summer planning period. These team members cited Black Excellence as a vessel for stopping reproductive practices, creating independent learners, and providing feedback, along with increasing staff awareness of racial tensions and Black history via the media study. However, staff members who were not members of the Race and Equity team, were not members of the school leadership, or who did not participate in planning PD sessions well much less clear about the goals of the PD over the year, often not connecting the themes present

in race- and equity-related PD with issues of equity at all. For example, while participants in this non-leadership, non-PD-planning group could identify feedback and high academic expectations as foci for PD during the year, they rarely named it as an equity strategy when asked to reflect on race- and equity-related PD themes during the year. Without making the connection between learning targets at the equity focus at the center of them, it was unclear how successfully staff were incorporating PD learning around race and equity into their teaching. Without being able to name it as an equity strategy, it is unclear that staff understood it as one, which is key in changing teacher practice for the long term.

Interpretation of observation data

Observational data made up a significantly smaller portion of the study data but illustrates important changes and teacher beliefs about teaching. Observation data throughout the study was open coded, compared across observations while looking for common themes, and then compared by theme from BOY observation data to mid-year and EOS observation data.

During BOY observations, I observed that both instructional teams (kindergarten and first grade teachers) found ways to remain responsive to the needs of their students and also make modifications to better teach to different needs. I noted that:

A concern from [one team member] in regards to differentiation of expectations was which students typically received lowered expectations and why; including why the expectations needed to be lowered for these students (due to their underperformance on assessments). This question hung in the air and went mostly unanswered aloud but clearly spoke to race (from *Beginning of Year Observation Data* in *Findings* section).

At beginning-of-year team planning observations staff was becoming aware of their bias and how race impacts their instruction but their acknowledgement of bias hadn't yet begun to shift how they were planning or teaching. Later in the year this question was less present than in BOY observations, the majority of observed grade-level team planning meetings focused on planning out the curriculum in order to move students along in the year scope and sequence of learning but there were much fewer questions of equity or modifying expectations. So, while teachers were becoming more aware of their personal biases and the institutionalized racism that surrounds schooling (via the PD media study), they were less able or less likely to use that awareness in their planning in a critical way. Nancy had observed this change and said, "Overall as a school it feels like people are thinking and talking more about equity...I don't know that actions have changed, but it's a conversation that people are more comfortable having and that's huge" (Nancy, personal communication, February 8. 2019). Teachers and staff were more likely to use the curriculum to guide their planning and less likely to consider the socio-political context of schooling and create plans that directly confront it. Therefore, observations of teaching practice at the end of the study were based in the planning that teams had completed which focused on the curriculum but did not deeply interrogate racism or racist structures around teaching and learning. However, teachers' own personal biases were explicitly addressed more often in EOS teaching observations than in earlier teaching observations; teachers more consistently held all students accountable for their learning during the lesson and were more likely to call on students from a range of racial and ethnic backgrounds to answer questions and participate in learning. Many of the ways that teachers expected students to participate remained the same throughout the year and did not consider the various methods of participation that are commonly espoused in CRP, however. The level of academic press and rigor present in

classrooms varied across the year, with some teachers being more consistent in holding all students to the high expectation and learning standards, regardless of the ways they differentiated the learning. Other teachers struggled to keep expectations high and push student learning at whatever level the student was. Many teachers reverted to raising hands and turn-and-talk by this time in the year, leaving out more culturally relevant methods of engaging students in learning. So while the media study's initial focus was getting teachers aware of race and bias, the outcome thus far was that they were becoming more aware but that the awareness hasn't translated into changes in practice for the majority of staff, yet.

Interpretation of student achievement data

Student achievement data was not collected during the study. In order to reflect upon and analyze student academic achievement, I used the school's standardized MAP assessment and historical data. According to interviews with school leadership, the existence of a racial achievement gap was controversial. Kim said that:

What was really interesting for us was that because of our population [the school district identified] schools...as "focus schools" because they had an achievement gap. Even though our scores were lower and we didn't have a lot of kids that were proficient we didn't have a gap because we didn't have a lot of White kids. So, other schools that were identified at the time might have been scoring higher than us were like, "how the heck did that happen?" and it's because there wasn't a gap for us because we had a smaller population of White students and where our students were performing - students of color and White students. There wasn't a

gap, or the gap that was there wasn't large for those students (Kim, personal communication, September 5, 2018).

Meanwhile, Sandra said that the achievement gap was present in the school's data over the past five years:

While we did see a significant gain [in academic achievement scores on MAP] for our African American students, specifically, our gap actually widened over 5 years. So I think it speaks to, there are definitely things that are working because we would not have seen the growth without it, and it was a steady trend, not just like a blip or like one year, but it's certainly not fast enough (Sandra, personal communication, August 30, 2018).

School leadership's statements are not oppositional, however. While Sandra said that the school had an achievement gap that was widening, Kim said that the gap was not large enough to merit additional attention from the school district or to garner additional support from it.

Both participants mentioned the significant growth that the school had made on MAP tests over the previous five years. As mentioned above, Sandra identified the growth as a positive but cautioned that the growth did not apply to all students equally, referencing the fact that in the 2016-2017 school year 30% of the school met reading proficiency but only 17% of African American students did⁷⁸. Sandra insisted that "hard data, I think, really shows that we are making growth and I think that's really exciting. Do we have a long way to go? A very long way" (Sandra, personal communication, August 30, 2018). Meanwhile, Kim focused on the patterns of growth and questioned the practices that made them possible. She said:

⁷ Student demographics come from parent- or guardian-reported race upon enrolling in school.

⁸ Data from school district representative via central office data center, per ERC approval.

It was really strange because over five years we made that 20 point gain but it was like we'd make gains and then the next year we would kind of stay stagnant and then they next year we'd make gains and then we'd stay stagnant and then we'd make gains...So I was trying to figure out, were we doing things that were different in classrooms that people were trying on and so we made those gains and then we didn't make a gain? So just looking back at the years where gains were made, what was happening in the building at that time? (Kim, personal communication, September 5, 2018).

Sandra also discussed this period of achievement data improvement, saying that:

Being the role that I'm in, I look at data quite a bit and I think that we've seen a lot of growth in our data and I really believe that's not happened on accident. One of the things that we're tried to celebrate [at the recent PD] is that we're one of the top 5 schools [in the district] for MAP growth in the past 5 years. So that's huge. And the variety of schools that were on this list do not all have the demographics of [Dakota] and there are many schools that have similar demographics to [Dakota] that were not on the list so I think that just speaks to something that we're doing is working and although it was 3-5 data, everyone played a role in that (Sandra, personal communication, August 30, 2018).

While Dakota was making growth on the MAP test, the implications of that growth were interpreted and valued differently across the school. Due to this difference, it was important for me to evaluate the growth as well.

During the design period of creating this study, school MAP data from years prior to the implementation of race- and equity-focused PD was originally going to be considered the

"control." Prior to 2012 all of the schools in Dakota's district used the Wisconsin Knowledge and Concepts Examination (WKCE) exam. In 2012 this test was replaced by MAP. In Dakota's district, both tests assess students in grades 3-8 and both assess reading (which is the focus of this study). However, Kim argued that comparing the two tests was like comparing apples and oranges. Kim said that the switch from WKCE to MAP testing was confusing because "even within MAP, the cutoffs and whether you gotta follow the NAEP cutoff or the school district cutoff ... gives you different results too and that's changed over time" Kim continued, discussing the results of the tests:

[It] was kind of hard when [MAP testing] first started too though, because it was like comparing apples and oranges. So when they came out with the first statewide school report card...that we did not score well on. But when it first came out, it was WKCE scores and then it was MAP scores and you can't compare those two things. It didn't take into account a lot of the academic growth students made when [MAP] first came out, the report card was mostly around proficiency and they ended up changing their formula through DPI so that actually ended up moving schools to higher grades. (Kim, personal communication, September 5, 2018).

Due to the incongruous nature of the two tests, it was not possible to compare results from the two different exams. Instead, I focused on data from MAP tests from 2014-2017, which would capture the academic progress made with race- and equity-related PD as a component. It was the line of regression that was most important to the analysis of student growth under each test and each form of professional development. Achievement data from the years during which race- and equity-centered PD was implemented was analyzed to find a line of regression in MAP

proficiency rates both within the whole school and within a focal grade (third grade). Each racial subgroup was graphed and included its own line of regression to identify change over time. My hypothesis said that if race- and equity-centered PD was making an impact, I would expect to see that students of color (specifically Black and multiracial) would have made greater gains in proficiency rates than their White peers. This is due to the fact that Dakota's race and equity PD is intended to reduce the achievement disparity for students of color. Nancy said that much of the district's work, too, had shifted to focus on "gap-closing work" that specifically called out "Black Excellence," even going as far as to mention that she had heard the complaint from non-Black families and staff: "people will say things like, you only do things for Black kids" (Nancy, personal communication, September 13, 2018). If there was indeed, a significant difference between the rates of proficiency for White students and students of color (with students of color having a more positive slope), race- and equity-focused PD could not be ruled out as a factor.

The MAP test data used was from the 2013-2014 school year to present, with the most recent available data from spring 2017. It also called out MAP data from Spring 2014 to Spring 2017 disaggregated by race and disaggregated by race for third graders in each year, specifically. This four-year span produced sizeable data from which to draw a line of regression. The regression data came both from students in 3rd grade, taking the reading assessment in the spring of the year and from the whole school MAP data. Due to the change in tests (WKCE to MAP), it was initially important to use subgroups that carried across the tests (3rd grade reading was one of those subgroups). In designing the research project, I planned to use data from the previous standardized assessment (WKCE) in order to get an equal picture of both tests - MAP scores from 2013-2018 (5 years) and WKCE scores from 2007-2012 (5 years) were to be used. However, after talking to school leadership and in an effort to be as fair as possible to the

school's teachers (see the apples and oranges quote above) only MAP scores were used. MAP data was disaggregated by race in order to show the gap in proficiency scores and to observe whether or not Black students made more significant growth than White students. Data came from data officers at the district headquarters and included data that came from MAP reports provided to school leadership and staff. In some subgroups during specific years, data was suppressed (withheld) due to the low number of students (fewer than seven) within the group, in an effort to protect the students' privacy.

I analyzed MAP data from the 2013-2014 school year until 2016-2017 using graphs and charts populated with achievement data from the MAP Reading test. Chart 1 shows a consistent trend among subgroups - White students consistently scored higher on MAP than other subgroups. White students consistently scored higher than the mean of the school and never scored lower than a minority subgroup in any year. Meanwhile, Black students consistently scored the lowest across subgroups for each year. In order to analyze the data trends and observe change over time in the whole school and in subgroups, I also disaggregated out data to show the specific difference between the scores of White students and students within each additional subgroup, in order to note how wide the gap between White students and students of color was for each year. Later, I took a closer look at one specific grade level, third grade, to observe how one year of testing changed over time.

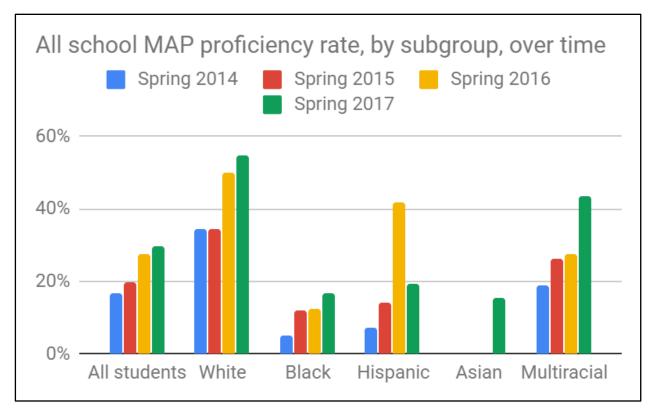


Chart 1 - Student achievement data over time by subgroup

I analyzed third grade MAP data from 2013-14 to 2016-17 using graphs and charts populated with achievement data from the test. While the populations of some subgroups during specific years required their data to be suppressed (withheld), the trend from the available data is still apparent. Chart 2 shows a consistent trend among subgroups - White students consistently scored higher on MAP than other subgroups and Black students consistently scored lower than other subgroups. This was already a known piece of data and was part of the reason for the study, therefore I dug into the changes over time in achievement data growth for each subgroup in the whole school data.

