Black Advanced Placement Student Success: A Case Study Exploring Pedagogical Practices at a School with High Expectations and Well-Defined Support Structures

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Abstract

Each year, the percentage of Black students who enroll in AP coursework is smaller than the percentage of Black students in the total student population. Black students are less likely to take AP courses, and when they take the courses, they are less likely to pass the AP exams. This instrumental case study explored the pedagogical practices and school-based supports of teachers with successful Black Advanced Placement students. Culturally Relevant Pedagogy was used as the theoretical framework for this study. The research questions guiding this study were: *What pedagogical practices do AP teachers at an urban high school use to help Black students succeed in AP courses?* and *How does a school with successful Black AP students support teachers’ pedagogical practices?* Participants of this study were the principal and four teachers at a school with high-achieving Black Advanced Placement students. Following data analysis of interviews, observations, and artifacts, four themes emerged. Findings indicated that the school and teachers had high expectations for student achievement, while providing appropriate supports for student success. Teachers maintained a warm but strict relationship with their students that allowed them to build trust with their students while still maintaining high expectations for appropriate behavior. The school and teachers engaged in data-driven decision making that allowed them to make changes to their instruction based on student data. Finally, a strong commitment to teacher support gave teachers the support of an instructional coach and weekly, school-wide, professional development.

*Keywords*: Culturally Relevant Pedagogy, Advanced Placement, black student achievement, high expectations, teacher support, student support.
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Chapter One: Introduction

Statement of the Problem and Topic

The benefits of attending college are well documented. In terms of earning potential, college graduates, on average, earn more than non-college graduates in every major occupational sector (Oreopoulos & Petronijevic, 2013). Additionally, college graduates have lower unemployment rates than non-college graduates (Oreopoulos & Petronijevic, 2013). The benefits of attending college are not merely economic. The Institute for Higher Education Policy (1998) found that college graduates are more likely to have improved health and life expectancy, increased personal status, and an improved quality of life for their offspring. In terms of the social benefit to the public at large, increased rates of college educated citizens leads to reduced crime rates, increased charitable donations, improved ability to adapt to and use technology, and increased social cohesion (Institute for Higher Education Policy, 1998).

The push for all students to earn a college degree has led to an increase in the number of students looking for opportunities to earn college credit in high school (An, 2013). The College Board’s Advanced Placement (AP) program comprises 38 courses that give students the opportunity to engage with college-level coursework in a high school setting. These courses, including the most popular subjects of AP Calculus, AP United States History, and AP English Language and Composition, are built and vetted by both high school teachers and college faculty to ensure that they match the rigor of introductory level college coursework (College Board, 2014).

Students who score well on the end-of-course exam are often able to earn college credit. There are benefits outside of college credit as well. Students who take AP level courses and score 3 or better on the exam are more likely to graduate college in five years or less (Dougherty,
Mellor, & Jian, 2006). Additionally, the odds of a student who has participated in AP courses attending a four-year college institution is increased by over 171% versus a student with no AP experience (Chajewski, Mattern, & Shaw, 2011). The number of students who take AP courses continues to grow each year, with the number more than doubling between 2003 and 2013 (College Board, 2014). Students who earn a score of 3, 4, or 5 on an AP exam are considered to have passed the equivalent college course, though it should be noted that not all colleges give AP credit for scores of 3 or 4. However, data suggest that not all students fare well on AP exams. Fifty seven percent of the AP Exams taken in 2013 earned a score of 3 or better (College Board, 2014). There is also a racial gap in performance on AP exams.

**Research Problem**

Each year, the percentage of Black students who enroll in AP coursework is smaller than the percentage of Black students in the total student population. In 2013, Black students made up 14.5% of the nation’s total graduating student body, yet only 9.2% of AP Exam takers (College Board, 2014). Of all students who took and passed an AP Exam, only 4.6% were Black (College Board, 2014). In summary, although AP coursework provides students with an opportunity to receive rigorous coursework, helping to prepare them for college and receive college credit, Black students are less likely to take AP courses and when they take the course, they are less likely to pass the AP exams. Therefore, there is a need to examine ways in which teachers with a high proportion of Black students can help these students succeed in AP coursework.

It can be argued that the current classroom setting found in many American schools is not set up for non-dominant cultures. Ladson-Billings (1995b) suggests that the goal of education for non-dominant cultures is to fit these students into the current, hierarchical structure. Students of non-dominant cultures enter school having “already mastered many cultural skills and ways of
knowing” (Gay, 2010, pg. 26). If these skills and ways of knowing do not align with the current school success structure, these students enter the education system at a disadvantage. As such, success for students of non-dominant cultures becomes reliant on their ability to fit into the current social structure found in schools (Ladson-Billings, 1995b).

**Justification for the Research Problem**

Being underrepresented in AP courses is an example of Black students’ consistently having fewer educational opportunities than white students. Storer et al. (2012) point to research that shows Black students are more likely than their White contemporaries to drop out of college, score lower on standardized tests, and be suspended or expelled. Minority students in diversely populated schools are more likely to be tracked into nonacademic and low-achieving course tracks (Mickelson & Heath, 1999). This does not improve with less diverse school populations as Black students in schools that are primarily low-income and minority are less likely to have access to AP courses (Klopfenstein, 2004b).

**Deficiencies in the Evidence**

There are several studies that discuss the benefit of closing the AP opportunity gap for Black students (Klopfenstein, 2004a; VanSciver, 2006). Additionally, there is research that examines how to recruit Black students into AP courses (Flores & Gomez, 2011; Klopfenstein, 2004a). There is a gap, however, in research that examines schools who have prepared Black students to be successful in AP coursework. The context of this study was determining the strategies that successful teachers of non-traditional, Black students use to prepare their students for success in AP-level coursework.

**Relating the Discussion to Audiences**
There are several audiences that will benefit from this study. Schools with unsuccessful or underrepresented Black students will gain an understanding of how to prepare them for success in AP-level coursework. Black students will have increased opportunity to gain the benefits of AP-level coursework, as well as gain college credit. Additionally, the College Board will be able to use the study data to create a suite of professional development opportunities specifically targeted at preparing schools and teachers with a majority population of Black AP students for success.

**Significance of Research Problem**

The consequences of not addressing this problem cannot be overstated. Only 42% of Black males who enter the 9th grade go on to graduate high school (Sen, 2006). Black dropouts are less likely to be employed than other ethnic groups (Sum, Khatiwada, McLaughlin, & Palma, 2011). Additionally, Black dropouts are more likely to go to jail, with 23% of Black dropouts incarcerated, as opposed to 6.6% of white dropouts (Sum, Khatiwada, McLaughlin, & Palma, 2009). The outlook is also bleak for Black students that do stay in school. Black students make up 17% of public school students, but 41% of special education placements (Sen, 2006). Black students must be given the opportunity to take, and successfully complete, AP level coursework if they are to begin to close the achievement gap and compete academically with White students.

**Positionality Statement**

Positionality is an idea that acknowledges how background, including race, gender, and socioeconomic status, can create bias within research (Carlton Parsons, 2008). Ladson-Billings (1999) states that race is a constant presence in our lives, and that we must go about exposing how racism exists in society. Yet those who have lived a White-centric existence might not understand issues of White privilege and inherently racist social systems. As a European-
American who has benefited from the privileges in this country that come from being White, I recognize that my positionality is very different from the participants of my problem statement.

According to Machi and McEvoy (2012) curiosity and personal interest are often the starting point of research. My experience as a teacher in an urban school has prompted my interest in this issue, and has led to my understanding some of the issues in urban education. As a former high school science teacher in inner-city Los Angeles, I know firsthand the challenges urban students are facing. I taught hundreds of students during my career with the Los Angeles Unified School District, worked with countless more as my school’s testing coordinator, and I felt unprepared to handle the challenges I faced daily. As an AP teacher, I was completely unprepared to help my students be successful in the college level course. It is partially my own experience as a struggling AP teacher that makes my research so important to me.

As a science teacher in an urban high school, I saw firsthand how minority students did not have access to many of the opportunities that White students and their parents would take for granted, such as qualified teachers and abundant educational resources. More specifically, I noticed that the majority of teachers at my school were brand new to teaching, ensuring that students went from year to year with under-qualified teachers. Additionally, many of our textbooks were well over ten years old, and science teachers often had to buy their own lab supplies. Although I am no longer in the classroom, my experiences with urban education have sparked in me a life-long focus in improving educational opportunities for minority students.

However, it is in my current position with the College Board that has had the biggest impact on my research interest and positionality in relation to this problem. In my role as the head of the instructional design team for AP subjects, I see firsthand how Black students are often left out of the conversation in terms of college-level coursework. For example, the course
tracking in some schools keeps Black students out of higher-level coursework, including honors and AP. Additionally, I have seen firsthand how urban schools are less likely to offer AP courses.

Throughout my career in education, I have been strongly invested in social justice. Yet despite my dedication to social justice and eradicating the achievement gap, it is important to recognize that being White may limit my insight into these research questions. Whiteness as property is the idea that the rights, privileges, and benefits that come with being White are so embedded within society, that Whiteness has become a property right (Harris, 1993). Similar to the tenet of permanence of racism, Whiteness as property puts White teachers in a place where they are unable to see how the system is biased in favor of Whites. This is true even for those Whites who wish to bring about a more socially just education system, as no matter how hard they might fight their privilege, there is nothing they can do to fight the inherent power that comes with being White (DeCuir & Dixson, 2004). This idea is mirrored by Anders, Bryan, and Noblit (2005) who state that “even whites, who identify with non-white causes or work for equity and social justice, are capable of retreating back into their whiteness, culturally or geographically” (p. 116).

As such, I was careful to not make any assumptions about the research site or collected data to avoid skewed results due to my positionality. Additionally, I recognized how my bias and opinions might affect my research, and ensured that this was acknowledged in my study. Creswell (2011) cites research that calls for using language that avoids “demeaning attitudes, including biased assumptions” (p 277). Rather, language should be inclusive and sensitive to the feelings of research participants and those who will be reading the study (Creswell, 2011).

**Research Questions**
The research problem coupled with my experiences as a teacher and working at the College Board led me to the following research questions:

- What pedagogical practices do AP teachers at an urban high school use to help Black students succeed in AP courses?
- How does a school with successful Black AP students support teachers’ pedagogical practices?

**Theoretical Framework**

Culturally relevant pedagogy provides urban high schools with a framework for improved classroom environment for students from a non-dominant culture (Brown-Jeffy & Cooper, 2011). This theoretical framework provides teachers with a way to acknowledge, and integrate, students’ home-community culture into their educational experience (Brown-Jeffy & Cooper, 2011). Culturally relevant pedagogy is a term that has been defined in several different ways. Gay (2010) defines it as teaching “to and through [students’] personal and cultural strengths, their intellectual capabilities, and their prior accomplishments” (p. 26). Alternatively, Ladson-Billings (1995b) defines it 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” (p. 469).

As there are multiple ways that culturally relevant pedagogy has been defined, this study will use the theoretical framework developed by Brown-Jeffy and Cooper (2011), specifically because it pulls together the work of major culturally relevant pedagogy researchers, such as Ladson-Billings and Gay, into one, summative list of five themes: identity and achievement; equity and excellence; developmental appropriateness; teaching the whole child; and student-
teacher relationships. It should be noted that these themes should not be treated as a checklist, as Sleeter (2012) cautions against trivializing culturally relevant pedagogy by “reducing it to steps to follow rather than understanding it as a paradigm for teaching and learning” (p. 569).

Identity and achievement. The theme of identity and achievement encompasses the following concepts: identify development, cultural heritage, multiple perspectives, affirmation of diversity, and public validation of home-community cultures (Brown-Jeffy & Cooper, 2011). Teachers who embrace culturally relevant pedagogy embrace students’ culture by using it as a “vehicle for learning” (Ladson-Billings, 1995a, p. 161). It should be noted that this theme considers not just the identity of students, but also of teachers (Brown-Jeffy & Cooper, 2011). Cross (2003) identified a cultural gap between students and teachers that has a direct effect on the quality of education in urban schools. As such, teachers must become aware of their students’ identities, while also recognizing their own identity, and how it may have led to biases that must be recognized and addressed. This awareness of identity allows teachers and students to both embrace diversity and see it as an asset (Brown-Jeffy & Cooper, 2011).

Equity and excellence. The theme of equity and excellence encompasses the following concepts: dispositions, incorporation of multicultural curriculum content, equal access, and high expectations (Brown-Jeffy & Cooper, 2011). An important distinction made by Brown-Jeffy and Cooper (2011) is the difference between equity and equality, whereby equity allows for giving students what they need whereas equality, in which all things are equal, does not allow for differentiation. Therefore, an equitable educational experience allows for differentiation based on students’ needs. Also within this theme is the concept that teachers must include multicultural content in their curriculum and instruction (Brown-Jeffy & Cooper, 2011). This gives students
the opportunity to see their culture represented in a positive light, thereby increasing positive associations with their cultural identity.

However, equity within curriculum and instruction is not meaningful if students aren’t given equal access to high-level courses that are typically the purview of dominant cultures. Equal access requires schools to ensure that “Whiteness should not be the only determinant of entry into high-level courses and programs because equity and excellent are not the exclusive ownership of Whites” (Brown-Jeffy & Cooper, 2011, p. 75). Alongside equal access is the need to ensure all students are being held to high expectations. It is not enough to give non-White students access to high-level courses. They must also be held to the high expectations that these courses require for success. The parallel of equal access and high expectations in the issue of Black student access and success in Advanced Placement coursework should be noted.

Developmental appropriateness. The theme of developmental appropriateness encompasses the following concepts: learning styles, teaching styles, and cultural variation in psychological needs such as motivation, morale, engagement, and collaboration (Brown-Jeffy & Cooper, 2011). Developmental appropriateness recognizes the importance of understanding where students are in their cognitive development (Brown-Jeffy & Cooper, 2011). Students have a variety of learning styles and psychological needs, and teachers must incorporate strategies into their curriculum and instruction that specifically meet these needs. Developmental appropriateness does not allow for a “one size fits all” curriculum. Rather, teachers must develop a teaching style that allows for differences in learning styles and learning preferences, while still maintaining high expectations for all students (Brown-Jeffy & Cooper, 2011).

Teaching the whole child. The theme of teaching the whole child includes the following concepts: skill development in a cultural context, home-school-community collaboration,
learning outcomes, supportive learning community, and empowerment (Brown-Jeffy & Cooper, 2011). Teaching the whole child requires teachers to be “sensitive to how culture, race, and ethnicity influence the academic, social, emotional, and psychological development of students” (Brown-Jeffy & Cooper, 2011, p. 77). Teachers who are teaching the whole child acknowledge cultural group behaviors, while also recognizing students’ individual behaviors that may not align with cultural group norms (Brown-Jeffy & Cooper, 2011). Sleeter (2012) cautions against essentializing culture, which is the assumption of a fixed and homogenous culture of a racial group. An added benefit to recognizing students’ individual needs is the way in which it helps students see that their teachers care enough about them to learn about them as an individual, which can be a powerful motivator for students (Brown-Jeffy & Cooper, 2011).

Teaching the whole child also recognizes the home connection in student development. When a teacher recognizes this connection, he or she acknowledges the value in those experiences learned outside of school, and incorporates that learning into the classroom, thereby recognizing the benefit of students’ cultural knowledge (Brown-Jeffy & Cooper, 2011). This helps students not only recognize the value of their own culture, but the value of the differing cultures within their classrooms (Brown-Jeffy & Cooper, 2011).

**Student-teacher relationships.** The theme of student-teacher relationships includes the concepts of caring, relationships, interaction, and classroom atmosphere (Brown-Jeffy & Cooper, 2011). As mentioned in the theme of equity and excellence, culturally relevant pedagogy requires high expectations for students. The student-teacher relationship theme recognizes that these high expectations must be in conjunction with a relationship of caring and respect (Brown-Jeffy & Cooper, 2011). Gay (2002) states, “Teachers have to care so much about ethnically diverse students and their achievement that they accept nothing less than high-level success from
them and work diligently to accomplish it” (p. 109). Through caring, which is demonstrated through patience and persistence, teachers “facilitate learning, validate learners’ knowledge construction, and empower learners’ individual and collective learning capacity” (Brown-Jeffy & Cooper, 2011, p. 78). This caring relationship helps students and teachers to create a classroom community that is built on respect and provides a safe place for learning (Brown-Jeffy & Cooper, 2011).

**Conclusion.** These five themes provided the basis for incorporating culturally relevant pedagogy in the classroom. This study’s aim to examine ways in which teachers with a high proportion of Black students help these students succeed in AP coursework aligned with this framework in several ways. First, the framework was specifically related to academic achievement in non-dominant student populations, which aligns with the participants of this study. Second, the framework’s focus on classroom curriculum and instruction aligned with this study’s focus on classroom practices. Third, the framework’s focus on equitable access and effective pedagogical practices made it ideally suited to this study, as the school site in the study has a proven record of AP accessibility and success.

The research design chosen for this study was instrumental case study, as the purpose of the study was to better understand the phenomenon of high-achieving Black AP students, rather than the case itself (Stake, 1995). In this study, the case was a school site with Black students who are successful in AP coursework. This design worked well with this research study, as the research questions could be addressed through a description of practices, which is a component of case study research (Creswell, 2011). The culturally relevant pedagogy framework does not provide specific steps for teaching, but rather suggests that there are five themes that must be addressed in the culturally relevant classroom. This makes the framework ideally suited for case
study research, as it allows for a description of practices that teachers undertook to address Black student achievement.
Chapter Two: Literature Review

The purpose of this research study was to examine ways in which teachers with a high proportion of Black students helped these students succeed in Advanced Placement (AP) coursework. This study was guided by the following research questions: (1) What pedagogical practices do AP teachers at an urban high school use to help Black students succeed in AP courses? and (2) How does a school with successful Black AP students support teachers’ pedagogical practices? To do this, it was important to understand different factors that can affect and lead to student achievement, what schools are currently doing to improve academic achievement, and why it is important for Black students to be enrolled in AP coursework. This literature review will begin by defining the achievement gap and investigating the correlates that affect the educational opportunities of Black students. A review of the literature on high-achieving Black students will be next. After that, factors that affect academic achievement will be investigated. This is followed by a review of current practices in school improvement in academics. Finally, this review will examine how AP coursework works as a mechanism for student success.

The Achievement Gap

The achievement gap refers to the gap in academic performance between Black and white students. However, before discussing the achievement gap, it is important to first acknowledge that the achievement gap stems from a much larger issue of educational disparity. Ladson-Billings (2006) suggests that the focus of research on the achievement gap has added to the deficit thinking about the academic capabilities of Black students, which makes it unlikely that the underlying, long-term problem of educational inequality will be addressed. Milner (2012) suggests that instead of the achievement gap, we should be focusing on the opportunity gap,
which places focus on the educational processes and practices that have led to the achievement gap. However, since the achievement gap is often the standard by which racial inequity is discussed in education, it is important to understand not only what the achievement gap is, but what factors lead to it.

Research consistently points to the existence of the achievement gap. For example, the average Black high school senior performs four years below grade level, showing the same educational knowledge as the average White eighth grader (Ford & Moore, 2013; Roach, 2004). Unfortunately, the achievement gap shows no sign of shrinking. In fact, gaps in math scores between White students and Black students have recently either stayed the same or widened, which is in stark contrast to the narrowing of the achievement gap that occurred in the 1970s and 1980s (Darling-Hammond, 2010; Lee, 2004). The shrinking of the achievement gap in the 1970s and 1980s was due to federal programs that supported desegregation and the improvement of conditions in urban schools (Darling-Hammond, 2010). The subsequent cutting of those programs during the Reagan administration led to a widening of the achievement gap that began in the late 1980s and has continued to this day (Darling-Hammond, 2010).

There are several variables that contribute to the achievement gap. It is important to note that there are no genetic or unalterable traits that could be the cause of the achievement gap (Singham, 2003). This is significant, as it means that all variables leading to the achievement gap can be eliminated. Barton and Coley (2009) identified 16 variables that consistently contribute to the achievement gap between White and Black students. However, this literature review will focus on those factors related to school, as these directly address the research questions.

**School factors.** School factors are those that are directly related to the school site. There are several school factors, which include both teaching and learning and the learning
environment (Barton, 2003). Barton and Coley (2009) state that school factors are indicators of the general conditions and ambiance at a school, from the health of student-teacher relationships to issues of school security. School factors are especially important for the purposes of this research study, as they are the ones that can be directly impacted by the study participants.

**Curriculum rigor.** Curriculum rigor is a term that is often used to denote challenging curriculum that is taught in an atmosphere that emphasis strong achievement goals (Barton, 2003; Barton & Coley, 2009). Ford and Moore (2013) found that the ability of students to achieve academically depends significantly upon the rigor of the curriculum they are being taught. Unfortunately, Black students are frequently being given a less rigorous curriculum then their White counterparts. This rigor includes teachers’ expectations of students, as teachers with deficit thinking or negative beliefs about Black students often do not challenge them to perform at higher levels (Ford & Moore, 2013). This can leave Black students with the double disadvantage of being taught a less rigorous curriculum by teachers who do not believe they can achieve at higher levels.

**Teacher preparation.** A school factor that consistently affects Black students is underprepared teachers. Black males in urban schools are more likely to encounter unqualified, uncertified, out-of-field teachers who received the lowest college grades and test scores (Barton, 2003). In fact, Ford and Moore (2013) state that almost 30% of teachers in schools with high Black student enrollment do not even have a minor in the subject they are teaching. Ford and Moore also found that under-qualified teachers have difficulty teaching or raising the achievement of Black males, as they do not have adequate training in cultural competence. Perhaps in part due to this inadequate preparation, new teachers in urban classrooms are more likely to leave the profession early, with almost 50% leaving within five years (National
Commission on Teaching and America’s Future, 2007). Teachers must be properly prepared to handle the unique challenges of urban schools. Perhaps then teachers will be able to meet the needs of all students in order to ensure the achievement gap does not continue to widen, but rather begins to close.