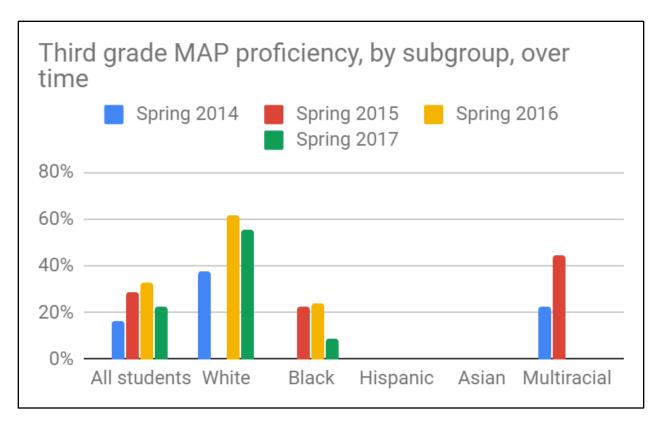


Chart 2 - Third grade student achievement data by subgroup over time

In order to reduce the likelihood that sample size is impacting the data or that withheld data is affecting the trends, we can look at the school as a whole. By taking the difference between White students scores and the scores of Black and multiracial students at each year marker, I could identify the growth made by each group as compared to the growth made by White students. In Chart 3 the performance differences among subgroups is made clear by line graph. The difference between White students and Black students is the highest among subgroups and grows significantly across the graph, beginning at about 29% higher proficiency in spring 2014 and ending at about 38% higher proficiency in spring 2017. The graph has a steady upward trend that shows the gap between White students and Black students widening by 9% over the four years. The graph illustrating the difference between White students and multiracial students is much less predictable. In fact, in 2015 White students only outperformed

multiracial students by 8%, but then in 2016 White students outperformed multiracial students by nearly 22% (discussion on this trend later). The overall trend of the difference between White students and multiracial students' performance is positive for the four years, meaning that the gap between the two groups grew larger with White students outperforming multiracial students.

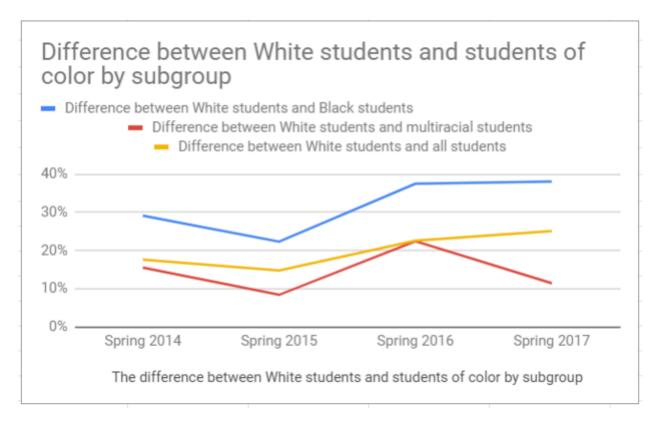


Chart 3 - Proficiency difference between White students and students of color by subgroup

If our null hypothesis, that there is no difference between White students growth and Black or
multiracial students' growth were true, the graphs above would be closer to the x-axis or would
at least be approaching it and a value of zero. Because the trend line for Black students and
multiracial students is positive, the gap is actually getting larger. Meanwhile, the trend line for
the performance of White students as compared to the school as a whole is also positive and has
a fairly level slope, showing that White students as a subgroup are outperforming the rest of the
school's average proficiency rate and are increasing the margin by which they do so, from a

difference of 18% in 2015 to 25% in 2017, an added change of 7% more growth for White students in just four years' time.

Now let's consider third grade proficiency rates for Black students and White students. During the years 2015, 2016, and 2017 Black students' proficiency rate was above zero (rates of 22%, 24%, and 9%9), unlike in 2014 (0%). However, according to Chart 2, Black students actually decreased in proficiency (from 24% in 2016 to 9% in 2017) by 15%, a more than 60% decrease in proficiency rates, while White students also decreased but by a much smaller margin (62% in 2016 to 56% in 2017) of 6% or about 10% decrease in proficiency. So while both groups decreased, Black students' loss of proficiency rate was more than six times that of White students. This widening gap is shown in the upward trends of the school wide "Difference between Whites students and Black students" line also the "Difference between White students and all students" line; not only were White students making larger proficiency gains than Black students, they were also making larger gains than the rest of the subgroups (Asian, Hispanic) in the third grade at the school and as a whole.

It is not possible to call out third grade data specifically in looking at differences between subgroups because the population size in several subgroups is below the suppression limit (seven students or fewer in the category) meaning that the data is suppressed to protect student privacy.

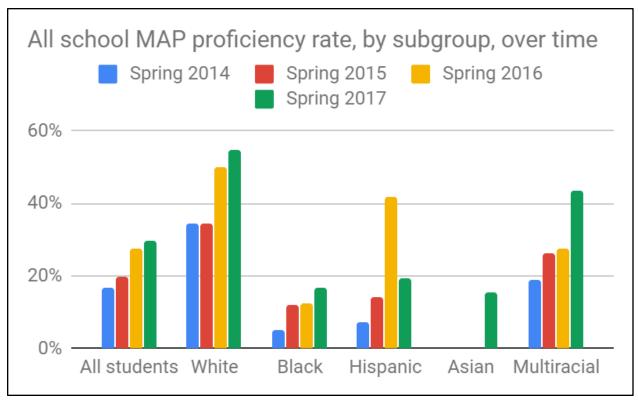
In Chart 1 it is clear that across the subgroups, the school is making growth in proficiency; all but one subgroup has positive line from 2013-2014 to 2016-2017. Hispanic students saw a rise from 2014 to 2016 and then decline in 2017 which may or may not be an anomaly, depending on results from 2018. Asian students had few data points in any charts because of their small population size. When the data for Asian students became large enough to

⁹ For a complete chart of numerical data, see Appendix L.

no longer be suppressed (in 2017) the rate of proficiency for this group was the lowest among all subgroups (15%). This low proficiency rate may be due to the small population size of the group in general and may be more largely linked to the growth in the group's size over the course of the study (from fewer than seven students in 2014 to 25 students in 2017) over the four years, coupled with the population change over those four years from being relatively unrepresented to a small portion of the population (7.7% in 2017), without any additional culturally-relevant staff training to accompany the population growth. Nancy said:

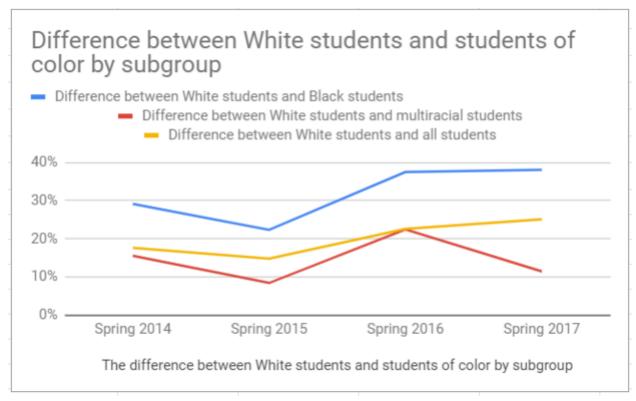
One thing we haven't done at all is PD around ELLs, so that's a big deal especially if you've never taught them before and that's something that needs to be looked at. It's interesting because we didn't have an ESL program for years and years and then all the sudden here it is but [no PD] (Nancy, personal communication, February 8, 2019).

However, the focus of an ELL instructional gap is noticeable primarily in non-Spanish-speaking populations because the majority of ESL programming and support is for students who speak Spanish at home, meaning that the staff has largely been left to determine best practice for students from other language subgroups, noticeably Hmong-speakers.



Review Chart 1 - Whole school MAP reading proficiency rates by subgroup over time

As previously stated, White students show higher rates of proficiency across years and across subgroups. It is then helpful to look at the changes in the differences between the rate of proficiency for White students and students of color (Chart 3). Chart 3 shows an overall upward trend in the gap between White students' proficiency rates and the rates of students of color. White students and Black students have the largest gap, a gap that is getting larger each year. While all subgroups (except Hispanic, according to Chart 1) made proficiency gains over the four years, the gains disproportionately affect White students. White students gained 21 percentage points (from 34% to 55%) in proficiency over those years while Black students' proficiency rate grew by just 12 points (from 5% to 17%), leaving White proficiency scores pulling away from the school average growth of 13 points (from 17% to 30%) over that time.



Review Chart 3 - Difference between White students and students of color by subgroup

Multiracial students consistently have the closest rate to zero of any other subgroup, meaning that multiracial students' scores are closer to White students' scores and have the smallest gap between the two groups. Why this phenomenon exists is unclear. At Dakota it may be due to test-taking population sizes (Black students are the largest subgroup averaging 43.3% all years, followed by White students (24.9%), and then multiracial (14.0%), Hispanic (12.4%), and Asian (5.9%)) and the relative weight each group carries in creating the average score (each student as a percent of the group's score differs by subgroup). It may also be that Dakota Elementary is part of an interesting educational finding by the Brookings Institution (Rothwell, 2018) that shows that multiracial students typically scored at the same levels as White students on standardized tests, although their conclusions about why are still fairly hypothetical. The study's author, Rothwell, said:

As of 2015, there is no test score gap between white and multiracial high school students; an important fact that, to my knowledge, has never been documented. My analysis is of data for 12th grade students from the National Assessment of Education Progress (NAEP). This is the largest nationally representative sample of cognitive performance in the United States, with approximately, 47,000 students (1.5 percent of all students) in public and private schools taking the exam. Of test-takers, about 2 percent (roughly 1000 students) are multiracial. There is no statistically significant difference between whites and multiracial students on tests in science, math, and writing (Rothwell, 2018).

Rothwell presents several hypotheses about why this lack of gap may exist, from socio-economic status to issues of identity and family. However, without any concrete explanations in Rothwell's case or Dakota's, further investigation must be done to determine the root cause for certain.

Analysis and interpretation of changes in data

By integrating the three data sources (interview, observation, standardized assessment), we can determine the effects of race- and equity-focused teacher PD. While student academic achievement according to the MAP test has been growing over the years of race- and equity-focused PD, it has been slow. Clearly something that Dakota has been doing is boosting achievement scores because most subgroups have experienced gains in proficiency rates. As Nancy noted while reflecting on the school district initiatives to integrate academic vocabulary and increase teacher skills around literacy practices:

You raise the bar in every content area and I think the district initiative with all of the close reading and work around shared reading and Common Core in general, all of our boats have been lifted. We have been so much more thoughtful about what we're planning, what we're actually teaching and actually having kids do. It's been really powerful and I believe that ties into the whole race and equity piece enormously. Being mindful that kids can actually access things that are challenging and they can tear them apart and they can dive in, even very young kids, and at the same time that you're building foundational skills (Nancy, personal communication, September 13, 2018).

However, there remains a large gap between White students and students of color in performance on MAP tests, and the gap is growing. So while practices that have been implemented at Dakota have indeed "lifted all boats," they have not lifted them by the correct ratios. Patricia directly addressed this need saying:

Who has made adequate growth? Growth is not enough, it has to be enough growth... Everybody needs to sit with their data and reflect on who has moved enough, who hasn't and then why because I think it's a very predictable thing on who has moved enough and who has not (Patricia, personal communication, January 9, 2019).