**Teacher experience.** Teacher experience is closely tied with teacher preparation, and Black students in urban schools are more likely to have less experienced teachers. Teachers with less than five years of classroom experience are more likely to be teaching in urban settings, as compared to suburban settings (Barton & Coley, 2009). Barton (2003) found that schools with high percentages of Black students have faculty in which 21% of the teachers have less than three years of experience in the classroom. As mentioned earlier, half of new teachers in urban classrooms are leaving the classroom within five years. This, tied with poor teacher preparation, means that Black students in urban schools are consistently taught by a revolving set of new, inexperienced teachers.

**Teacher absence and turnover.** Teacher absence and turnover denotes time that students are not in the classroom with a consistent teacher presence, which can happen for two reasons. First, chronic teacher absence requires the use of short-term, less qualified substitute teachers. Second, when teachers leave the school site, they may leave students in the hands of long-term, less qualified substitutes, or new, untrained teachers. Students in urban, high-minority schools are more likely to have teachers who exhibit low attendance rates and high turnover rates, thereby causing students to be taught by less prepared substitute teachers (Ford & Moore, 2013). More specifically, Barton and Coley (2009) found that Black students are more likely to attend schools with high teacher absence and turnover. This lack of consistent instruction makes it
difficult for Black students to gain learning opportunities that will help to build their achievement (Ford & Moore, 2013).

**Class size.** Class size refers directly to the number of students that are in a classroom at a given time. Schools with high percentages of Black students tend to have larger class sizes than White students (Barton, 2003). Large classes are more difficult to manage, thereby requiring teachers to spend more time on behavior and less time on instruction (Ford & Moore, 2013). This situation leads to Black students’ having less instructional minutes than White students in smaller classes.

**Availability of instructional technology.** Ford and Moore (2013) state that availability of instructional technology “concerns the digital divide, which includes access/availability, teachers’ skills, and students’ use of technology to augment instruction” (p. 407). Schools with a high percentage of Black students are less likely to have classroom computers, access to the Internet and high-quality software (Barton, 2003). When it comes to using technology, 61% of schools with low minority student populations use assignments that require Internet searches, compared to just 35% of students in high-minority schools (Barton, 2003). This lack of equitable access to technology sets Black students up to be less qualified to compete with Whites in situations where technological skills are important (Ford & Moore, 2013).

**Fear and safety at school.** School safety is a concern at schools with high Black populations. Barton and Coley (2009) found that Black students in urban settings are more likely to report issues with classroom discipline, classroom disruptions, and negative peer pressure. As discussed previously, students in urban schools are more likely to deal with large class sizes that are more difficult to manage. This lack of class control feeds into students’ feelings of fear at school. This fear directly affects achievement, as students who experience fear and safety issues
at school have difficulty concentrating and staying focused under these conditions, resulting in poor attendance and high dropout rates for students trying to avoid these conditions (Ford & Moore, 2013).

**Factors related to the home and school connection.** There is only one factor that is related to the home and school connection, and that factor is parent participation. Yet this factor is important, as it ties together a student’s school life and home life, which are the two main groupings of factors that affect the achievement gap. Barton and Coley (2009) call the home and school connection the “two-way street of parents trying to be supportive of school efforts and schools reading out to inform, encourage, and show receptivity to parents’ input” (p. 7).

**Parent participation.** Parent participation is a key factor in the academic achievement of Black students. Ford and Moore (2013) state “The degree to which African American families are involved in their sons’ education influences the academic achievement and school behavior of these students” (p. 408). It is therefore critical that Black families be involved in their children’s education. Yet, Barton (2003) found that Black families in urban settings tend to participate less in their children’s education than other students. Many Black students are not receiving the parental participation that is key to their achievement. Yet it should not be inferred that Black families do not put value on education. Forty-four percent of urban parents feel unwelcome in schools, which can lead to the assumption that these low participation rates are due more to these feelings of unwelcome than to a lack of caring about their child’s education (Ford & Moore, 2013). It is important to note, however, that it is not clear how this data took into account, if at all, children who were not living with their parents, such as those being raised by other family members. In that way, these findings have a limited scope.

**Factors that Affect Achievement**
As mentioned, the achievement gap refers to the gap in academic performance between Black and White students. Yet the factors that lead to the achievement gap do not necessarily correlate to individual achievement. Therefore, after looking at variables that may add to the achievement gap, it is important to look at factors that affect individual achievement. It is crucial to understand that poor achievement is not inevitable, but rather a behavior that is learned, and can therefore be unlearned (Ford & Moore, 2013). If this is the case, then it is critical to understand the variables that affect student achievement. Ford and Moore (2013) find that achievement should be looked at through the contexts of cultural/familial, school, and individual variables, as there are multiple variables that contribute to underachievement and low achievement.

**Cultural/familial.** Cultural/familial variables focus on issues related to the immediate lives of students, in relation to their families, community, and peers (Ford & Moore, 2013). It is important to recognize that Black families emphasize educational attainment and hard work, and parental encouragement has a greater influence than many other measures in ensuring academic achievement for low-income students (Newman, Myers, Newman, Lohman, & Smith, 2000). This assertion is mirrored in Stewart’s (2008) finding that family is a key factor in student achievement, with students performing better when their parents are involved in their education. Additionally, parents can help their children by joining parent-teacher organizations to influence school policy and monitor student/teacher relationships (Stewart, 2008).

Like family, community can have a big impact on student achievement. Students who attend schools in poor, urban communities exhibit more school problems than students in rural, suburban, and affluent communities (Stewart, 2008). South and Baumer (2000) found that, just as the presence of successful neighborhood role models can have a positive effect on adolescent
development, the presence of disadvantaged neighbors increases the likelihood that children will engage in non-standard behaviors. Duncan and Raudenbush (1999) who argue that there are several neighborhood factors that can affect children, found that students are more likely to drop out of high school if less than 5% of the neighborhood work in professional or managerial jobs. These data point to the importance that the residents in a child’s neighborhood play on his or her achievement.

Despite the positive effect that parents can have on their child’s education, a child’s peers can have a direct impact on a child’s development (Becker & Luthar, 2002; Nichols & White, 2001; Stewart, 2008). For example, when school achievement is belittled by gifted and high potential Black males’ peers, they may become less motivated to do well in school (Ford & Moore, 2013). On the other end, when students believe their peers are supportive, they are more likely to achieve academically (Wentzel, 1999). Clearly, the people that surround a student, whether their parents, neighbors, or peers, have a strong effect on his or her achievement. Since most of these relationships happen outside of the school setting, it is critical for students and their parents to manage their interactions to maximize positive, rather than negative, peer pressure.

School. There are many individual and structural variables at the school level that are consistently linked to achievement, including school commitment, school involvement, school attachment, and school climate (Stewart, 2008). These variables not only look at conditions at the school site, but also at how a student interacts with the school. Stewart (2008) suggests that it is important to look at how the school context affects academic achievement through an ecological approach, which looks at characteristics at both the individual and school level to explain academic achievement. The individual level looks at how student achievement is
affected by how the students interact with and engage in the school community, whereas the
school level looks at how school variables, including teacher efficacy, materials and facilities,
can affect achievement.

One significant aspect of how schools can affect student achievement is in relation to the
teachers at the school site. Ford and Moore (2013) find that culturally incompetent, biased
teachers can significantly affect the educational outcomes of Black students. This is significant,
as Stewart (2008) notes that students who feel encouraged by their teachers are more
academically successful. In addition to teacher attitude, teacher quality greatly impacts
achievement, with poor teacher quality greatly affecting the achievement of Black students. As
discussed earlier, Black students are more likely than their White contemporaries to have
inexperienced and under-qualified teachers.

Teachers, particularly those who are in-service, are often not prepared to teach the urban
student population. Lankford, Loeb, and Wyckoff (2002) found that students in New York urban
areas, particularly those who are low-income and non-White, are more likely than other students
in the state to have lesser-qualified teachers. Additionally, the teacher population, both pre- and
in-service, are predominantly White, middle-class women (Chang, Anagnostopoulos, & Omae,
2011; Hyland & Heuschkel, 2010). There is a large divide between the cultures of urban students
and their teachers. Many researchers (Griner & Stewart, 2013; Baskerville, 2009; Rubel & Chu,
2012; Gay, 2002; Martins-Shannon & White, 2012; Sealey-Ruiz, 2011; Siwatu, Frazier,
Osaghae, & Starker, 2011) have expressed the need for culturally responsive pedagogy as a
means to increase minority students’ achievement. This need seems particularly urgent as new
teachers are being thrust into urban classrooms with inadequate preparation, which may be a
factor in the high attrition rates in urban schools (Siwatu et. al., 2011). Gay (2002) believes in the
importance of culturally responsive pedagogy, which makes learning more meaningful and interesting, and which thus can help content be learned more easily. Martins-Shannon and White (2012) believe that the implementation of culturally responsive pedagogy helps to develop students’ self-efficacy.

In terms of how instruction affects achievement, Brophy (1988) argues that research shows that the amount of time students spend engaged in academic activities will impact their learning. Additionally, Brophy finds that students learn best when teachers use active instruction to help them relate learning to what they already know, and then monitor their performance with corrective feedback. Foster (2004) suggests that one consequence of having underprepared teachers is that schools use “teacher-proof” scripted curricula that create a “ceiling above which neither students nor teachers can rise” (p. 402). While these scripted curricula do provide opportunities for students to find academic achievement, they limit students’ ability to advance beyond the levels set forth by the curriculum.

Several different aspects of the school environment, such as budget, percent minority enrollment, and percent of free and reduced lunch students, can influence academic achievement (Stewart, 2008). Small school size is associated with increased achievement on standardized test scores (McMillen, 2004), though there is some debate as to what degree school size affects achievement. Since we know that class size is a factor in the achievement gap, it follows that small schools would have the small class sizes that are shown to improve student achievement.

In terms of how the school environment can affect achievement, Stewart (2008) emphasizes the importance of a sense of a school community in improving achievement, citing research that shows students in urban school districts often have to contend with “school violence, high dropout rates, vandalism, inadequate equipment and facilities, greater numbers of
inexperienced teachers, student and teacher alienation, and academic failure” (p. 22). On the positive end, students who are more embedded in their school through engagement in school activities are more likely to increase their academic effort (Johnson, Crosnoe, & Elder, 2001). Schools should work to provide students with a safe, supportive environment that allows opportunities for outside of the classroom activities and supports that can have a positive effect on student achievement.

**Individual.** Students own a large part of their ability to achieve. For example, the amount of effort that students put into their education has a direct effect on their academic achievement (Carbonaro, 2005; Stewart, 2008). There is a variety of personal variables that can have a direct effect on a student’s achievement. According to Ford and Moore (2013), urban educators should consider “personality, motivation, self-perception, achievement, affiliation, and other variables that commonly influence achievement among urban African American male students” (p. 404). Black students must be encouraged and given opportunities to find the internal characteristics that will help to increase their achievement.

**Black Student Achievement**

A review of the literature on high achieving Black students is important for two reasons. First, it brings to light Black student achievement, which is a central focus of this study. Second, many studies on Black student academic achievement focus on academic disparity between Black and White students. Researchers have suggested focusing on Black student academic achievement as a way to defuse potentially negative messages about the intellectual capability of Black students (Carter Andrews, 2009; Floyd, 1996).