Patricia suggested that if teachers examined their classroom achievement data it would be obvious that certain groups of students (particularly students of color) were not reaping the same academic gains as their peers and that this discrepancy needed to become a focus. As Black feminist scholar Anna Julia Cooper said about reducing gender inequality in schooling, "Not the boys less, but the girls more" (Cooper, 1892, p. 79), at Dakota, the same principle needs to apply for students of color - White students should continue to grow and achieve, but students of color need an extra push. In other words, to the White kids not less, but the Black kids more.

One clear and continuous refrain from participants was around the balancing act that is PD; how hard should facilitators push the staff to learn and integrate new ideas into their practice while remaining realistic about how much they can possibly retain during a brief PD session?

According to Nancy, planning and follow through on implementation of the planned PD was:

Where it falls apart actually. I think we are really good at having annual plans. We have an idea of what concepts we want to address, the links we see to the everyday work, but then it goes back to that things get planned at the last minute, they get thrown together...and some of the people who are doing the planning and delivering stop short. They're hesitant and uncomfortable to really go there, including our principal...so that message from the top is this isn't actually important to me, or I'm uncomfortable with this. So there's always that sort of disconnect between the people on the committee who are passionate and really see this work as a mission and the verbal message [from the building leadership] that "yeah, yeah, I agree" but in fact the behavior doesn't demonstrate that...I can't complain because I haven't been doing a lot of the presenting but I do know that there are people doing it who are uncomfortable with going that next step; making the staff uncomfortable when in fact that's exactly what we need to do. Our kids are uncomfortable. Our families are uncomfortable, so it's ok for us to be uncomfortable (Nancy, personal communication, September 13, 2018).

On the Race and Equity team, the goal is to proceed with new learning and push staff to become uncomfortable in order to learn and grow. School leadership needs to be ready to support leadership, teachers and staff who are ready to "go there" in discomfort. However, these eager participants cannot "go there" without going against the direction of the school currently. The

principal cannot push forward an agenda that those in direct contact with students everyday will not enact if they are not part of the group that is ready to "go there." Currently, the staff is divided into those who are ready and those who are not, and the principal is stuck in the middle on how to proceed. All staff and leadership needs to be on the same page about goals and pacing (Lantieri, 2001, p. 12). Kim acknowledged this tension saying:

[This year we] have had the opportunity to have more self-reflection, but [it's not about] leaving it there, actually having more action which is the direction I'm hoping to be able to go for the remainder of this year and then next year. I think that was one of the frustrating things for some people that want us to go go go go, like ok, we're done reading articles, and talking about what it's supposed to look like, what changes are we going to make if we're going to make this happen? (Kim, personal communication, January 17, 2019).

However, Nancy stated, "[The Race and Equity committee is] constantly being told no [by school leadership] we can't do this big idea because we have to take all these baby steps first, but we're continually taking all these baby steps so we never get to the big ideas as a school" (Nancy, personal communication, September 13, 2018). Perhaps these small steps are having the unintentional side effect of increasing the gap between White students' and Black students' proficiency on MAP; insisting on slow growth in order to make teachers (and primarily White teachers) comfortable may be reinforcing the White supremacy that created the gap in the beginning, by allowing White staff to be slow in changing their practice, not only are Black students directly affected academically, but White ways of being are privileged, which is seen by students and reinforces the narrative that school is for White people, and its eurocentricity is self-perpetuating. In fact, Singleton and Linton (2006) say that "gradualism or support for

incremental change is a major reason for the permanence of institutionalized White supremacy" (p. 223).

Nancy's point is directly in contrast to feelings and thoughts from several teacherparticipants and to tensions addressed during the EOS observation of the PD planning team. Nancy is ready to push equity learning into uncomfortable spaces, many staff members are not willing to engage in uncomfortable discussion, and the PD planning team itself is split on how much to push. Meanwhile, school leadership is straddling both sides of the line; personally leadership is eager to push for equity at the center but is professionally held back by what the school district requires and what the rest of the staff needs. During the final observed Race and Equity team meeting members heatedly debated the value in using PD time to teach Black history. One faction of the group, primarily staff of color, insisted that if staff are not interested in conducting their own learning outside of PD, using all of the resources and tools that the PD and Race and Equity teams have provided for them, perhaps Dakota is not the appropriate school for them. The other faction insisted that teachers are already strapped with too many directives and tasks and asking for them to guide their own learning on a subject that they have been intentionally undereducated on in their own schooling is asking too much. At this point the staff of color spoke directly to the undercurrent of racial tension in the building and in education at large - that for White teachers learning about race is a choice but for staff and students of color, racism is the reality of existing (personal communication, January 14, 2019).

Participants addressed their need to have more concrete examples and practice with race and equity strategies in their teaching. For example, Donna said that what she needed from future PD was: "I think, time to apply what we want to do, or the practices, like having time actually apply it or sit down and plan out how you want this to look in your classroom, so application

time, to me, is huge" (Donna, personal communication, September 12, 2018). Nancy's differing viewpoint and willingness to jump into more intense equity work is likely a reflection of her own equity work and time spent confronting her own biases over her more than 30 years teaching. For teachers who are just beginning their journey, Sleeter says that they need to "broaden their own education before they try to broaden that of their students" (2005, p. 92) because failure to do so tends to develop teachers who use stereotype and generalization of culture (the food, festivals, and famous men approach (Coelho, 1998, p. 201)) instead of deeply investigating the culture in which they are situated and to which they must become responsive. In fact, Sleeter says that a common practice of elementary school teachers, to layer on or add in multicultural education via pictures books is detrimental: "Relying on children's books as the primary source of knowledge would be like relying on Cliffs Notes for background to teach Shakespeare" (2005, p. 92). Instead Sleeter recommends that teachers do their own research and locate sources with diverse perspectives in order to create a nuanced and robust understanding of non-mainstream (i.e.: noncurricularly privileged, non-White) cultures. All of this takes time and support from teachers and those who are members of the non-dominant culture, in pushing White teachers to develop fuller understandings of the cultures present in their schools.

In addition to time, many participants asked for direct feedback on their practice and their implementation of new PD learning around race and equity. Donna continued talking about her needs in effective PD and said she would like:

Even somebody observing me and just noting what they notice and what could be improved with race and equity practices...I want feedback. We're supposed to give our scholars feedback. I think teachers want feedback too so that they know the avenue that they can go down; like I'm doing well with this, here are some

things you could do better with. I think feedback is really important for self-growth (Donna, personal communication, September 12, 2018).

Linda agreed with this sentiment, saying:

Sometimes like, you know, [I need someone to] put your finger on it. Tell me what I'm doing, exactly what I'm doing and what I need to do and I guess you can't really do that cause everybody's different...we're all doing different things in our classrooms. I would love for somebody to come in and tell me "Oh my gosh, you're doing this and this is what you have to do differently" but those are all things I have to be aware of myself (Linda, personal communication, August 24, 2018).

Even school leadership had faith in the power of effective feedback. Kim agreed that feedback is an essential component in teacher growth. One of Kim's professional goals for herself was:

Continuous feedback; making sure that staff have that feedback on a continuous basis...really feedback that they can use and having it be in a way that they can reflect on their teaching and how they can improve as well (Kim, personal communication, September 5, 2018).

While much of the staff is on the same page around feedback, one caveat to highly effective feedback, as pointed out by the leader, Kim, above, is that it is time consuming. Kim theorized that in order to provide the feedback she would like to give staff it would require her to, "actually schedul[e] out when I'm going to be in classrooms and having particular things that I'm going to look at so that my feedback can be focused" (Kim, personal communication, September 5, 2018). At the end of the study Kim still cited feedback as an area of growth for her own practice saying, "I'm continuously working on [giving staff more feedback] and it's interesting because that's

what we're working on with students and it's an area that I know I need to grow in myself is feedback" (Kim, personal communication, January 17, 2019). School staff and leadership knew that feedback could be very effective at making changes to teacher practice but also recognized that good feedback takes time, and time is not something that Dakota has in excess.

Nearly every participant mentioned that (lack of) time was a major stressor in their job and was often a roadblock to reflection and improvement. Therefore, Dakota is at a crossroads; either they decide to proceed as planned with race and equity work but determine whether to take more surface-level and quick course in order to keep the group moving forward or else go deeply into topics, give time for teachers to process, integrate, be observed, get feedback, reflect, and change again, or Dakota needs to reconceptualize what race and equity will look like in the school. If they decide to pause and reconsider their equity pedagogy, they will need to determine if they are truly putting race and equity at the center of all of their work and not as a standalone section of PD; in the words Nancy, it has to "flow through everything that we do" (Nancy, personal communication, September 13, 2018) and truly be everything that they do, instructionally and otherwise. Singleton and Linton theorized that giving time and space for conversations about race were the first step in transforming a school into using equitable practices. Having time to self-reflect and have conversations about race helps the staff understand what they don't know and creating this awareness makes space for new learning (in PD). Therefore, PD doesn't have to flow from some greater source of all knowledge about race and equity (which is not only an unrealistic expectation, but is paralyzing for planners of PD), it just needs to follow the needs of the honest and open staff conversations. PD doesn't have to have all the answers, it just has to provide a space and a staff with a willingness to converse about uncomfortable topics. By regularly having these challenging conversations, open dialogue

can be built into the foundation of the school, which in turn changes the culture of the school and changes the school's equity vision to be truly equitable, organically and from staff direction.

Part of the challenge in having courageous conversations is to keep the focus on race and not veer off into other tangential topics, such as poverty, family, or behavior. Poverty came up as a topic in interviews throughout the year and across several participants. Participants cited a PD session that veered off into discussion about trauma as a particularly memorable and nonproductive learning period. Instead of building staff awareness around race and equity issues during that PD session, several staff members and participants were left feeling like outsiders to the PD session for the way that their discussion around trauma was misinterpreted. During this PD session participants, rightly or wrongly, brought up trauma as a factor in how students interact with school and their words were taken out of context, making them appear to be blaming trauma for student's academic failures. The lack of understanding of the staff as a whole about race as a concept allowed this incident to divide the staff and create huge tension within factions of the staff for weeks following the PD. In this case, staff and PD planners needed more knowledge about race in order to dissect the fine details of complicating factors before addressing race as a larger topic. Singleton and Linton (2006) said that often, challenging conversations can "drift off into topics about which people feel more knowledgeable" (p. 88). The way to avoid this distraction from race, Singleton and Linton say, is that staff should agree to "isolate race" (p. 88) and practice doing so repeatedly and throughout conversations. This implies a deeper cultural shift at the school, in order to establish the commitment to engage in uncomfortable topics that staff feels they know less about.

In order to allow race and equity practices to "flow through" everything that the school does, the staff needs to reconsider what culturally responsive, equitable teaching looks like.

Several participants recognized the "surface level" definition of CRP and included concepts such as participation protocols, classroom literature that is reflective of the students in the class, discussion protocols, code switching, and generally building and understanding of students' home culture and personal needs and interests. However, several staff members - but, importantly, *not* all - included on this list academic press and rigor to achieve equitable outcomes. Nancy spoke to this point when describing her planning, saying she had to consider relevance while also:

You're balancing things like, you gotta know your letter sounds, but that's also an equity piece; if you don't know your letter sounds you're not going to learn how to read. So deconstructing what it means to teach in a culturally responsive way so that it's not just about the stuff that people automatically assume, but it's also about high quality, really intentional instruction and expecting kids to measure up, expecting them to meet me so that they're moving forward. That's really key; nobody gets to slide. So kind of understanding that, that it's not just your call and response, it's that you're actually expecting kids to do work that's meaningful and challenging and brain-building (Nancy, personal communication, September 13, 2018).

While the school started the year able to easily identify clear CRP approaches to teaching, whether surface-level or deeper, as the year went on, teachers were observed using fewer CRP strategies in their teaching. For example, during the first round of teaching observations Nancy and Pam included movement breaks throughout their instruction, asked deeper-level questions that provoked critical thinking (such as "How do you know?" or "What questions do you have? What do you need to know so that you can do this center? What don't you understand?"