Before reviewing the literature, it is important to recognize that many of the studies on Black student achievement are centered on proving oppositional culture theory invalid
Oppositional culture theory posits that Black students have a negative, oppositional view of schools and education because they are seen as institutions of the dominant, White group (Ogbu, 1978). Although it is true that some Black students have a negative view of education, this is far from the norm (Wiggan, 2008). In fact, Black students have been found to have a more pro-school attitude than White students (Ainsworth-Darnell & Downey, 1998; Harris, 2006). Additionally, Ainsworth-Darnell and Downey (1998) found that Black students who are defined as good students by their peers are more likely to be popular than their White counterparts. These findings point decidedly away from the notion that Black students have a negative view of education.

Yet perhaps it is Lundy (2003) who has the most compelling argument against oppositional culture theory, when he states, “[Oppositional culture theory] has undermined the possibility of viewing any critical and complex position on the part of Black students to interpret their world and has shifted attention away from the social reality of white supremacy to an erroneous belief that Black students are rejecting academic success en masse (pg. 451).” In trying to find a possible cause for the achievement gap, the oppositional culture theory may have unwittingly added to the problem of deficit thinking. Ogbu’s (1978) suggestion that Black students are unwilling to engage in an education system that is steeped in White privilege can lead one to the conclusion that Black students are at least in some way at fault for their own academic issues.

Alongside oppositional culture theory is an idea from Fordham and Ogbe (1986) that Black students who achieve in school are at risk of being accused of “acting White.” But, if as this idea suggests, “acting White” consists of behaviors associated with academic success
(Lundy, 2003), then academic success becomes something that is only found for White students. This idea, like oppositional culture theory, feeds into deficit thinking. Lundy (2003) takes this notion one step further when he states,

> Arguing that it is an affinity for the Black community and its culture that prevents Blacks from achieving success on par with their white counterparts and other academically successful groups places Ogbu and Fordham squarely in the camp of conservatives who argue that the root of the African American condition lies in their deviant values, which can only be remedied by acquiring the habits and values of white America. (pg. 464-465)

If, as Lundy suggests, acting White means Black students are unable to critically assess their world, then academic success will likely never exist for Black students who refuse to fall into the notion that they must become someone else in order to navigate the world of academic success. In fact, many studies have found that Black student achievement is often in direct opposition to this idea.

Much of the literature on high-achieving Black students recognizes that the education system in America, which is built on White privilege, can be difficult for Black students. Yet despite this resistance, and sometimes because of this resistance, Black students have learned how to navigate the system. These students do not see academic success as something for White students, but instead see it as a human trait that can be reached regardless of race or ethnic group (Carter, 2008). At the same time, they recognize the challenges that racism plays into their current and future opportunities, and have come up with adaptive strategies to overcome it (Carter, 2008). Students use these adaptive strategies in several ways. Griffin and Allen (2006) found that students in racially charged campus environments decided that, instead of fighting against doubts their environment engendered, they would maintain an optimistic attitude, taking
advantage of the opportunities provided by their school. This is similar to Marsh, Chaney, and Jones (2012) finding that high-achieving Black students in a racially diverse setting were able to overcome their initial feelings of intimidation to be academically successful. This, however, should not be taken as evidence for Fordham and Ogbu’s (1986) suggestion that high achieving Black students must “act White” to succeed. Rather, these students are able to navigate these racially charged situations while still maintaining pride in their race and culture (Carter, 2008; Carter Andrews, 2009; Marsh, 2013; Marsh, Chaney, & Jones, 2012). In fact, Griffin (2006) found that students particularly worked toward academic success in order to prove the stereotypes of their classmates and professors wrong.

Also important to high achieving Black students is their desire to be a source of pride for their community. Griffin (2006) found that students in her study thought it important to succeed in school so that they could both be a source of pride in their community and to help address the underrepresentation of Black men and women in professional settings. This finding was mirrored by Marsh (2013), who states that the young Black women in the study viewed themselves “as part of a larger ‘collective struggle’ that helps them to academically excel, and make their families and the members of their community proud” (pg. 1225). Additionally, McGee and Martin (2011) found that the high-achieving Black students in their study felt a sense of responsibility for the next generation of students.

Of course, not all high-achieving Black students do so as a form of resistance to the current state of the educational system. To suggest otherwise intimates that Black students do not achieve for their own edification. Rather, high-achieving Black students have a very clear idea of what it takes to find educational success. Fisher (2005) found that Black high achievers have high levels of confidence and a strong academic and intellectual self-concept. They recognize
that effort and accountability lead to academic success (Carter, 2008; O’Connor, 1997). Carter Andrews (2009) found that high-achieving Black students hold the same traits as all high achieving students: “the desire to do things well and to compete against a standard of excellence (pg. 308)”.

Also key in these students is a strong belief that education will take them somewhere. Ainsworth-Darnell and Downey (1998) found that Black students do not perceive that they will have less future return from education than Whites. In tandem with that, Floyd (1996) found that these students work hard to overcome obstacles, all in the belief that their academic success will pay off for them in the short- and long-term. These high-achieving Black students recognize the importance of education for improving their future, and do not name their race as a factor that will keep them from their goals. Rather, they suggest that their futures are in their own hands and are dependent on their achieving academically through hard work and individual effort (O’Connor, 1997).

In many studies of high-achieving Black students, the students point to specific factors at school and at home that helped in their achievement. Not surprisingly, schools that have access to more resources and place an emphasis on going to college have a positive impact on students’ academic achievement (Griffin & Allen, 2006). Wiggan (2008) conducted a study of high-achieving Black college students, who suggested the following four ideas for improving Black achievement overall: 1) school finance reform; 2) improving teacher practices; 3) enhancing extracurricular activities; 4) and making higher education more affordable. Instrumental to the success of students in Wiggan’s (2008) study was the support and practices of teachers. In fact, students reported teacher practices as having the most instrumental school-based effect on their success (Wiggan, 2008). These practices were both pedagogical and non-pedagogical. For
example, effective teachers used interactive instruction that emphasized teamwork, self-direction, and critical thinking (Wiggan, 2008). Outside of pedagogy, effective teachers were described as caring and supportive individuals who were committed to developing relationships with students (Wiggan, 2008). Floyd (1996) found that selected teachers were frequently cited as motivating influences in students’ academic achievement.

Outside of the classroom, high-achieving students described the positive impact that social relationships they developed in the school setting had in helping them to develop social skills and positive peer groups (Carter-Andrews, 2009; Wiggan 2008). In addition to the support found at school, high-achieving Black students point to the support of their family as key to their academic success (Carter-Andrews, 2009; Floyd, 1996; Griffin, 2006). Parents can impact student achievement in several ways, including students’ having a desire for parental approval, along with parents who instilled a need to strive for academic success in order to achieve the “American Dream” (Fisher, 2005; Griffin, 2006). Carter-Andrews (2009) found that supportive family was key to the development of students’ identity as academic achievers. Floyd (1996) found that mothers in particular were cited as clear drivers for students’ desire to achieve.

**Current Trends in School Improvement**

Much of the current literature on school improvement is embedded in No Child Left Behind reform efforts (Bloomfield Cucchiara, Rooney, & Robertson-Kraft, 2015; Finnigan, 2010; Finnigan, 2012; Finnigan & Stewart, 2009; Orr, Berg, Shore, & Meier, 2008). These studies discuss reform brought about by state or district mandate, rather than school-based decisions. However, these studies should not be dismissed from this literature review, because although the impetus for these reforms came from outside of the school, the results still shed light on what does and does not work in terms of school improvement.
Stoll (2009) states that the ultimate goal for school improvement is that it needs to make a difference for students. As such, the literature reviewed here will focus on school improvement efforts centered on improving student achievement. While it is important to recognize that no two schools are alike, and what works in one school might not work in another (Stoll, 2009), the literature on school improvement can be reviewed for themes on school improvement rather than rules one should follow during reform. Specifically, this review will look at what works in school improvement through the lenses of principal and teacher leadership.

Principal leadership. Ineffective leadership is considered one of the top issues in failing schools (Finnigan, 2010). In fact, Finnigan (2010) states that there are no documented cases of failing schools that were turned around without the help of a powerful leader. Principals at schools who successfully undergo reform efforts are often referred to as transformational leaders (Bloomfield-Cucliara et. al., 2015; Finnigan, 2010; Finnigan, 2012; Finnigan & Stewart, 2009; Leithwood & Jantzi, 1990). Transformational leaders provide clear vision, inspire employees, and give work a greater sense of meaning (Runhaar, Sanders, & Yang, 2010). Leithwood and Jantzi (1990) proposed that principals who exhibit transformational leadership qualities are most effective at helping to restructure a school into a student-centered culture. In fact, Finnigan and Stewart (2009) found that transformation leadership qualities were hard to find in principals at failing schools.

Working with teachers. Effectively working with teachers is a key component of principal leadership in schools undergoing reform efforts. Bloomfield Cucchiara et. al. (2015) suggest that effective leaders not only put systems in place, but ensure that teachers know what to expect. This is important, as teacher effort is affected by a principal’s openness and
Consistency (Finnigan, 2010). Finnigan and Stewart (2009) found that principals at improved urban schools created a collective sense of responsibility for improving student achievement.

Geijsel, Sleegers, and van den Berg (1999) found that teachers’ practices were positively impacted when they worked under a principal who showed the following three characteristics: vision, individual consideration, and intellectual stimulation. The results of this study suggest the importance of accounting for teachers’ feelings as part of the change process. This is further supported by Geijsel, Sleeger, van den Berg, and Kelchterman’s (2001) study into what conditions teachers needed in order to succeed during large-scale change. In this study, Geijsel et. al. (2001) found that teachers who understood the vision and change process and had some say in change decisions were more likely to have positive feelings about the change process.

Effective principal leaders in schools that successfully underwent reform efforts support and motivate their teachers. Research has found that effective principals “encourage teachers to take risks and try new methods of teaching in their classroom, challenge the status quo, and bring teachers into contact with new ideas” (Finnigan, 2012). Finnigan (2010) found three areas associated with follower motivation at improved schools: development of a shared vision and purpose, the changing of school norms, and the promotion of trust and respect. This support also comes in a more tangible way through the strategic work they do to acquire resources for teachers and students (Finnigan, 2012).

Along with support and motivation, the development of trust between principals and teachers is a key component of school improvement efforts. Teachers trust in principals’ ability to both manage a school and show them respect is a critical component of school improvement (Finnigan, 2012). In fact, teacher effort is directly related to their trust in their principal’s truthfulness, openness, and consistency (Finnigan, 2010).
**Instructional leadership reform.** Kelley and Salisbury (2013) found that the supportive role played by a principal was critical in the advancement of “instructional leadership reforms” (pg. 311). It is possible that this critical role is due to the fact that the principal is often the one that is directly communicating with district administration. Frost and Durrant (2003) found that teacher-led instructional development work is improved when administrators lead the initial planning of that work, likely due to their familiarity with current school- and district-wide instructional initiatives and priorities.

School principals have been found to help support teacher-led instructional development in several ways. First, principals who maintain clear, open communication channels were much more likely to see this work flourish (Finnigan, 2012; Harris, 2001; Muijs & Harris, 2006). Harris (2001) found that school improvement initiatives require clear communication with administrative staff, who were needed to remove structural barriers that were affecting their implementation. A lack of clear communication is likely to impede the progress of instructional improvement. Muijs and Harris (2006) found that, even when teachers were working cooperatively and had a shared vision of their work, this work was unlikely to move forward when they were faced with a lack of principal support. If this is true, then it may be stated that promotion of teacher leadership initiatives by senior leadership is key to both starting and sustaining them (Muijs & Harris, 2006). Additionally, principals play a critical role in promoting consistency with instructional programs at their school (Finnigan, 2012), which can help when schools need help to maintain successful initiatives.

Portin, Russell, Samuelson, and Knapp (2013) found that principals who were successful engaged in teacher-led instructional development were doing so in three important ways. First, administrators “lay the groundwork” (Portin et al., 2013, pg. 244) for the implementation of
these initiatives. It should be noted, however, that there is no specific information about what this groundwork entails. Second, Portin et al. found that principals who were successful in teacher-led instructional development saw themselves not as the instructional leader of the school, but rather as the leader of an instructional leadership team. Third, Portin et al. suggest that successful principals found ways to interact with teachers outside of the normal, evaluative way they had in the past.

**Clear vision and expectations.** Principals in schools that have undergone successful reform efforts have a clear vision for improvement (Finnigan, 2012). Harris (2001) found that when school principals had a clear vision for development, and were able to effectively share this vision with teachers, the teachers were much more likely to work toward and actually achieve the developments. Feeney (2009) takes this one step further, suggesting that both clear vision and steps to measure daily improvements made in the classroom are key to success.

It has been found, however, that clear vision and expectations on their own do not ensure success. In fact, it is possible to have too broad of a vision, or too many initiatives to implement effectively (Margolis & Huggins, 2012). Rather, school administrators need to focus on developing a shared vision with teachers in situations where shared leadership is being implemented (Muijs & Harris, 2006; Printy, 2008). When school improvement initiatives are based on clear goals that have been shared with teachers, continuous sharing of expectations and school reform intentions can lead to an increased willingness of teachers to work with administration on school reform (Portin et al., 2013).

**Teacher leadership.** Frost and Durrant (2003) state that, “long term, sustainable improvements in the quality of learning depend on the action taken by teachers” (pg. 175). As principals’ time is often consumed with managerial work, and the responsibility of improving a
school’s instructional capacity is seen as too much for a single person to accomplish (Klar, 2012), it seems a natural fit that teachers would take on roles of leadership when it comes to teaching and instruction reforms. In fact, Feeney (2009) found that “teacher leaders have become essential to improving student achievement” (pg. 213). Perhaps this is because teachers are more likely to take input from peers whom they see as wedded to the daily experiences of being a teacher (Taylor, Yates, Meyer, & Kinsella, 2011).

Muijs and Harris (2006) identified five dimensions of teacher leadership that are necessary for strong instructional support. First, teachers must be given opportunities to make decisions about school improvement work through shared-decision making (Muijs & Harris, 2006). Second, suggest Muijs and Harris, is that teacher leadership must allow for collaboration that gives teachers the opportunity to make changes to their practice and improvements in teaching and learning. Third, successful teacher leadership must involve opportunities for teachers to become involved in important tasks that lead to their participation in school improvement initiatives (Muijs & Harris, 2006). Fourth, according to Muijs and Harris, is the use of professional learning opportunities that allow teachers to learn both by themselves and with colleagues. Finally, teacher leaders must include activism in the form of engaging teachers with school-wide issues in a way that allows them to directly bring about change (Muijs & Harris, 2006).

**Instructional coach.** Instructional coaches are teachers, or former teachers, who spend at least part of their day in the service of their colleagues. Margolis and Huggins (2012) suggest that instructional coaches use their teaching expertise and pre-formed relationships with teachers to help teachers bring about instructional change in their classrooms. Their utilization, suggest Margolis and Huggins, is due to state and district leadership hoping to bring about learning
alignment and student achievement in the face of No Child Left Behind adequate yearly progress goals. Strahan, Geitner, and Lodico (2010) found that successful instructional coaches spent a great deal of their time building trusting relationships with their colleagues. This is aligned with the earlier discussion of the importance of trust. Another key aspect of instructional coaches’ success is having well-defined roles. In fact, Margolis and Huggins found that when the role of an instructional coach was not well-defined, there was a negative impact on the relationships between the instructional coach and their teacher colleagues.

*Teacher teams.* There is evidence to support the notion that teachers work most effectively when they are working collegially with other teachers to support each other’s practice (Harris, 2001). These teacher teams give instructors a chance to serve as mentors to their colleagues, while also discussing effective instruction and student work (Barnett & Aagaard, 2007). Scribner, Sawyer, Watson, and Myers (2007) suggest that there are two purposes for teacher teams: problem-solving teams that are given a well-defined purpose, and problem-finding teams, who work towards innovative solutions to a vaguely understood issue.

Teachers who work in teams on teaching and learning have been linked to improved student achievement (Portin et al., 2013; Scribner et al., 2007). Scribner et al. (2007) found that schools who have self-governed teacher teams working to develop goals, curriculum, and instructional strategies have students who achieve at higher levels. Similarly, Portin et al. (2013) found that, when teachers were in teams with a primary goal of school-wide instructional leadership, they were able to improve their practice, which has been linked to improvements in student achievement. However, teacher teams, when not used efficiently, can lead to conflicts. Specifically, when problem-solving groups are unable to find a solution to the problem, the team
members can seem to be at cross-purposes, leading to a lack of productivity (Scribner et al., 2007).

**Data-driven inquiry.** In addition to the importance of *how* teachers engage in reform is *what teachers are doing* during this engagement. Several studies (Gallimore, Ermeling, Saunders, & Goldenberg, 2009; Feeney, 2009; Harris, 2001; Muijs & Harris, 2006; Stegall & Linton, 2012; Taylor et al. 2011) point to the importance of engaging in data-driven inquiry. The use of data-driven inquiry is successful for several reasons. First, it allows teachers to make instructional changes that are directly tied to student achievement data. In their study of successful instruction teams, Muijs and Harris (2006) found that those groups were engaged in data collection with the express purpose of informing instruction. This use of data was especially successful, as it allowed teachers to focus instructional changes directly on the effectiveness of instructional initiatives, rather than on “momentary whims or reactions” (Muijs & Harris, 2006, pg. 969). This result is mirrored in the work of Harris (2001), who found that the focus on data during instructional reform efforts led to targeted development goals that were based on actual teaching and learning data. As teachers gathered data and monitored their students’ work, they were able to engage in informed decision making about needed areas of improvement (Harris, 2001).

Second, the use of data-driven inquiry allows the opportunity for school-wide reform. Stegall and Linton (2012) found that when teachers worked in collaborative teams to focus on identifying and helping struggling students, they were able to develop school-wide strategies that were beneficial to similarly achieving students. Taylor et al. (2011) found that teachers were able to use student work as a jumping off point for the clarification of state-wide teaching standards. As teachers discuss student work and develop strategies for helping them succeed, they are
improving their own pedagogical knowledge, regardless of whether the student work they are analyzing belongs to their own students.

School improvement, then, seems to take place when there is a marriage of strong principal leadership, opportunities for teacher leaders, and data-driven inquiry. This would make sense, as they all fit together. Principals must provide clear vision and inspire teachers, while also effectively working with teachers and encouraging teacher leadership. Teacher leaders must then engage meaningfully with the principal while also forming trusting, supportive relationships with their colleagues. Yet even with this leadership, the pathway for improvement is not set with improvement work that is based on data-driven inquiry. So, in this way, principal leadership, teacher leadership, and data-driven inquiry form an interrelated bond for school improvement.

**AP as a Mechanism for Success**

There has been a number of studies that look at how students who take AP courses in high school achieve in college as compared to non-AP students. Several studies have shown that AP students perform well in subsequent college courses in the discipline (Morgan & Klaric, 2007; Patterson & Ewing, 2013). Morgan and Klaric (2007) found that, in most AP subjects, students who receive a 3 or higher on one or more AP Exams performed the same as or better than non-AP students in the intermediate-level college course related to their AP Exam. Patterson and Ewing (2013) had similar results, though they found that for all the AP subjects in their study, examinees performed the same as, or better than, non-AP students in the subsequent college course related to their AP Exam. These findings are significant because they show that students who replace a college course with AP credit are as prepared as those students who took the same course in college.
Success for AP students can be found throughout their overall college experience. Hargrove, Godin, and Dodd (2008) found that students who took one or more AP courses and exams generally had higher grade point averages (GPAs) throughout their college career than non-AP students. Similarly, Mattern, Shaw, and Xiong (2009) found that students earning a 3 or higher on the AP Exam earned higher first-year GPAs. In fact, students’ mean first-year GPA is directly related to their average AP Exam scores. The higher students scored on the AP Exam, the higher their GPA in their first year of college.

Another significant advantage of AP students is the likelihood that they will graduate college in four to five years. Mattern, Marini, & Shaw (2013) found that students who took one or more AP Exams, regardless of what score was earned, are more likely to graduate from college in four years or less compared to non-AP students. This finding is particularly important because it shows that even simply taking an AP course and exam will benefit students, even if they do not receive a passing score of 3 or better. Dougherty et. al. (2006) had somewhat different results, as they found that students in Texas who earned a 3 or higher on one more AP Exams were more likely to graduate from college in five years or less.

Another impact that AP participation has is on students’ college major selection. Mattern, Shaw, and Ewing (2011) found that students who take an AP Exam in a particular content area are more likely to major in a related discipline in college, especially in the STEM majors. As stated earlier, there is a large gap in the number of Black students who enter STEM fields. If this finding is accurate, encouraging Black students to take STEM-related AP courses could work as a mechanism to increase their participation in the STEM field. There is some evidence to show that focusing students on STEM can increase their likelihood to succeed in this field. Stolle-McAllister (2011) found that talented Black students who attended a STEM bridge program prior
to attending college were helped to succeed in STEM courses. Palmer, Davis, and Thompson (2010) had similar findings in that students who attended a summer program before enrolling in an engineering program at a particular HBCU were more likely to persist to graduation. What these programs have in common with AP coursework is that they expose students to college-level coursework in a lower-stakes environment, thereby preparing students to engage in the rigor and critical thinking required of them to succeed in college-level STEM courses.

**Summation**

There are many different school-based factors that can affect a student’s academic achievement (Barton, 2003). In addition to the factors that affect individual achievement, Black students must also contend with factors that lead to the achievement gap, which put them at unequal academic footing with their White contemporaries (Ford & Moore, 2013). Among these factors is a lack of rigorous curriculum (Barton, 2003), which is a term that could certainly be used to describe college-level, AP coursework. It is important to acknowledge that research into the achievement gap often takes a deficit perspective. However, Ladson-Billings and Tate (1995) found that educational inequalities are not brought on by cultural factors but instead by institutional and structural racism in schools.

Schools who have managed to improve student achievement found success through both principal and teacher leadership (Finnigan, 2010; Frost and Durrant, 2003). Principals who have a strong vision for school improvements efforts and work with teachers to build trust and motivation are most effective at bringing about academic reform (Bloomfield Cucchiara et. al., 2015). For reform efforts to work, teachers must be willing to work together to improve their instruction, especially by using data-driven inquiry (Muijs and Harris, 2006).
Research shows that Black students do not have equal access to AP coursework, and those who do have access are not passing AP Exams at rates equal to White students (College Board, 2014). Yet there are Black students in urban settings who are successful in AP level coursework. This is significant, as there are substantial benefits at the college level for students who take AP and pass AP courses and exams (Morgan & Klaric, 2007; Patterson & Ewing, 2013).