(personal communication, October 18, 2018; personal communication, October 18, 2018), and offered more differentiation to students via center choices and varying levels of support throughout the instruction. Observation notes from the beginning of the year included this finding: "Students were all cold-called but the questions differed (some got no prompt but were expected to respond, others got a direct question followed by prompts, others got direct question with no prompts)" (personal communication, October 18, 2018), indicating that all students were being held to high academic standards but were being offered scaffolding to reach those high expectations. At the EOS teaching observations teachers were holding students to high expectations but to paraphrase one observed teacher, Donna, the expectations over the course of the year had necessarily been adjusted to better respond to the high needs of the class. Donna stated that the grade-level team as a whole has been forced to remove some of the choice inherent in the curriculum and add in more teacher-directed work places in order to better suit the needs of the class, both behaviorally and academically (personal communication, January 22, 2019). Additionally, the use of participation protocols that were commonly cited in BOY interviews were showing up less frequently in mid- and end-of-study observations. However, the planning around culturally relevant literacy resources was consistent. Overall, the beginning-ofyear CRP focus had begun to fade both with surface-level CRP strategies and with the intensity of academic expectations.

If Dakota Elementary intends to grow beyond its ever-widening gap, it needs to make some reflective changes and determine what it considers most important for students and whether it is allowing equity work to have a big enough role in that. It will be about moving beyond equity PD, and toward equity-infusion within all aspects of the day and school community. It will be about approaching students from a culturally appropriate stance, inviting

them into learning in a way that makes sense to them, overhauling the curriculum to be both engaging and challenging for *every* student, and then getting feedback on the changes. And then doing it all over again to complete the model of change.

In addition to using CRP in daily practice, several participants spoke about making students into "change makers" who would advocate for social justice. Donna discussed how students in older grades could be having conversations about social justice. Nancy discussed how social justice should be brought into the curriculum in kindergarten through fifth grade (the highest grade at Dakota) and that it should "spiral" so that students wouldn't learn the same things each year but that each grade's social justice learning would build on previous years'. Wise wrote about the importance of social justice work for children because of its ability to empower, not victimize or guilt. Wise said:

One of the things that might help in the future would be to teach about [Martin Luther King Jr.] and the issue of racism and discrimination through a lens of resistance and allyship, rather than a lens of oppression and victimization.

Imagine...how different it might sound to a student of color to hear about the oppression meted out to members of his or her group, but beginning with a narrative of rebellion and resistance...By beginning with resistance and allyship, both the students of colors and the white students get a message that they have choices to make. The students of color do not have to be passive recipients of other people's mistreatment...and the white students are more likely to see that they needn't be either active oppressors of others or passive bystanders, standing on the sidelines while people of color have to go it alone (Wise, 2011, p. 264-265).

While teaching in culturally responsive, surface-level ways (protocols, text selection, inclusion of student interests, etc.) and in academically rigorous ways with high expectations is a good place to begin, teachers must also change the narrative for their students and begin to cultivate a sense of personal efficacy in creating change, or at least continuing to agitate for change by thinking critically about the ways of being that are privileged in schools and in society.

Traditionally, for schools' working to implement culturally relevant pedagogy in order to affect students and student achievement, "best practice" has been to use the "surface level" practices mentioned by participants, adhere to high expectations for all students, and connect to issues of social justice outside of the classroom (Byrd, 2016). Byrd's nationwide survey of 315 middle and high school students from four equally-represented racial populations (White, Black, Latino, and Asian) questioned students to reflect upon the culturally responsive practices used during their educational experiences (or not used). Byrd found that:

Teaching methods that connect with students' real lives and interests and promote understanding of other cultures are associated with better academic outcomes. In addition, encouraging students' understanding of their own culture and raising awareness about racism and discrimination is related to students' ethnic-racial identity development (Byrd, 2016, p. 7).

A case study (Ware, 2006) of African American "warm demander" teachers with high levels of success for their Black students also found several common characteristics of these successful teachers. Teachers had high expectations of students coupled with nurturing and caring relationships in which students felt seen and heard. Teachers related to their students in ways that matched with students' cultures and identities (in this case teachers shared the racial and cultural background of the students - at Dakota this is not the case most often) and support their students

in their racial and cultural identities. Finally, teachers used practices in their daily teaching that was culturally responsive to their students. Ware summarized saying:

Teachers who skillfully use warm demander and culturally responsive pedagogies and have a strong sense of racial identity can create a new classroom culture. This culture supports African American students who actively respond to the warm demander teachers' high expectations by embracing a culture of achievement (Ware, 2006, p. 453-454).

In studies performed by both Ware and Byrd, as representatives of the field of research on CRP and academic achievement, teachers who used culturally responsive practices and had high expectations, while also connecting to life outside the classroom had success in bolstering the achievement of Black students.

At Dakota, staff has built an understanding of the importance CRP, is working on boosting their achievement expectations of all students, and is beginning to connect these inschool practices to larger works of social justice participation in the real world. Dakota seems to be on the right path but hasn't truly taken off yet.

In other studies of schools that faced large achievement gaps, Singleton and Linton (2016) espoused the use of their "courageous conversations" as both the starting point and as a continuous source of professional growth. At the Chapel Hill-Carrboro School District, courageous conversations over the course of five years helped the school move from being a good school district for White students to being a good district for all students, and improved their achievement test scores to 94.2% proficiency rate that included all students and subgroups (Singleton & Linton, 2006, p. 32). Meanwhile, the Del Roble Elementary School in San Jose California used courageous conversations about race to close their achievement gap in just one

year (Singleton & Linton, 2006, p. 37). Courageous conversations at both of these schools included deep discussions around race; developed staff understanding of race and institutionalized racism; and pushed staff to critique the school systems, who they were serving, and how they could be improved to serve all students. These conversations were undoubtedly uncomfortable and required staff to step into a "brave space" (as referenced by participantleaders Kim and Sandra (Kim, personal communication, November 28, 2018; Sandra, personal communication, January 25, 2019) but forced participants to push beyond current ways of thinking. These critical thinking skills formed out of the time given to have challenging discussions under the schools' united equity vision for all students. They also insisted upon teaching the whole child, not pitying or lowering expectations, but considering all aspects of the students' background, ways of learning, culture, and educational needs (developmentally appropriate practice). At the core of all of this work, courageous conversations relied on the strength of staff discussion, peer observation, and staff insight into their own school, built on a foundation of understanding race and racism. As Singleton and Linton imply, there are no easy fixes or "solutions" to institutionalized racism but that "the solution is revealed in the dialogue itself...we cannot discover a solution to a challenge if we have not been able to talk about it" (Singleton & Linton, 2006, p. 64). Additionally, Singleton and Linton say that "anti-racist leadership is not just playing a role; it is a deeply transforming personal experience" (p. 262), meaning that true equity work comes from transforming the practitioner, not just the practice. Johnson says, "Teaching for liberation and human freedom is soul work — that is, it requires a deep excavation of the self(ves)" (Johnson, 2017, p. 481), and thus cannot be "solved" with a standard formula. Ladson-Billings (2008) agrees, saying, "[a] staff professional development session typically ends with teachers unsure of what they can or should do and eventually

defaulting to regular routines and practices" but that "instead of the specific lessons and activities that we select to fill the day, we must begin to understand the ways our theories and philosophies are made to manifest in the pedagogical practices and rationales we exhibit in the classroom" (Ladson-Billings, 2008, p. 163). Ladson-Billings and Singleton and Linton imply that the real work of creating changes in teacher practices requires that teachers feel empowered and embroiled in the reality of CRP. When teachers engage deeply in CRP work they engage in an identity shift that no longer requires "solutions" and is driven by the practitioners themselves, not a curriculum or an expert outsider. The way that Singleton and Linton suggest engaging in CRP work that affects teacher identity is through conversation. Thus, it is through these courageous, generative conversations that staff "speak their truth" and help to reveal the true strengths and challenges of the school, and it is from these revealed strengths and challenges that effective PD can spring, new discussions can emerge, and school structures can be examined.

In addition to showing holes in staff knowledge, emergent PD design allows content to be responsive to changing theory and pedagogy around CRP. Ladson-Billings (2014) found deep flaws in the current conception of CRP as static, and instead suggested that it should be "culturally sustaining pedagogy" (Ladson-Billings, 2014, p. 81) and needs to evolve as cultures, students, literacy, etc. evolve, but while retaining critical thought and social justice as the basis. Ladson-Billings said that this critical lens from culturally sustaining pedagogy "allows for a fluid understanding of culture, and a teaching practice that explicitly engages questions of equity and justice" (p. 74). There are no easy answers in teaching and so the question of how to best provide CRP PD must be answered in an equally complex and exploratory way. Additionally, Singleton and Linton suggest that the need to have simple solutions comes from a White, task-oriented perspective that caters to the needs of the White staff. They contrast the "White Talk" "need 'to

do' something and to find solutions" (2006, p. 123) with the "Color Commentary" "need 'to be' respected, validated, and affirmed" (p. 123) pointing out that while White staff will feel a lack of closure in not having a set of steps to take next, having discussions that open up space for staff of color to reflect their experiences will create an equitable space for staff dialogue, not dominated by White ways of conversation.

Implications

The implications of the results of this study tell us that while race- and equity-focused PD does make a difference in the way that teachers plan, think, and teach, the effects that it has on students are slow-growing and inequitable. However, slow growth does not mean no growth, and inequitable growth is still improving outcomes for students of color. Over the studied years that Dakota has been implementing race- and equity-focused PD they have seen a 13 percentage point growth in student proficiency in reading. This growth is 24 percentage points for multiracial students, 21 percentage points for White students, 12 percentage points for Hispanic students, 12 percentage points for Black students, and an unknown percentage for Asian students due to sample size. This means that the White and multiracial students are receiving the biggest benefits from teachers' work around CRP, while Hispanic and Black students proficiency rates are growing but are not experiencing the same benefits as White and multiracial students, and the impact on Asian students is unknown. Overall, Dakota is improving student reading achievement scores on the MAP test but they are not closing the gap for Black (or Hispanic) students, in fact the gap is getting wider. This widening gap suggests that while Dakota is making strides for all students, there is something that they are missing in targeting the growth of the most historically and currently minoritized group among them, Black students. Something that Dakota is doing is working but there is also lots of room to improve.

Limitations of the study

This study was conducted via case study. It was a mixed-methods study that minimally incorporated quantitative data to assess the academic achievement of students prior to the study. Due to the reliance on previously-collected data, the large-scale collection of targeted data on achievement by various groups that may have been more relevant to the study was absent. For example: data that measured student attitudes toward teacher practice and student achievement data aggregated by students' length of enrollment at Dakota (had they seen the shift in PD focus and if so, did it impact their scores?). Additionally, due to the scope of the study a more robust analysis of the context was absent; I could not interview or observe teachers at all grade levels but had to focus on primary grades for time purposes. Finally, because students were not involved in the study it is impossible to understand whether or not they internalized or observed teacher shifts in practice, leaving a large area of the research unexplored. As Kozol states in Savage Inequalities, "the children often are more interesting and perceptive than the grownups are about the day-to-day realities of life in school" (Kozol, 1991, p. 5-6). Kozol realized that the students are best able to speak to what happens in classroom every day because they are there every day, too, and come without knowing about the PD that their teacher may or may not be using to guide her teaching practice. Students' observations are a lot more nuanced and astute than many researchers give them credit for. Therefore, in future and larger studies on this topic student voice will be a necessity to understand then entire context and get the full understanding of life in a classroom. As Freire (2005) said, comprehension involves transaction between the reader and the content, which in this case means that the background knowledge that students bring to the classroom deeply impacts the way that they understand the curricula; teachers need to utilize student knowledge in order to both engage students and build their understandings.

Chapter 6: Conclusions

Significance and generalizability

This study was focused on one, specific site. While this is an especially illuminating way to engage in case study and to deal in the specifics of the site, limitations of the study include its specificity. While habits and techniques used at Dakota may be applicable to other schools, it is impossible to determine without expanding the scope of the study to more diverse settings.

Future research

Future research would do well to incorporate student voices into the conversation. While students are the literal recipients of teacher practice and are thus deeply impacted by it, they are underutilized as sources of knowledge about teacher practice. In addition, given more time and more resources, the expansion of this study into more and diverse settings would increase the generalizability of the findings and help determine best ways to impact teacher practice. Future research should also include inquiry into the unique demographic achievement data of multiracial students. While the research presented by the Brookings Institute (2017) includes a large sample size and generally matches the achievement data trends at Dakota, it is just one study and cannot be held up as a conclusion for multiracial students' achievement as compared to White students. Further, the interpretation of the Brookings Institute study is hypothetical and should be examined further before generalizations are made.

One of the most salient findings of the research came through in both interview data and observation and matches what is currently understood about racially equitable education and learning within the academy: this is challenging work and is not likely to be finished soon or ever. Nancy said:

It's part of everything we do, getting people to understand that, and it's not scary and you don't have a checklist, "Ok, I'm doing my literacy planning, did I do these three things? Check, check." It becomes a way of being and you're never done...We're always going to be learning. We're always going to be struggling with all of this but if we don't do the struggle we shouldn't be doing this work (Nancy, personal communication, September 13, 2018).

Just as the work is never done, the struggle *is* the work, *is* the change. In his book *White Like Me* Wise said, "Maybe the point is not victory, however much we all wish to see justice achieved and injustice routed. Maybe our redemption comes from the struggle itself" (Wise, 2011, p. 269). Wise continued, quoting Desmond Tutu, who said "You do not do the things you do because others will necessarily join you in the doing of them...nor because they will ultimately prove successful. You do the things you do because the things you are doing are right" (Letter from Desmond Tutu in Wise, 2011, p. 269).

Final thoughts

Upon completion of this research study I was able to answer the question: How does teacher professional development around race and equity impact academic achievement for students of color? This question was answered by also addressing the subquestions: How are teachers taking up new learning from professional development within their classrooms? Does teacher participation in race- and equity-focused PD change the way that they plan and implement their lessons? Has professional development-based race and equity learning positively impacted achievement data for students of color since its implementation?

The results of this study and the answers that it provided help determine future directions for research around best CRP practices within PD at elementary schools because it concluded that while Dakota Elementary is making positive steps for all students, their efforts are not closing the achievement gap. In other words, current efforts have been successful in affecting student academic achievement trends by impacting teacher self-concept and practice but not in a way that reduces inequity. Interviews and observations helped to paint a clearer picture of necessary changes by showing what is currently happening and how teachers are thinking about it. The case study approach provided a layer of generalizability because as Longhofer et al say, "a single case has significant explanatory power" (Longhofer, Floersch, & Hartmann et al, 2017, p. 190). All of this data can help the school determine the best way to provide PD in order to make classrooms and the education that their teachers provide equitable and impactful for minoritized students.

The National Education Association (NEA) outlined several factors that contribute to achievement gaps (2017), recognizing factors that are both within and outside of schools' control. While those factors outside of schools' control are not insignificant, focusing on the

ways that schools can affect achievement trends gives more than enough space for growth. Highlights of the NEA's factors include: low expectations for student achievement; "culturally unfriendly" environments; teachers' poor training and cultural insensitivity; and teachers' low expectations of students (NEA, 2017). Many of these themes surfaced during interviews and by recognizing them and creating a plan to address them, Dakota can move forward. Themes and common ideas from interviews suggest a few key steps in moving forward, toward reducing educational inequity at Dakota Elementary:

- Utilize the "surface-level" and "obvious" practices that are associated with CRP.
 This includes using participation protocols, reading culturally relevant texts,
 connecting with home culture, and many other concepts that make school more
 reflective of the students who attend it. The basic tenet of CRP is that when
 students see themselves and feel respected by school they are more ready and able
 to engage in the hard work of learning.
- Have high expectations of all students in their academic growth while providing the necessary supports to make them successful (but not providing so much support that rigor is reduced). The point of school is to learn and to prepare for life. If students do not have the basic skills to thrive in middle school and beyond, then their education has failed them. Setting high expectations and providing scaffolds to achieve these goals is essential. Equitable practice is to maintain high expectations for all students, regardless of how teachers *perceive* them or assume them to be academically. Sleeter (2005) says that the alternative to focusing on basic skills is to focus on developing the process of knowing; that is, to build critical thinking skills and teach students how to learn instead of expecting them

- to memorize decontextualized facts (p. 140). Clearly expecting and developing critical thinking skills requires higher expectations than expecting basic skills.
- Attend to all aspects of the students' life and needs, not just academic. While students needs to be able to achieve at high levels academically, students also need to be prepared to enter a world that does not fit on a standardized test. Brendtro and Brokenleg (2001) says that across cultures and across time there are four universal developmental needs of children (developmental psychologyrelated terms in parentheses): belonging (attachment), mastery (achievement), independence (autonomy), and generosity (altruism) (Brendtro & Brokenleg, 2001, p. 42). While education currently focuses on mastery and culturally relevant pedagogy centers around belonging (seen at Dakota in work around collectivism and building relationships with students), students' needs in the areas of independence and generosity can be addressed by focusing on social skills and even, as Lantieri posits in her book, spirituality (Lantieri, 2001). Lantieri says that emotional intelligence is the ultimate intelligence because it allows all other types of intelligence to function (2001, p. 18). Without independence to feel a sense of self-efficacy and without social interaction to feel a sense of altruism for another being, students' spiritual needs are not being met and their growth in other forms of intelligence (ex: academic) cannot continue. Lantieri says that "at least in part academic success depends on a student's ability to maintain positive social interactions" (p. 17) which are certainly not in any scripted curriculum but are essential to developing well-rounded humans who have self-awareness, know their strengths, and know their limits. Part of CRP is helping students have this

type of self-awareness in context with historical and current inequity. Getting students to build off of this awareness will help them grow and thrive academically because they will have a greater understanding of and confidence in themselves.

Developmentally-appropriate practices in curriculum and daily educational experiences. In addition to building students understanding of themselves and their own strengths and challenges, students should be given the chance to thrive socially and develop healthy relationships with peers. Social skills prepare children for life while standardized assessments prepare them for tests. Currently, we have no gold standard metric for life skills and social skills. However, social skills should not be overlooked simply because they cannot be measured easily. Social justice work hinges on the so-called "soft skills" of empathy, communication, and the ability to disrupt the status quo; skills that are not on any kind of MAP test or multiple-choice assessment. Children learn these social skills throughout the day, throughout the curriculum, and in the spaces between the curriculum. While it is important to utilize a rigorous, high quality curriculum, it is also important that it be developmentally-appropriate and that students are given time to interact with it and outside of it in ways that bolster their social growth. Freire said, "We cannot teach content as if that were all there is" (2005, p. 93), meaning that in addition to rigorous instruction, it is necessary to develop "imagination for life" (p. 93). Typically "play" at school is seen as taking away from instructional time but this is a simplistic view of what play actually is. Since the turn of the 20th century education scholars have touted the necessity of play in

education as a source of learning (Payne, 1902). Today, play is seen as an important factor in developing children's cognitive skills and contributes to their social, emotional, intellectual, and physical well-being (Undiyaundeye, 2013). There have been studies that show play (via video games) can be a productive way to teach social justice skills and empathy to high school students (Wartenweiler, 2018). Play allows students to try out and practice interactions in safe environments before enacting them in their real lives, giving students extra practice in building social and emotional skills with supportive staff to guide them. Schools are beginning to recognize the value of social and emotional development in students as it prepares them for life outside of school. Appleton East High School in the Appleton School District in Wisconsin is rolling out a new component of their middle and high school report card this year, one that features "Career and Life Skills" and is grounded in student performance around three concepts: Acts Responsibly and Respectfully; Communicates Effectively and Works Collaboratively; Thinks Critically and Creatively (Mineau, 2018). The district includes a rubric for assessing on these points. While not all schools or districts are making this shift into the viewing the so-called "soft skills" of socialemotional learning as worth assessing on formal report cards, the fact that at least one school is making the transition suggests that it is no longer an easily dismissed add-on; this school is placing value on the skills that students learn outside of the curriculum and assessment material. In elementary school, many of these soft skills are learned in play, outside of boxed curriculum that focuses on boosting achievement data. Therefore, in order to meet the changing needs of

what it looks like to be career/community/college-ready, schools need to consider ways of building in play and time for social interaction. While the current operation of school is best suited to meet the social-emotional needs of White students, guiding Black students to be well-rounded future participants in democracy may be best addressed by African-centered pedagogy. Delpit's (2013) discussion of African babies' outperformance of European/White babies on developmental and cognitive tests demonstrates the utility of letting students learn in the highly successful tradition that naturally fits their history and culture. African-centered pedagogy was highly successful with the studied African babies but is nearly non-existent in American classrooms. Instead, we have "culturally relevant" discussion protocols, and call-and-response chants, etc. Why do schools constantly try to bandage a White system to fit Black students? Currently, schools are giving all students a White, Eurocentric education because that is what is most familiar to the majority of teachers and as Delpit says, believing that Black students simply are less capable means that teachers "don't have to change [their] lesson plans" (p. 7). Perhaps what is truly necessary is not making lesson plans culturally relevant, but reinventing education as a whole.

• Create a vision for students who are change makers in their communities and push this message forward. As seen in research by Byrd (2016) and Ware (2006), teachers not only need to have high expectations and use CRP in their classrooms, they also need to connect learning to students' identities and lives. Additionally, Roerden (2001), quoting research by Berman (1997), says that "positive social action was 'less about moral principles and more about the sense of self as

connected to others and to the world as a whole" (Roerden, 2001, p. 64) and it is this interconnectedness to the larger world that makes students participate in social change. By positioning students as the future leaders of the world, with decisions to make about what justice looks like and what interrupting injustice will feel like to them, teachers can create in students the social justice action that completes the three-part pedagogy (passion, practice, and persistence (Singleton & Linton, 2006)) of true CRP for academic achievement.

Determine the focus of the school. Members of the school Race and Equity committee were unflinching in their assessment of Dakota's goals and progress. They referred to their beginning-of-year goals for staff development and monitored their progress against it often. They felt that although the school had grown, there was much work left to be done to close the achievement gap and ensure educational equity. According to Nancy, the school is unable to meet its goal because there is no single, guiding principle that steers it toward the finish line when the waters get murky (like in the middle of the school year when the staff is overwhelmed and exhausted). Nancy's suggested guiding document is a vertical articulation of race and equity practices that are taught at each grade. This is one solution but it is not the only solution. What Dakota needs, in essence, is a recommitment to the cause of educational equity. Dakota needs to determine if equity is a lens through which to look at the work or, as the participant said, if it is the work. Determining that equity is the work means that the curriculum needs to be reexamined and either drastically altered or replaced. It means that conversations around student achievement need to be reevaluated for bias and

reformatted to focus on objective data. It means that Dakota needs to select highly engaging, rigorous work that expects the same work from all students, and then they need to hold all students accountable for the work, without creating excuses for why certain kids should achieve less. It means that sometimes Dakota needs to defy the wishes of the school district in favor of what it knows to be best for its students. Dakota needs a wholehearted recommitment to equity that includes every member of the staff, if they choose to remain on staff. Singleton and Linton express why this recommitment is essential in reframing the school's mission by saying, "The collective message from the dominant racial group to people of color is that the problem of race stems from their inability to thrive in 'mainstream' society" (Singleton & Linton, 2006, p. 26), meaning that the way that school currently operates privileges the dominant group and that in order to make it serve all students it needs to be overhauled, starting with the staff. Singleton and Linton say that in order to determine the equity motivation in the school, staff must consider the question: "Is equity really your passion?" (Singleton & Linton, 2006, p. 12), because until every staff member can answer affirmatively, "the children of the school pay the ultimate price for the adults' unwillingness to engage" (p. 60). Education is a political endeavor by nature, teachers need to act in accordance with their choice to educate and remember that the "hidden curriculum" (Apple, 2012) of power and representation is present even when not directly addressed in the overt curriculum. Teachers can use their political choice to teach as a way to do social justice work.