Teachers with Black students must consider a variety of variables within the school, cultural, familial, and individual contexts if they are to help their students succeed in AP courses. The purpose of this research study was to examine ways in which teachers with a high proportion of Black students helped these students succeed in AP coursework. This study looked at the practices successful schools use inside the classroom to support Black AP students, as well as the supports that schools provide these teachers.
Chapter Three: Research Design

Methodology

The research questions for this study were as follows:

- What pedagogical practices do Advanced Placement (AP) teachers at an urban high school use to help Black students succeed in AP courses?
- How does a school with successful Black AP students support teachers’ pedagogical practices?

The overarching research design for this study was qualitative. Qualitative research calls for the analysis of data, which are collected in a setting that is natural to those under study, to establish patterns or themes (Creswell, 2011). This feature made qualitative research design ideal for this study. The research questions asked what pedagogical practices AP teachers at an urban high school use to help Black students succeed in AP courses and what the school is doing to support those practices. As such, the ideal setting for this study was the setting in which these students and teachers interact. Conducting the study in the natural setting allowed for more face-to-face interaction of time (Creswell, 2011), which was a key for the development of patterns.

Research Paradigm

The research paradigm for this study was constructivism, which is rooted in the assumption that reality and truth are subjective and based on the experiences of each person (Ponterotto, 2005). The reality of one person is completely different from that of another, as it is shaped by a person’s experiences and values. As such, the constructivism paradigm is qualitative in nature and relies heavily on the interactions between the researcher, and the participants to make meaning (Ponterotto, 2005, Merriam, 1991). Only through understanding the experiences
of the group being studied can a constructivist begin to develop meaning and understand reality (Ponterotto, 2005).

In terms of research design, constructivists would interview their participants and then sort through their stories in order to “search for patterns of meaning” (Butin, 2010, p. 59). In this particular study, I interviewed the school principal and AP teachers in order to represent their realities. The constructivism paradigm requires the researcher to document participants’ perspectives on the issue being investigated (Butin, 2010), and therefore the relationship between the researcher and the participant is very important. The researcher and participant have a close connection, as this paradigm is rooted in interviews, stories, and first-person accounts (Merriam, 1991). For this study, I shared an open dialogue with my participants, which included sharing information about myself such as my experience as a teacher and my work with the AP program at the College Board. Because of the close interactions between the researcher and the participant, my bias cannot be separated from the research process, and will be acknowledged within the study.

**Research Tradition**

The research design chosen for this study was case study, which can be used to illustrate unique cases, in this study a school site with Black students who are successful in AP coursework (Creswell, 2011). This design worked well with this research study, as the research questions could be addressed through a description of practices, which is a component of case study research (Creswell, 2011).

Case study research is one of the most frequently used qualitative research methods (Yazan, 2015). Despite this popularity, there are still many misconceptions about its efficacy as a research method (Baxter & Jack, 2008). At the most basic level, case study research involves the
study of a case. Seminal researchers who have contributed greatly to case study research are Yin, Stake, and Merriam. Yin, Stake, and Merriam’s approaches to case study research all fall into the constructivist paradigm in that they believe that truth is relative and dependent on each person’s perspective (Baxter & Jack, 2008; Yazan, 2015). Yet how they define case, case study, and the design of case study research differ and are worth greater consideration.

Beginning this discussion by defining the word case is important, as it outlines what exactly should studied in order for a researcher to choose case study as a methodological approach. All three researchers use the word boundaries when defining case (Merriam, 1998; Stake, 1995; Yin, 2003). What is being bounded, however, differs. Merriam (1998) states that a case is “a thing, a single entity, a unit around which there are boundaries” (pg. 27). Stake (1995) offers a similarly brief definition, though he suggests cases are integrated systems with boundaries and working parts. Yin (2003) goes further by identifying what this “thing” or “system” is, which he specifically labels a phenomenon. Specifically, a case is “a contemporary phenomenon within its real-life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and context” (Yin, 2003, pg. 13).

If a case is some bounded entity, thing, or phenomenon, then it stands to reason that case study research is the study of that entity, thing, or phenomenon. Yet Baxter and Jack (2008) caution that case study research is often misunderstood, with those unfamiliar with the methodology assuming it is the study of individuals, historical events, or an attempt to “holistically understand exemplary ‘cases’” (pg. 544). Yin, Stake, and Merriam all take different approaches when defining case study research. Perhaps not surprisingly, given his detailed definition of case, Yin (2003) provides a detailed definition of a case study as “an empirical
inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident” (pg. 13). Merriam (1998) builds on her definition of case to suggest that a case study is “an intensive, holistic description and analysis of a single entity, phenomenon, or social unit” (pg. 34). Stake (1995) takes a different approach with his definition in that he states a case study is both “the process of learning about the case and the product of our learning” (pg. 237).

It is perhaps in the design of case study research that the three scholars most differ. Yin (2003) calls case study research design a logical sequence of steps that takes the researcher from the initial research questions, to empirical data, and finally to conclusion. Yin outlines four specific types of case study design: single holistic, single embedded, multiple holistic, and multiple embedded. Holistic studies are comprised of a single-unit of analysis, while embedded are comprised of multiple units of analysis (Yin, 2003). Stake (1995) takes a more organic approach to case study design, calling for researchers to have the flexibility to make changes to their design as they proceed through the study. Finally, Merriam (1998) puts strong emphasis on the benefit of literature review in contributing to the research design. The theoretical framework that emerges from this review helped me mold my research problem and research questions.

As the methods of the three case study scholars differ in all aspects of their methodology, it was important to choose one that would undergird this study. Therefore, this study used the work of Stake for research design, data collection strategies, and data analysis. Case study was an appropriate research design for this study because the context of the case was an important aspect of such understanding, more specifically, interviewing the teachers and principal to understand the context of the study site, along with observing classrooms to understand how teachers help Black students succeed in AP coursework. For this particular study, the case was
an urban high school that has demonstrated Black student success in AP. It was bounded by its setting as an urban school with a high Black student population and its high AP scores for Black students. This was an instrumental case study, as it described the phenomena of high achieving Black AP students (Stake, 1995).

**Participants**

Participants in this study were the principal and four AP teachers at an urban high school where the Black students are successful in AP coursework. The sample size of one urban high school was chosen based on Stake (1995), who states that the purpose of case study research is to understand that one case, rather than to understand or represent other cases. For the purposes of this study, an urban school was defined as one that predominantly serves low-income students of color. As the research questions are specifically interested in Black students, the students of color in the participating school were predominately Black.

**Recruitment and Access**

The pool of possible participants for this study was gathered from College Board data stores, which allowed for a search of AP passing rates by school. This allowed me to look specifically for schools with a high proportion of Black students that passed their AP exams. Ten schools were identified that met these criteria. Potential study sites for this research study were contacted via an email (Appendix A) to the school principal. This email detailed the purpose of the study, how they were selected, and the amount of time and number of teacher participants requested for data collection. Additionally, the email mentioned my employment with the College Board and my plan to use the study data to improve teacher training at schools with low-performing Black AP students. I received a response email back from one principal. Once the principal approved participation in the study, he signed a consent form (Appendix B). From the
original College Board data search, I identified teachers within the school that met specific criteria. I used purposive sampling, so that only teachers with students who passed the AP exam at rates above the national average of 30.7% (College Board, 2016b) for Black students were contacted via email (Appendix C) to request their participation in this study. Four AP teachers were asked to participate in the study.

Once participants were engaged, I worked with them via email to choose a time for the initial interviews to take place. All interviews were conducted at the study site. Additionally, I worked with the principal and the AP teachers to choose dates for the direct observations.

In order to guarantee participation was voluntary and that teachers could drop out at any time, participants were presented with an Informed Consent Form (Appendix D) that clearly stated the scope of the study, the roles and responsibilities of the researcher, and information about how to opt out of the study. It is important to keep the study data and study site confidential to protect the participants in the study. To do this, pseudonyms for the participants and school site were used, such as labeling the site as a Northern urban high school rather than giving the actual school name.

**Data Collection**

Data collection in case study research is characterized by the need of the researcher to spend a significant amount of time at the study site, interacting with, and reflecting on the case (Stake 1995). As such, data often take the form of direct interaction between the researcher and participants. Data collection for this study comprised two separate interview protocols, one for the principal (Appendix E) and one for AP teachers (Appendix F) as well as direct observations of the teachers’ classrooms and the collection of artifacts.
Interviews allowed for a focused conversation on the case study topic with those that have the most first-hand experience with the case (Stake, 1995). Data were collected over the course of one interview, which took approximately one hour. All interviews were audio recorded. I requested a copy of any documents that are referred to during the interviews or were used during the observation for analysis.

Both initial interview protocols (Appendix E and F) were designed to better understand the context of the study site, as well as to discover participants’ thoughts on the curricular and instructional practices taking place at their school, as well as the supports provided by the school, with the specific questions based on the characteristics of culturally-relevant pedagogy outlined by Brown-Jeffy and Cooper (2011). Specifically, these interviews allowed for collecting data on how teachers and the school allow for the expression of students’ and teachers’ cultural heritage, as well as how the school ensures equal access and high expectations for all students.

Data collection also included direct observation of the teachers’ classrooms. Stake (1995) suggests that direct observations allow for greater understanding of the case, and that these observations needs to take place in the setting most pertinent to the issue. As the research questions were specifically interested in pedagogical practices, the classroom provided the most appropriate observation setting. Additionally, observations allow for rich, thick description of what is happening in a particular setting (Ponterotto, 2006). I observed two sessions of each study participants AP courses and took notes using a grid that explored the culturally relevant pedagogy framework (Appendix G). Follow-up interviews were conducted with each teacher to ensure that observational notes reflect the teacher’s intent, rather than my own interpretation of their intent. This process helped to address my own bias, as well as improved the accuracy of the implementation of the theoretical framework to the observational data.
Classroom observation data provided the most support of the exploration of the theory of culturally-relevant pedagogy, as they allowed for direct observation of several pieces of the theory, especially developmental appropriateness, teaching the whole child, and student-teacher relationships, which are all closely tied to how the teacher interacts with his or her students.

The collection of artifacts provided unique insight into the culturally relevant pedagogy theory. I requested a copy of lessons plans, if available, and any classroom handouts for analysis. These artifacts provided crucial insight into how teachers’ lessons and classroom activities take into account developmental appropriateness, especially varying learning and teaching styles.

**Data Storage**

In order to securely maintain the data, all study data, including sound files, notes, transcripts, and coded data are kept in two locations: a hard drive and a separate back up disk. All folders are password protected to ensure access to data is limited to those with the password. All participants’ names are coded to provide participant anonymity. A key with the name coding is kept in a separate, password-protected folder. Those that require access to the data, such as my advisor, will be given a link to a secure Dropbox folder, which contains only those documents specifically required. All data will be maintained in secure folders for a period of five years post-study.