Get all staff to engage in discomfort for equity. Throughout interviews, many participants referenced their fear, anxiety, and hesitation to engage in discussions of race and equity. Other participants emphasized the contradiction in making children engage in culturally, linguistically, and socially inequitable and offensive practices every day at school while staff had the gumption to choose not to engage in challenging or uncomfortable conversations. Singleton and Linton capture this contradiction and describe why it is necessary for White people to engage in courageous conversations that make them fearful and emotional. They say:

It is important that White people get emotional about Whiteness and invest in challenging White cultural domination. Until White educators experience lasting emotions related to Whiteness, they will struggle to understand why their students of color exhibit such strong emotions around and connections to race (Singleton & Linton, 2006, p. 200)

They say that White people have typically been able to decide when and where and how much they want to discuss race, but that this has never been an option for people of color, and at some point White people need to recognize that their White privilege is also White responsibility; responsibility to engage in challenging discussions wholeheartedly, to examine their Whiteness, to stand up for social justice even when it is detrimental or risky to their own position.

Johnson says:

People of Color do not have the same privilege [to choose not to think/talk about race] —deal with it we must. To engage in true

racial-justice-oriented work, white educators must look deep within and face their own racial ghosts. Indeed, when white educators work against whiteness and racial oppression and work and teach for full humanity and liberation, it requires a metaphorical death. In relation to this notion of a metaphorical death, it is important to note that for more than 500 years, the United States has always aimed to protect whiteness and white supremacist patriarchy. With this being said, white children, youth, and adults are possessed with what Dillon (2012) calls the spirit of slavery—she writes, "The spirit of slavery has its own desires that exceeds our conscious control or thought. But for the demonic to be exercised, you must first know that you are possessed" (p. 123). (Johnson, 2017, p. 483)

And so, in order for White teachers to begin to change their practice toward an authentically culturally responsive design, they will need to take on challenging conversations that they may have previously opted out of; they must understand their privilege and deal with the guilt and discomfort of it in order to move toward real, personal change. It is for this mission that the voices of staff of color should be highly valued and brought to the forefront. While the Race and Equity team is altruistic in its mission and is focused on creating equity within the school, the majority of the team is made up with White women. By honoring the opinions of staff of color and recognizing their experiences, the Race and Equity team will be able to better engage in responsive planning and more nuanced equity work that

does not depend on an outside expert. The White members of the team will have to realize that even as school leaders in the mission toward equity, their own experiences are tainted with privilege. Singleton and Linton say that White people are in for a long and arduous journey toward fully understanding their identity, privilege, power, and responsibility. They reference the Helms Model of White Identity Development (1990) to point out that there will be much conflict, both internal and external, as White people develop in their White identity (Singleton & Linton, 2006, p. 204). Much of the struggle will reside in their emotions, interact with their conception of self, and will engage them intellectually. Staff members at Dakota are at varying points in their White identity development, as evidenced by their responses during interviews. Many staff fall into Helms' "Disintegration" stage, where one becomes aware of racism and privilege and responds with discomfort. By allowing staff to plunge into challenging conversations with staff of color or with staff that is further along in their White identity development, staff will progress along in their development and learn to embrace discomfort as growth.

The results of the achievement data analysis and qualitative data conclusions show that ideas communicated at PD are carried into the classroom. Therefore, if PD designers and planners continue to put forth high quality PD and center it around the points listed above, they will be making greater strides toward closing the achievement gap.

Dakota's process forward needs to be two-pronged: as an entire school and from a PD planning perspective. Their steps are as follows:

- 1. The entire staff (including leadership, the Race and Equity team, teachers, support staff, anyone in contact with students) needs to redefine their mission of equity for all students. The staff needs to be on the same philosophical page as the Race and Equity team, meaning that while staff needs to feel integral to the creation of the staff vision, the fears and hesitations of staff should not hold back the building. The staff needs to redefine their equity vision and recommit to it, privileging it above all other influences (district directives, new curricula trials, etc.) and continually make decisions based on the question: How will this support our equity work? An essential partner to this recommitment is the time to regularly reflect upon it and give staff the time to take it seriously. This looks like:
 - a. Giving staff time for silent reflection on their growth and challenges, and staying consistent in this practice even when time is scarce.
 - b. Giving staff time to integrate new learning into practices and allowing them to admit to failing without being judged, but instead being given support to reflect and try again. An example of such support is offering teachers coaching and team planning that focuses on integrating the new PD learning with a reflective lens on what the teacher has tried so far. This is in contrast to the staff-wide PD discussion incident in October where staff reported out about their discussion, were judged for their statement, and discussion was cut off without probing more deeply to find out what the motivation or actions behind the statement were.
 Instead of that incident being a learning moment it turned into the most divisive PD event so far that year.

c. Honoring the knowledge of the staff willing to lead the work and letting the staff do the research, planning, and teaching of equity issues, without feeling overruled by district or leadership-based mandates that might pull away from the equity vision. Cuban's (1993) study of change in schools and classrooms found that successful reforms "secure the teacher's commitment" (p. 281) meaning that when reform is presented to the staff, teachers need to feel heard and essential in the process; change can neither be entirely top-down nor bottom-up but needs to include a partnership between those in the school office and those in the classroom. Priestley, Biesta, and Robinson (2015) support this idea and say:

If teachers are to achieve agency in their professional setting - which is important for meaningful engagement with policy initiatives...then school managers should carefully consider the relational conditions through which teachers achieve agency, bearing in mind that a collaborative culture to strengthen agency is to a large extent dependent upon the nature and scope of relationships within the school (p. 104).

Priestley, Biesta, and Robinson suggest that effective school reform needs to come from teachers who are invested in the change and that in order to feel invested, school leadership needs to look for ways to include staff in decision-making processes.

The staff also needs the time and space to share strengths with each other. For example, classroom community is a focus and strength of many teachers at Dakota, teachers who create this especially well should be looked to as leaders and allowed to share their strategies. Not all "best practice" comes from a study. As long as staff continues to question: How does this

practice support our equity goal? Teachers and staff should feel encouraged to share their knowledge.

- 2. Professional development can then align with the school's vision for equity because all PD should answer the question of how new learning will support equity work. PD should express a sense of urgency in remedying the present achievement gap (or opportunity gap as is perhaps more apt). PD needs to have a multilayered approach to instruction, supporting staff in critical ways, as seen in known and effective studies of closing the gap for students of color. The layers to this new PD are:
 - a. Continue to provide day-to-day instructional CRP best practices that teachers can start using the next day and can operate continuously and independently of other layers of PD. Build in the understanding that the foundation of CRP is teachers understanding the children in front of them and providing high expectations with care and community that honors the child. This includes making classroom community a focus of all staff, so that all students feel safe, cared for, and seen.
 - b. Build in time for teachers to do deep self-reflection so that they can grapple with their role and culpability in oppression and inequity. Help them realize their identity and how it is linked to their students. Give teachers the tools to reflect on their practice and how it has been both liberatory and oppressive, then use team collaboration time to help them create new practices and lessons based on their reflections. Delpit (2013) cites a conversation with Hilliard in saying that "collaboration apparently *is* the magic bullet" (p. 141) because it is during collaboration that the diverse perspectives of different teachers' knowledge and

- experiences can be used collectively to relate to and teach a diverse group of students with various needs.
- c. Give teachers time to work in small groups, both grade-level and cross-curricular so that they can plan instruction that is based on new equity learning and that they will apply within the near future. This means that teachers need to have more control over their content than standardized curricula. In order to help teachers feel efficacious and competent they need to be held to a higher standard that honors their knowledge and trusts them to plan content that is developmentally appropriate (and therefore develops the *whole* child), culturally relevant (based on new learning), and rigorous. Since teachers are experts at their craft, it is essential to let them use their skill. Remember, academic rigor does not mean all academics all the time, it means **holding** students to high expectations and scaffolding them with appropriate instruction and care. Teachers' knowledge of students is what tells them how much scaffolding to provide, planning groups are what make sure that the scaffolding is equitable and is not biased, pitying, or harsh.
- d. Allow small planning groups to be accountable for the progress of each other. When teacher teams plan content that is rigorous, relevant, and developmentally appropriate, help them create plans to check in with each other, Part of building a teacher (and staff) team is showcasing the cumulative knowledge present in the group. Freire said, "teacher-proof materials [are] a continuation of experts' authoritarianism, of their total lack of faith in the possibility that teachers can know and can also create" (Freire, 2005, p. 15). Therefore, teaching (and in this

case PD), "cannot be a process of transference of knowledge for the one teaching to the learner...comprehension needs to be worked, forged...for this very reason reading and studying form a challenging task, one requiring patience and perseverance" (Freire, 2005, p. 40-42) but with appropriate support because when the learning goal and present knowledge "are too far apart, when one has nothing to do with the other, all efforts towards comprehension are fruitless" (p. 42, emphasis in original) Therefore, PD learning cannot just be taught, the strategies, content, and pedagogy have to come from the learners; just as we expect students to be independent so must teachers be. Part of this independence is created in the teamwork of observation and feedback from trusted peers. Creating time and space for staff to observe each other and then give feedback regularly not only alleviates some of the burden for school leadership (who will still be necessary parts of the observation and feedback process) but it creates a sense of teacher ownership of the progress of all students (not just the ones in a specific teacher's own class), demonstrates leadership faith in the abilities of staff, and creates independent, critical thinkers and teams. In the case study of Del Roble Elementary School (Singleton & Linton, 2006) staff collaboration, observations, and communication allowed them "to surface and share methods used by teachers who were succeeding with all students and to replicate those practices throughout the grade levels" (p. 36). This collaboration helped Del Roble close their achievement gap in just one year.

e. Help teachers hold high expectations for all students by working with and continually referring to grade-level standards. Since the entire goal of using the

above strategies and techniques is to the close the achievement gap, the school would be remiss to not use it as the driving force behind their equity work.

With these steps in place, Dakota will address the needs of students of color by empowering teachers to lead the school, reflect on their teaching, integrate new equity learning, and support students with both "care and push" (Hammond & Jackson, 2015). Singleton and Linton suggest that "courageous conversations" where race and equity are called out are the first step in creating equitable schools (2006, p. 16). They say that there are three critical factors necessary for schools to close the achievement gap: passion, practice, and persistence. Passion lies in the school's recommitment to equity; practice in the use of CRP strategies and team collaboration created during peer observation and feedback, team planning, and collaboration; and persistence shows up in the time and space the school gives staff to reflect, try, fail, and try again (2006, p. 6-7). As singleton and Linton say, "There is no non-racist place - you are either anti-racist or perpetuating the racism that already exists" (Singleton & Linton, 2006, p. 262).

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Appendices

Are we helping the kids? - Appendix A - Recruitment script

Recruitment script for professional development:

Hello, my name is Emily Braun. I am a graduate student at UW-Madison in the Curriculum and Instruction Department of the School of Education. This is Dr. Carl Grant, professor in the department of Curriculum and Instruction and my advisor. Many of you already know me as a kindergarten teacher at Dakota. However, this year I am on sabbatical and am conducting research for my dissertation at UW-Madison. I am conducting my research at Dakota in my new role as a UW researcher. I am conducting research on teacher professional development as it relates to race and equity in Dakota and I am inviting you to participate in this research because you teach at Dakota.

Participation in this research includes taking an initial screener survey to be sure you work here and interact with kids, two surveys about your experience with professional development (one at the beginning of the year and one at the end), a series of about 8 interviews about your experiences and reflections on your teaching, professional development, and planning. Additionally, if you agree to it, I would like to observe your planning and teaching for up to an hour at a time and for about 4 sessions. If you participate in the surveys, interviews, and observations, your total time commitment will be between 8 and 10 hours over the course of the year.

If you have any questions or would like to participate in the research, I can be reached at 608-669-xxxx or exxxx@wisc.edu.

Are we helping the kids? - Appendix B - Recruitment email

Dear Dakota staff:

Would you like to help Dakota better understand race and equity? Participate in this study:

Researchers: Researchers are Emily Braun and Carl Grant

Who: ALL Dakota staff is invited and encouraged to participate!

What: Emily will conduct interviews and observations of planning and teaching to help her (and Dakota as a school community) understand how school staff talk about, plan, and implement race- and equity-related practices

Where: At school or anywhere you feel comfortable talking

When: Study begins now and ends in spring

Why: To answer this question: *It is the goal of both MMSD and Dakota to use a race- and equity-focused lens to close the achievement gap and staff have been learning about best practices for several years, but is it working and how can it be better?*

What else?

- This study is non-evaluative. Emily is interested in talking to you about your teaching and planning, seeing your team planning sessions, watching you teach, and hearing your thoughts and reflections.
- You may opt out at any time.
- If you have ANY questions do not hesitate to contact Emily (608-669-xxxx or exxxx@wisc.edu)
- You can also reach out to study supervisor, Carl Grant (xxxx@education.wisc.edu) if you have any questions or would like to discuss with a third party.

How to participate:

- Contact Emily (call, text, email, locate her in the school)
- Contact Carl Grant (email)
- Respond to the email you received after Welcome Back Days PD

Thank you for helping with this study by simply sharing your knowledge!

Are we helping the kids? - Appendix C - Recruitment flyer



Attention Dakota staff!

Would you like to help Dakota better understand race and equity? Participate in this study:

Researchers: Emily Braun and Carl Grant, Professor, UW-Madison School of Education

Who: ALL Dakota staff is invited and encouraged to participate!

What: Emily will conduct interviews and observations of planning and teaching to help her (and Dakota as a school community) understand how school staff talk about, plan, and implement race- and equity-related practices (how much you participate is your choice)

Where: At school or anywhere you feel comfortable talking

When: Study begins now and ends in spring

Why: To answer this question: *It is the goal of both MMSD and Dakota to use a race- and equity-focused lens to close the achievement gap and staff have been learning about best practices for several years, but is it working and how can it be better?*

What else?

- This study is non-evaluative. Emily is interested in talking to you about your teaching and planning, seeing your team planning, watching you teach, and hearing your thoughts and reflections.
- You may opt out at any time.
- If you have ANY questions do not hesitate to contact Emily (608-669-xxxx or exxxx@wisc.edu)
- You can also reach out to the study supervisor, Carl Grant (xxxx@education.wisc.edu) if you have any questions or would like to talk to a third party.

How to participate:

- Contact Emily (call, text, email, locate her in the school) OR
- Contact Carl Grant (email) OR
- Respond to the email you received after Welcome Back Days PD search "Dakota Race and Equity Study"

Thank you for helping with this study by sharing your knowledge!

Are we helping the kids? - Appendix D - Pre-participation screener

Braun Race and Equity Practinitial participant screener	tices study	
Date		
Participant name		
Participant role		
	Yes	No
Is participant a staff member at Dakota?		
While in their role at Dakota, does participant interact with students?		
Is participant willing to participate in study?		
Participant is approved/re	ejected from participation	
Participant contact info:		

Title of the Study: Are we helping the kids?: How does race- and equity teacher professional development impact practice?

Principal Investigator: Carl Grant (phone: 608-263-xxxx) **Student Researcher:** Emily Braun (phone: 608-669-xxxx)

DESCRIPTION OF THE RESEARCH

You are invited to participate in a research study about how race- and equity-related practices and learning occur in an elementary school setting. You have been asked to participate because you are a staff member who interacts with students at the target elementary school.

The purpose of the research is to answer this question: We know that it is the goal of both the district and the school to use a race- and equity-focused lens to close the achievement gap. The school has been learning about best practices for several years, but are they working and how can we make it better? This study will include interviews and observations of planning and teaching. Research will be conducted in a private space of your choice. It can be in a private room at the school or any other space that you feel comfortable talking.

Audio tapes will be made of your conversations with Emily, including your responses to the surveys and interviews. Emily Braun and Carl Grant will hear recordings. All data will be stored for seven years on UW-Madison's campus before they are destroyed.

WHAT WILL MY PARTICIPATION INVOLVE?

If you decide to participate in this research you will be asked to participate in interviews and observations. Emily will interview you about your teaching and planning practices, may observe your teaching and/or planning, and will reflect upon your practices with you.

People who choose to participate in all parts of the research study should anticipate spending 10 hours of their time completing: 2 surveys (30 min each), 1 screener (10 min), 2 questionnaires (10 min) 6 brief interviews (30 min), four observations of teaching (30 min) and four observations of planning (45 min). Participants may also choose to complete a smaller portion of the study and should anticipate spending 5 hours of their time completing: 2 surveys (30 min each), 1 screener (10 min), 2 questionnaires (10 min) 6 brief interviews (30 min). Participation in this research includes taking an initial screener survey to be sure you work here and interact with kids, two surveys about your experience with professional development (one at the beginning of the year and one at the end), a series of about 8 interviews about your experiences and reflections on your teaching, professional development, and planning. Full participation will include observation of planning and teaching for up to an hour at a time and for about 8 sessions total. Observations will be a combination of classroom teaching at various points throughout the year, and team planning at monthly facilitated planning time. Observations will be hand-written and will focus on race- and equity-centered planning. Observations will be on staff and will not include students. All interviews will occur outside of instructional time. Observations will occur during team planning time and during the school day.

ARE THERE ANY RISKS TO ME?

Potential risks include personal discomfort at examination of personal teaching and planning practices. Some discomfort may occur as participants discuss past, present, and future practices however, participants can decline answering any questions they do not feel comfortable with and may opt out at any time.

ARE THERE ANY BENEFITS TO ME?

There are no direct benefits for participants. However, potential benefits could include becoming more aware of your teaching and planning practices and interactions with students. This guided reflection may facilitate shifts in practices.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

While there will probably be publications as a result of this study, your name will not be used. When sharing data back with MMSD only summary level data will be shared. If you participate in this study, we would like to be able to quote you directly without using your name. If you agree to allow us to quote you in publications, please initial the statement at the bottom of this form.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

You may ask any questions about the research at any time. If you have questions about the research after you leave today you should contact the Principal Investigator Carl Grant at 608-263-xxxx. You may also call the student researcher, Emily Braun at 608-669-xxxx.

If you are not satisfied with response of research team, have more questions, or want to talk with someone about your rights as a research participant, you should contact the Education and Social/Behavioral Science IRB Office at 608-263-2320. Your participation is completely voluntary. If you decide not to participate or to withdraw from the study, you may do so at any time.

Your signature indicates that you have read this consent form, had an opportunity to ask any questions about your participation in this research and voluntarily consent to participate. You will receive a copy of this form for your records.

Name of Pa	rticipant (please print):
Signature	Date
name.	I give my permission to be quoted directly in publications without using my
	I give my permission to be audio-recorded.

Are we helping the kids? - Appendix F - Pre- and post-study questionnaire

Pre- and Post-Study Questionnaire Participant # Date		
Role at Dakota:		
Check one when applicable:		
	Yes	No
I interact with students daily.		
I use practices in my planning that are focused on my learning around race and equity.		
Such as:		
I use practices in my teaching that are focused on my learning around race and equity.		
Such as:		
Staff PD around race and equity has helped me use more race- and equity-related practices in my planning.		
In this way:		

Staff PD around race and equity has helped me use more race- and equity-related practices in my planning.		
In this way:		
My personal areas of strength in my planning	g are:	
My personal areas of strength in my teaching	g are:	
Something I wish I could do better in my pla	nning is:	
Something I wish I could do better in my tea	ching is:	
Something else I want you to know is:		

Questions? 608-669-xxxx or exxxx@wisc.edu Thanks!

Are we helping the kids? - Appendix G - Parent notification form

UNIVERSITY OF WISCONSIN-MADISON Research Study Information and Notification

Title of the Study: How does race- and equity-based teacher professional development impact practice? Are we helping the kids?: How does race- and equity teacher professional development impact teacher practice?

Principal Investigator: Carl Grant (phone: 608-263-xxxx) Student Researcher: Emily Braun (phone: 608-669-xxxx)

DESCRIPTION OF THE RESEARCH

Researchers from the University of Wisconsin - Madison are conducting a research study at your child's school. Your student is in a classroom where research may be taking place. This form will give you the information you will need to understand why this study is being done and who to contact with any questions. We encourage you to ask questions now and at any time.

The purpose of the research is to answer this question: How does teacher professional learning around issues of race and equity affect student achievement?

Your child's teacher is participating in the study and may be observed teaching while your student is in the classroom. The researcher will be taking handwritten notes. Your child is not part of the study and will not be observed.

Research may occur in your child's classroom but your child will not participate. This letter is simply notification of research that is happening in the school building.

HOW WILL MY CHILD'S CONFIDENTIALITY BE PROTECTED?

Due to the fact that your child is not a participant in the research study, no personally identifiable information or other data will be collected from your child.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

You may ask any questions about the research at any time. If you have questions about the research you should contact the student researcher, Emily Braun at 608-669-xxxx. You may also call the Principal Investigator Carl Grant at 608-263-xxxx.

If you are not satisfied with response of research team, have more questions, or want to talk with someone about your rights as a research participant, you should contact the Education and Social/Behavioral Science IRB Office at 608-263-2320.

Are we helping the kids? - Appendix H - Parent notification form in Spanish

UNIVERSIDAD DE WISCONSIN-MADISON Información y Notificación de Estudio de Investigación

Título del Estudio: ¿Como el desarrollo profesional de maestros basado en raza y equidad impacta las prácticas? ¿Estamos ayudando a los niños?: Como el desarrollo profesional de raza y equidad para maestros impacta las prácticas?

Investigador Principal: Carl Grant (teléfono: 608-263-xxxx) Estudiante Investigadora: Emily Braun (teléfono: 608-669-xxxx)

DESCRIPCIÓN DE LA INVESTIGACIÓN

Investigadores de la Universidad de Wisconsin-Madison están conduciendo un estudio de investigación en la escuela de su hijo/a. Su estudiante es un salón donde la investigación puede estar tomando lugar. Este formulario le dará más información porqué el estudio se está realizando y a quién contactar con cualquiera pregunta. Lo animamos a que haga preguntas ahora y en cualquier momento.

El propósito de la investigación es responder esta pregunta: Cómo los Desarrollos Profesionales basados en problemas de raza y equidad para maestros afectan el logro de rendimiento académico del estudiante?

La maestra de su estudiante está participando en el estudio y puede ser observada enseñando mientras que su estudiante está en el salón. El investigador estará tomando notas escritas. Su hijo/a no es parte del estudio y no será observado.

La investigación puede ocurrir en el salón de su hijo pero su hijo/a no estará participando. Esta carta es una simple notificación de la investigación que estará sucediendo en el edificio escolar.

¿CÓMO SERÁ LA CONFIDENCIALIDAD DE SU HIJO PROTEGIDA?

Dado que su hijo/a no estará participando en el estudio de investigación, no información identificable de su hijo u otros datos de su hijo se estará coleccionando.

¿A QUIÉN DEBO CONTACTAR SI TENGO ALGUNA PREGUNTA?

Usted puede hacer preguntas acerca de la investigación en cualquier momento. Si usted tiene preguntas acerca de la investigación, usted debe contactar a la estudiante investigadora Emily Braun al tel. 608-669-xxxx. Usted también puede contactar a el Investigador Principal Carl Grant al 608-263-xxxx.

Si usted no está satisfecho con la respuesta del equipo de investigaciones, tiene mas preguntas o desea hablar con alguien acerca de los derechos como un participante, usted debe contactar la oficina de Educación y Social/ Ciencia del Comportamiento IRB al 608-263-2320.