**Data Analysis**

To begin the data analysis process, audio files of the interviews were transcribed using a transcription service. I verified the transcriptions by comparing them to the audiotapes. These transcriptions, along with the observation data and artifacts were loaded into MAXQDA, a computer-assisted tool for data analysis.
First cycle coding for the interview, observation, and document data was conducted using descriptive coding which allowed for an inventory of the data’s contents (Saldana, 2009). Each interview and observation was treated separately, which allowed for the categorization of topics for each study participant. Next, provisional coding was used to code the data based on a list of codes developed from the literature review and theoretical framework (Saldana, 2009). These categories were: identity and achievement, equity and excellence, developmental appropriateness, teaching whole child, student-teacher relationship, teacher leadership, and data-driven inquiry.

These themes then underwent second cycle focused coding. This coding method allowed for the disparate first cycle descriptive codes to be brought together and grouped together into salient themes (Saldana, 2009). As first cycle coding and provisional coding yielded some common codes, I began by eliminating redundant codes. Next, the codes were exported into Excel to allow for grouping. Similar codes were grouped by color. As this grouping was occurring, I took notes on my impressions of the data. Stake (1995) suggests that researchers allow their intuition and impressions to guide data analysis. Based on the groupings and notes, four major themes began to emerge from the data. The codes were then moved into new sets in MAXQDA that aligned with the four themes. Finally, sub-themes began to emerge for three of the major themes. The theme sets were exported to Excel, which allowed for re-grouping the codes into the sub-themes.

**Trustworthiness**

To improve trustworthiness and validity, this research study used triangulation to provide corroborating evidence (Creswell, 2011). I used two different sources of data, interviews and direct observation, for analysis. A member check gave participants the opportunity to review the
interview transcripts and direct observation notes to check them for accuracy (Harper & Cole, 2012). This was especially important so that I could ensure that my bias did not affect the study data.

One way to maintain internal validity is to preserve neutrality and avoid bringing bias and opinions into research work. To keep personal beliefs and bias out of research, I engaged in a careful reflection to identify and recognize personal views and biases on the issue (Machi & McEvoy, 2012). Creswell (2011) cites research that calls for using language that avoids “demeaning attitudes, including biased assumptions” (p 277). Rather, language should be inclusive and sensitive to the feelings of research participants and those who will be reading the study (Creswell, 2011). An additional threat to internal validity is the possibility of losing research participants to another school or district. To minimize this interference, I gathered data during a single school year.
Chapter Four: Research Findings

The purpose of this study was to examine ways in which teachers with a high proportion of Black students helped their students succeed in Advanced Placement (AP) coursework. An analysis of the principal and teachers at a school that has found success for Black students in AP courses will help determine strategies and supports that were used to achieve this success. This study engaged the principal and four teachers at a high school. Specifically, the teachers taught AP World History, AP Biology, AP Seminar, and AP Calculus. Data for this study took the form of interviews, observations, and artifacts.

The first research question aimed to determine the pedagogical practices AP teachers at an urban high school used to help their Black students find success in AP coursework. To answer this question, I interviewed and observed four AP teachers. The teacher interviews allowed for targeted questioning of their classroom practices. I also interviewed the teacher to find any schoolwide pedagogical practices that the teachers might be using. The teacher observations allowed for a rich, thick description (Ponterotto, 2006) of their classroom practices. In addition, analysis of teacher artifacts provided another source of data for determining the pedagogical practices used by teachers.

The second research question focused on how that high school helped to support the pedagogical practices of AP teachers with successful Black students. To answer this question, I interviewed the principal to gain an understanding of the context of the study, as well as supports the school provides to teachers. I also interviewed the teachers to learn the supports they receive from the school and how they perceive the helpfulness of these supports.

This chapter presents the findings of this constructivist case study (Ponterotto, 2005). It begins with an overview of the data collection process. This is followed by a description of the
study context and an overview of the principal and teachers who participated in the study. Next is a review of the four themes that emerged from the data analysis. Finally, the chapter concludes with a summary of the findings.

**Context of the Study**

This study took place at a charter high school in a large, Northeastern city. The school is part of a larger charter network that has over forty-five elementary, middle, and high schools in several Northeastern cities. The larger charter network does use many similar strategies and approaches; however, each school has some autonomy in terms of curriculum. The school has 100% minority enrollment, 73% of whom qualify for free or reduced lunch. The student population consists of African American, Caribbean American, and Latino students that live in neighborhoods local to the school. The school began its fifth year in fall 2016. There are approximately 330 students enrolled in 9th through 12th grades for the 2016-2017 school year, though they hope to eventually reach enrollment of 600. Class size is an average of twenty-five to thirty.

The teaching staff at the school is made up of a mix of new and experienced teachers. About one-third of teachers are in their first through third year of teaching. Another third have been teaching three to five years, and the last third have been teaching over five years. Teachers who teach AP classes are chosen because they have a strong background in the course’s content knowledge. This, according to the principal, is for “ensuring that not only can they create the engaging classroom, rigorous culture that we want, but they have the background knowledge to be able to teach that level of rigor.” Teachers who have never taught AP are sent to conferences and trainings, and sometimes work with a co-teacher.
The school has made a commitment to offer all students at the school access to a variety of AP classes. The principal stated that the philosophy of enrolling all students in AP courses started in the second year of the school, when all the sophomores were enrolled in AP World History. As that first group of sophomores moved through their junior and senior year, the school’s administration decided to continue to add AP courses to the program. Several AP courses have 100% student enrollment: AP World History, AP US History, AP US Government and Politics, AP English Language, AP Seminar, and AP Research. In addition, students can take AP Calculus, AP Statistics, AP Computer Science, AP Environmental Science, AP Biology, AP Chemistry, and AP Physics. It should be noted that this philosophy of AP for all is not currently in place at the other high school in this school’s charter network.

This system ensures that students take at least six AP courses, and the school has found success. In 2015, 61% of students on the campus scored a 3 or higher on at least one of their AP exams. The school has worked strategically to build an AP culture at the school, so that students and their parents see taking AP as the norm rather than the exception. The school has made a conscious decision to focus on AP for the benefits it provides to students. As the principal stated, We’ve found the sweet spot of opportunity and success, and we’re giving kids access, and even if they don’t score a 3 or above, we see the great benefits of them having gone through the experience of the courses that have had this level or rigor.

What follows is a description of the educators’ perceptions of how this success has been achieved.

**Overview of Participants**

**Peter.** Peter, a White male, was the principal at the school for four years, though he recently moved into a regional role at the charter network. Prior to working for this charter
network, Peter was an assistant principal at another charter school network, and a classroom teacher for the six years prior to that. As a classroom teacher, Peter had the opportunity to teach AP World History. With regard to teaching AP, Peter believes that every day he was “preparing kids to have a deep understanding of history, but also mirroring every day the skills and habits they would use later on.” In other words, the transferable skills such as comparison, causality, and argumentation were just as important as the history content students were learning.

Peter recognizes that the students at this school might not have access to AP if they had attended another school. When asked why he thought it was important to have underrepresented students in AP, Peter stated,

We're providing our students with access to the most rigorous course opportunities, like I said, that if they had been in perhaps in one of the other schools that they could have attended that they might not have access to, some of them may never have taken an AP course or they wouldn't have been accepted into an AP course.

This school has made a strategic decision to eliminate tracking and ensure all students have access to rigorous coursework.

Beth. Beth, an Asian female, has been teaching AP Seminar for two years. AP Seminar is a course that requires students to investigate real-world issues and write evidence-based arguments, both individually and as a group (College Board, 2016a). Prior to that she was a world history teacher, which she called “Pre-AP World.” Beth also had experience teaching at another school where AP was not open to all students. She believes that AP opens doors for minority students and that the school is “willing to take that job” as “Any kid can benefit from [AP].” Beth thinks it is important to provide the students with access to AP, stating,
I think first of all we give them the opportunity to do it. I’d imagine that in a lot of places where students are tracked, and students are discouraged either explicitly or implicitly through messaging and expectations that this is not the courses, or the track for them, but we don’t give students that option. We tell them from day one you are, you will be, and you just are that AP scholar.

In essence the school has made the decision that all of their students, who might have been tracked out of or discouraged away from AP at another school, are going to have the opportunity to take AP courses.

Jennifer. Jennifer, a Latino female, is an AP Biology teacher who has taught in both public and charter schools. She has been teaching for six years and has taught AP Biology for four of those years. Jennifer believes it is important for minority students to have access to AP because of the content but especially because of the transferable skills. She said,

It's important because it gives them… the content background that they’ll need to be successful in college. But more than that, it's the skills. It's the study skills, it's the engaging in class skills, it's the higher-level thinking they need to do. Without it, I think you're at a disadvantage going into a higher-level institution.

She pointed to her own experience with taking AP as a major factor in her success in college. She believes that her students would not have been allowed in AP at a “normal school” because “they’re not at the intellectual level” that would be expected in a public school. When students enter her class, “They’ll have the skills necessary, and the drive to do well. I think it exposes them to it, and they shouldn’t be shut out just because they’re not going to pass.”

Marjorie. Marjorie, a White female, has been teaching for four years, and teaching AP Calculus for two of those years. She believes that all students should have the opportunity to try
taking AP courses. As a Calculus teacher, she does believe there is a basic threshold of math skills that students will need in order to be successful in AP Calculus, but if they “are capable of this foundational level [work],” then they deserve to have a chance in AP. Marjorie believes students who were in her AP Calculus class the prior year would not have been in AP Calculus in a public-school setting. She talked about one student in particular,

I had a student last year in AP Calculus, and she was on…she had a C in pre-calculus, she had pass the Algebra 2 Regents, but just a middling student, and she probably would not have been put on an AP track, but she worked really hard in my class and she worked with me a lot, and she got a 3 on the AP exam.

Students who in some schools might not be seen as AP-level students can find success with hard work and good teaching.

William. William, a White male, has been teaching AP for two years, and has been teaching for a total of six years. William teaches AP World History, which is the first AP course that all students at the school will take in the 10th grade. William is in a unique position, as students take World History in both 9th and 10th grade, giving them two years to master the content of the course. William believes that it is important to provide opportunities for their students to take AP, especially as minorities are typically underrepresented in AP classes. When trying to share with his students the importance of AP, he shares the typical lack of opportunity for minority students, telling them,

This is a new opportunity for you to earn college credit where people think that you can't hack it. They're going to see you and they'll say, “You’re not AP-level material,” but you're going to prove them wrong by taking this course. I think that's the value when
you're trying to motivate them to prove, kind of debunk the trend to reverse the stereotype type of thing.

William hopes that discussing the current inequity found in AP enrollment with his students will help motivate them to do their best and prove wrong those who think AP is only for high-achieving, non-minority students.

Research Findings

The research findings for this study have been broken up into four themes: High expectations with appropriate supports, warm but strict student-teacher relationships, data-driven decision making, and commitment to teacher support. These themes have been organized in the order above based on how they support the two research questions. The first research question, which aimed to determine the pedagogical practices AP teachers at an urban high school used to help their Black students find success in AP coursework, is supported by the first two themes, as well as by the first and second subsections, formative assessment and interim assessments, within the third theme of data-driven decision making. The second research question, which focused on how that high school helped to support the pedagogical practices of AP teachers with successful Black students, is supported by the interim assessments and analyzing student work subsections of the third theme, along with the fourth theme, commitment to teacher support.