Are we helping the kids? - Appendix I - Staff notification form

UNIVERSITY OF WISCONSIN-MADISON Research Study Information and Notification

Title of the Study: How does race- and equity-based teacher professional development impact practice? Are we helping the kids?: How does race- and equity teacher professional development impact teacher practice?

Principal Investigator: Carl Grant (phone: 608-263-xxxx) Student Researcher: Emily Braun (phone: 608-669-xxxx)

DESCRIPTION OF THE RESEARCH

Researchers from the University of Wisconsin - Madison are conducting a research study at Dakota. This form will give you the information you will need to understand why this study is being done and who to contact with any questions. We encourage you to ask questions now and at any time.

The purpose of the research is to answer this question: How does teacher professional learning around issues of race and equity affect student achievement?

Dakota staff members are participating in the study and may be observed teaching or participate in interviews while you are in the same room. The researcher will be taking handwritten notes. You will not be observed. This letter is simply notification of research that is happening in the school building.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

Due to the fact that you are not a participant in the research study, no personally identifiable information or other data will be collected from you.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

You may ask any questions about the research at any time. If you have questions about the research you should contact the student researcher, Emily Braun at 608-669-xxxx. You may also call the Principal Investigator Carl Grant at 608-263-xxxx.

If you are not satisfied with response of research team, have more questions, or want to talk with someone about your rights as a research participant, you should contact the Education and Social/Behavioral Science IRB Office at 608-263-2320.

Are we helping the kids? - Appendix J - Interview protocol

Before starting, instruct the participants not to "name-names." They can use titles such as "student, co-worker, friend" but should not identify another person to avoid turning that person into a research subject, who would require consent to use their information in research.

Staff initial questions:

Participant #	
Date:	

- 1. Tell me a little bit about your role at Dakota.
- 2. Tell me about your classroom.
- 3. Tell me about your teaching style.
- 4. Why do you teach at Dakota?
- 5. How does professional development impact your teaching?
- 6. Tell me about the race and equity focus of PD.
- 7. How has your teaching changed over your career?
 - a. To what can you attribute those changes?
 - b. How has PD affected it?
 - c. How has race and equity PD affected it?
- 8. Tell me about a time when you fundamentally changed your practice.
 - a. Why did you change?
 - b. How did it affect your students?
 - c. How do you know it did?
- 9. How has your planning been affected by race and equity focused PD?
 - a. What about your team's planning?
 - b. How have you made conscious changes?
- 10. How have changes affected your students?
 - a. How do you see those effects?
 - b. Are they positive or negative?
- 11. Tell me about a time when you felt that your race- and equity-focused instruction was especially effective.
 - a. How did you know?
 - b. What were the outcomes for students?
- 12. What do you hope to get out of future PD?
 - a. Why?

Before starting, instruct the participants not to "name-names." They can use titles such as "student, co-worker, friend" but should not identify another person to avoid turning that person into a research subject, who would require consent to use their information in research.

Staff end-of-study questions:

Participant #	
Date:	

- 13. Why do you teach at Dakota?
- 14. How does professional development impact your teaching?
- 15. Tell me about the race and equity focus of PD.
- 16. How has your teaching changed over your career?
 - a. To what can you attribute those changes?
 - b. How has PD affected it?
 - c. How has race and equity PD affected it?
- 17. Tell me about a time when you fundamentally changed your practice.
 - a. Why did you change?
 - b. How did it affect your students?
 - c. How do you know it did?
- 18. How has your planning been affected by race and equity focused PD?
 - a. What about your team's planning?
 - b. How have you made conscious changes?
- 19. How have changes affected your students?
 - a. How do you see those effects?
 - b. Are they positive or negative?
- 20. Tell me about a time when you felt that your race- and equity-focused instruction was especially effective.
 - a. How did you know?
 - b. What were the outcomes for students?
- 21. What do you hope to get out of future PD?
 - a. Why?
- 22. How has your practice changed this year?
- 23. How has this study changed your practice?
- 24. What effect has the change had on your students?
 - a. Has it been positive or negative?
 - b. How do you know?
- 25. Will you sustain these changes in the future?
 - a. Why or why not?
- 26. What changes do you hope to make in the future?

a. What about the school?

Before starting, instruct the participants not to "name-names." They can use titles such as "student, co-worker, friend" but should not identify another person to avoid turning that person into a research subject, who would require consent to use their information in research.

Questions for school leadership:

Partici	pant #_		
Date: _			

- 1. Tell me about your role at Dakota.
- 2. Why do you work at Dakota?
- 3. What is your vision for the school?
 - a. How does race and equity fit into that vision?
 - b. How have you actively pursued that vision?
 - i. What have you given staff to push them toward it?
 - ii. What results have you seen?
 - iii. What are some milestones you've seen along the journey?
 - iv. What have been accomplishments and setbacks?
 - c. Where will you go next?
 - d. Where do you look for guidance in this journey?
 - e. How do you hold staff accountable for this vision?
- 4. What effect has this had on students?
 - a. How do you know?
 - b. What feedback have you gotten from families?
 - i. From the community?
 - ii. From staff?
- 5. How do you support staff in professional growth?
 - a. How do you ensure that teams are on the same philosophical page?
 - b. What do you do if they are not?
- 6. Does your professional development of staff work?
 - a. How do you know?
 - b. What would you change to make it better?
 - c. How much independence do you get over PD content?
 - d. How do you decide what to do?
 - e. Who decides?
 - f. How does staff weigh in?

- 7. Where do you hope to be in 10 years?
 - a. Will you get there?
 - i. Why or why not?
 - ii. What possible barriers do you see?
 - b. Does the district support this work?
 - i. How?
 - ii. What supports have you received?
 - iii. What would you like to receive?

Are we helping the kids? - Appendix K - Observation protocol

Observations will be conducted in two forms:

Observations of teacher team planning time:

- Teacher team planning time observations
- Teacher instruction of student observations
- ALL participants and individuals present during observations will be consented participants prior to observation.

Participants present	nt: #			
Theme/Topic/ Question	Things the coach said	Things the coach did	Things the teachers said	Things the teachers did
Outcomes:				
Next steps:				
Observations of t Participant # Date:				
Theme/Topic/ Question	Things the t	eacher said	Things the	teacher did

Outcomes:				
Next steps:				
	rofessional developmen			
Theme/Topic/ Question	Things the facilitator said	Things the facilitator did	Things the teachers said	Things the teachers did
Outcomes:				
Next steps:				
	rofessional developmen			
Date:				

Theme/Topic/ Question	Things the facilitators said	Things the facilitators did
Outcomes:		
Next steps:		

Are we helping the kids? - Appendix L - Student achievement and enrollment data

Whole school MAP reading scores - percent proficient or more	Spring 2014	Spring 2015	Spring 2016	Spring 2017
All students	1796	20%	27%	30%
White	34%	34%	50%	55%
Black	5%	12%	13%	17%
Hispanic	7%	14%	42%	19%
Asian	SPPR	SPPR	SPPR	15%
Multiracial	19%	26%	28%	43%
3rd grade MAP reading scores -				
percent proficient or more	Spring 2014	Spring 2015	Spring 2016	Spring 2017
All students	16%	29%	33%	23%
White	38%	SPPR	62%	56%
Black	O%	22%	24%	9%
Hispanic	SPPR	SPPR	SPPR	SPPR
Asian	SPPR	SPPR	SPPR	SPPR
Multiracial	22%	44%	SPPR	SPPR
Dakota enrollment information	Spring 2014	Spring 2015	Spring 2016	Spring 2017
All students	313	324	344	325
White	87	79	79	80
Black	144	143	146	133
Hispanic	35	40	44	43
Asian	SPPR	14	19	25
Multiracial	39	46	54	44
Dakota third grade enrollment information	Spring 2014	Spring 2015	Spring 2016	Spring 2017
All students	59	56	49	44
White	17	SPPR	13	9
Black	27	29	23	20
Hispanic	SPPR	8	SPPR	SPPR
Asian	SPPR	SPPR	SPPR	SPPR
Multiracial	9	10	SPPR	SPPR

Are we helping the kids? - Appendix M - External Research Committee (ERC) approval

Madison, Wisconsin 53703-1967

MADISON METROPOLITAN SCHOOL DISTRICT

608.663.4946 ▼ https://infosvcweb.madison.k12.wi.us

Andrew Statz, Executive Director of Research, Accountability & Data Use

EXTERNAL RESEARCH COMMITTEE

May 15, 2018

Emily Braun

Madison, WI 53704

Dear Emily Braun,

This letter will serve as final approval for your proposal entitled: "Are we helping the kids?: How does race- and equity teacher professional development impact practice?" We have approved your research from May 15, 2018 through June 12, 2019.

To move forward with your project, you must submit copies of all final IRB/HSRB forms, including the final approval from your IRB and all consent, assent, and recruitment materials with your institution's IRB/HSRB stamped approval, as applicable. These forms must match what was approved by ERC and IRB/HSRB; if modifications were made throughout the approval process, these forms must be vetted again by both sides before finalized.

Once these forms are on file, you may contact your liaison, Susan Gorud, Executive Director of Professional Learning & Leadership Development (608-466-466) @madison.k12.wi.us). The liaison may be able to assist with general issues related to your research topic and should be provided copies of all reports or products resulting from the research.

If you have been approved to access existing administrative data as part of your research project, you will need to complete the Data Request Form, available on the Research & Program Evaluation Office website.

Principals always have the right to grant or deny access to subjects within the school. Please contact the affected school principals about your research activities before you proceed.

If you have any questions, feel free to contact me at (608) 663-4

Sincerely.

Andrew Statz, External Research Committee Chair Executive Director of Research, Accountability & Data Use

Madison Metropolitan School District

Susan Gorud, Professional Learning & Leadership Development Carl Grant, PI

CC:



Education and Social/Behavioral Science IRB 5/21/2018

Submission ID number: 2018-0470

Are we helping the kids?: How does race- and equity teacher

Title: professional

development impact teacher practice?

Principal Investigator: CARL A GRANT

Point-of-contact: Emily Braun, CARL A GRANT, MARY L GOMEZ

IRB Staff Reviewer: STEPHANIE WILSON

A designated ED/SBS IRB member conducted an expedited review of the above-referenced initial application. The study was approved by the IRB member. The study qualified for expedited review pursuant to 45 CFR 46.110 and, if applicable, 21 CFR 56.110 and 38 CFR 16.110 in that the study presents no more than minimal risk involves:

Category 5: Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis)

Category 6: Collection of data from voice, video, digital, or image recordings made for research purposes

Category 7: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, or quality assurance methodologies

As part of its review, the IRB determined this study does not require continuing review either under federal regulations or institutional policy, or both. Please note, however, that although this study is not required to undergo continuing review, you must still submit the following to the IRB:

- Changes of protocol prior to their implementation (unless the change is necessary to eliminate an apparent immediate hazard to subjects)
- 2. Addition of new study personnel
- Funding updates
- Reportable events (unanticipated problems, noncompliance, new information) in accordance with institutional policy
- Closure report

In addition, please be aware that the type of funding that supports a study or whether the study

falls under FDA regulations can affect whether continuing review may be required in future.

To access the materials approved by the IRB, including any stamped consent forms, recruitment materials and the approved protocol, if applicable, please log in to your ARROW account and view the documents tab in the submission's workspace.

If the IRB required informed consent, please use only copies of the approved consent forms or information sheets to obtain informed consent; give all participants a copy of the consent document.

If you requested a HIPAA waiver of authorization, altered authorization and/or partial authorization, please log in to your ARROW account and view the history tab in the submission's workspace for approval details.

Prior to starting research activities, please review the Investigator Responsibilities guidance (https://kb.wisc.edu/images/group99/shared/BSIR) which includes a description of IRB requirements for submitting personnel changes, changes of protocol and reportable events.

If you have general questions, please contact the Education and Social/Behavioral Science IRB at 608-263-2320. For questions related to this submission, contact the assigned staff reviewer.