High Expectations with Appropriate Supports

A key tenet of the school is a focus on high expectations for all students. Beth described this as “a… fundamental belief that all our kids can achieve to a really high level.” One key way they demonstrate these high expectations is through their AP enrollment. Every student, regardless of skill level, is expected to take at least six AP courses, and Beth suggests this is a
big part of their culture and it makes students feel unique because they’re viewed as AP scholars. Peter believes this is why a charter network like the one their school belongs to is valuable:

 Well, this probably drives at the heart of why a charter network like ours exists, and that is to just demonstrate that through high expectations and excellent teaching that any student can have incredible success in the most rigorous coursework, which we’re proving.

These high expectations begin before high school even starts, with summer homework for entering ninth graders that ensures they understand the level of effort that is required at the school. William believes it is important to have these high expectations for students from the start, especially as their population of students might not have been groomed from a young age to strive for higher-level coursework like AP. William believes that holding students to these expectations tells students, “You deserve high expectations. If we’re going to lower them for you we’re saying you can’t do this, you can’t meet this, you can only meet 85%.” Ultimately, the hope is that holding students accountable with high expectations and rigorous coursework will prepare them to be successful as they transition into college.

Meeting students’ cognitive needs. While the school is focused on AP access for all students, many students do not come to the school prepared for AP-level coursework. Beth and William both mentioned having students that read below grade level in their courses, both of which are reading intensive. In addition, the AP for all focus at the school means that students who are classified as special education will also be taking AP courses. These challenges require the teachers to constantly monitor their teaching to make sure they are meeting the students’ cognitive needs, while also ensuring a rigorous course experience. William stated that this requires teachers to think about
Modify[ing] what an AP class looks like to make sure the foundations are in place, that we still have a clear path and that we’re still doing what the AP demands of us, but in a way, that puts our students in the place to succeed.

Beth believes it can sometimes be a struggle to find the right supports for students, and the teachers often discuss that it is not merely about pass rates on the AP exams, but where a student moves from one year to the next. The lack of emphasis placed on students’ passing the AP exams was shared by the others in this study. Peter remarked on the great benefits they see for students who took an AP course and did not pass, because they had the experience of taking a course that had a high level of rigor. Jennifer, who believes it is exposure to AP that matters, stresses to her students that she will be just as proud of them if they do not get a passing score, as long as they try hard in her class.

The school works diligently in the first few months of school to help students gain the habits and skills they need to meet the rigor of the AP courses. Those students who are having trouble have a variety of in-school supports available, including social workers, a special education coordinator, and content support for the humanities and math. Peter said these staff members work together closely to ensure students’ needs are being met and they are being set up for success. The school has developed a *Gradual Release Vision*, which is 61-page document that outlines exactly what supports a student can expect at the school. Each support is listed by grade level and semester, and is divided into three areas: Academics, Culture, and Student Leadership. For example, in terms of lecture length, a ninth-grade student in the first semester is expected to take notes in five to ten minute rounds, for a total of no more than twenty minutes. This would increase in the second semester to ten to fifteen minute rounds for no longer than
thirty minutes. By the time students are seniors, they are expected to be able to take notes for one continuous sixty-minute period.

Teachers work diligently to ensure there are enough supports built into their lessons. Beth believes this meticulous planning is necessary, as “We know that if we are working [with] the students who are multiple grade level behind, they are going to need a lot of intentional supports.” Beth’s lesson on connecting multiple perspectives included several exemplars that were provided to students. Marjorie’s AP Calculus lesson plan specifically called out roadblocks that students might face, and how to fix them. William’s lesson plan included steps to take if students annotated the sources incorrectly.

As these observations took place in the early part of the school year, I witnessed lessons where strong supports were still in place. This was perhaps most apparent in Jennifer’s class. During both observations, students were engaged in lectures. Rather than requiring students to copy down the slides, they were provided a photocopy of the PowerPoint, and were told to take notes on the slide. This support, according to Jennifer, ensures that students have the important points from the lecture. As the year progresses, this support will gradually diminish until they are responsible for taking notes without the aid of a PowerPoint printout. Jennifer also supported students in how to take notes on the PowerPoint printout. For example, Jennifer told students, “You should circle prokaryote and write on the slide what it means in case you forget in the spring when we’re reviewing.” In addition, she told students to draw a star next to an “easy phrase that people often forget,”, and ensured students wrote down specific, important words. In sum, students are explicitly taught how to learn college level material.

During the lesson on genetics, Jennifer did not back away from using technical, appropriate language, but rather added supports such as spelling out difficult words: “It’s called
an inducible operon. Inducible is spelled i-n-d-u-c-i-b-l-e,” or asking for a call and response on difficult words, “Repeat after me, achondroplasia, amniocentesis.” Jennifer made sure to engage the students visually as well. Her PowerPoint had visuals on each slide, and every slide had a minimal amount of large font text. Jennifer mimicked swabbing her cheek when talking about genetic testing, and she often mimicked writing when she wanted them to write down an important note. In another example, she had students demonstrate protein repressors by holding hands with their partner and mimicking inhibiting forces. Jennifer also made sure to model difficult tasks before having students work independently. For example, she modeled creating a disease pedigree. Then she created a second one, with interaction from the class. Only after these two were modeled did she have students work one on one with their partners.

William provided strong support as students worked to analyze primary and secondary sources. During a discussion of Rudyard Kipling’s *A White Man’s Burden*, William engaged students in a very detailed talk to the text. While he did not provide any answers or lead students to particular conclusions, he did support students with detailed guiding questions about each line of the poem. For each source that students analyzed, William continued providing these guiding questions, while still putting the onus on students to work through each source.

This is mirrored in what I observed in Beth’s class. Students were working on a mandatory, thorough course assessment, which meant Beth could only support her students in specific ways. However, she still managed to help her students through the process of writing their first research paper for the course. She provided students with a graphic organizer for the complicated concept of connecting perspectives between different authors. She modeled this task using a sample article and then had groups work on a second one together using a different article. Students are required to create a visual presentation as part of the thorough course
assessment. To facilitate this work, Beth provided support by showing students ineffective presentation slides and asking them how they should be corrected.

Marjorie’s class is composed of seniors, and while the supports they received were not as robust as with the younger classes I observed, they were still there. Rather than require students to work on four AP-level Calculus problems on their own, Marjorie assigned groups one of three problems, and then had them jigsaw the problems. This technique allowed her to still give students support, but they were supporting each other rather than relying on her. When reviewing the previous night’s homework, Marjorie made sure to show students multiple ways to solve the same problem, which supported different types of learners. In addition, prior to their taking a practice AP exam, she supported students by stressing test skills, such as how much time to take on each question and what to do if they did not know how to solve a problem.

**Focus on student engagement.** Throughout each observation students were actively engaged, even during lectures. The lesson plans have consistent references to points in the lesson when students will be engaged, and the lesson plan format specifically calls for teachers to write down exactly what students are doing during each part of the lesson. Teachers were constantly turning to the students for questions, and often did not rely on students with their hands raised to choose someone to respond. However, two strategies that were the most visible were snapping and turn and talk.

**Snaps.** Snaps could be continually heard in every classroom I visited. Teachers used them in a variety of different ways. They were used as praise for a student who did a good job. For example, Jennifer asked for “Two snaps for Molly” when she answered a question correctly. Other students would snap to show their agreement or support for something a classmate said. Students automatically snapped for a student in Marjorie’s class who went to the board to
explain a difficult math problem. Students in Beth’s class snapped for a student who correctly identified the problems in a slide presentation.

Another use for snaps was for teachers to get a quick understanding of how students were doing in the lesson. Students might be asked to snap if they agreed with a classmate’s answer, “John, what are their genotypes? Two snaps if you agree with John.” In another example, William used the technique to determine students understanding of a source, “Snaps if you think the author is supportive of imperialism. Snaps if you think this author is opposed to imperialism.”

**Turn and talk.** Another often used technique at the school is the turn and talk. In a turn and talk, partners will turn to each other and discuss some issue brought to them by their teacher. The class then turns back to the teacher and one or more students will share what he or she discussed with their partner. Beth called turn and talks one of her favorite tools as a teacher,

It ensures that every single student has engaged in that question. Then it also means that when I bring them back I can call on anyone on the room presumably, because I told you to have that answer with your partner. It also gives our low students an opportunity to hear from their peers, because they are intentionally grouped, so that if they need to mimic someone next to them they are at least starting to get that idea from them. If engagement is low, it’s just like a nice burst of energy for them to talk in a moment, but it also holds the whole room accountable for learning.

In other words, Beth is putting the onus on her students to ensure that they understand what is happening in the class, and to help their classmates reach that understanding as well.

Students in all classes I observed were seated in pairs to facilitate the ability to turn and talk with a partner. Turn and talks are written into lessons, but are also used at any moment,
based on student engagement. Marjorie and Beth both stated that if they ask their class a question and there are too few student hands raised, they immediately called for a turn and talk. For example, after Beth asked students a question, she paused for raised hands. She said, “Good diversity of hands. Looking for a few more.” When no additional hands were raised, she directed students to turn and talk. By doing this, Beth was ensuring that the entire class would engage in the question she was asking, rather than relying on the few students who knew the answer and raised their hands to share.

**Warm but Strict Student-Teacher Relationships**

The school has worked with teachers to help them create a relationship with their students that they call “warm-strict.” More specifically, warm-strict refers to the specific way that teachers at the school show students they care about them, while also maintaining high standards for student behavior. Peter states that this warm-strict dynamic allows for both rigorous and engaging classroom environments,

The warm-strict philosophy is most successful is where teachers are getting the highest level of rigorous performance from kids. That is proven by the work they're creating, their writing, their discussions, one or the other. There's what can often be viewed as competing or dual approach, but we think it's blended here… That the classes of students who see the most are the most rigorous and demanding, and the most engaging and captivating at the same time. Our best teachers do both, and so we want our classrooms to be serious and joyous at the right moments.

Jennifer believes the time she spends cultivating a warm-strict relationship with her students is worth it. “When you develop good relationship with your students,” she says, “they trust you.” The balance between warmth and strictness is important, according to Jennifer:
I think that’s the job of a teacher. You have to show them you care…I always maintain a boundary of professionalism, but I’m not afraid to goof around with them, make fun of them, be a human. I think a lot of times, novice teachers try to put up this front of, I’m just the commander, and I’m not a person. I think that doesn’t help them connect to you. At the same time, if something comes up, I shut it down. They know that. They know all 5’2” of me will take control, and they respect that.

This balance was evident in her classroom. Jennifer was quick with praise for her students, “Good job! You did so well today!” “Two snaps for Micah!” However, she was just as quick to be strict. One way that she did this was through prompting her students. For example, she said, “Michael, stay engaged,” and “No, no, don’t be mean to her. Emily, go ahead.”

Marjorie feels the relationships she’s cultivated with her students are positive. She believes students are comfortable coming up to her and asking for her help in class, and at the same time will engage with her out of the classroom. She states, “They like to say hello in the hallway. They like to talk to me. They have questions for me, I have questions for them. It’s a positive relationship.” Marjorie clearly has expectations for students’ behavior, and the seniors in her AP Calculus class quickly pick up her behavior cues. While students were engaged in a group work activity, Marjorie needed their attention. She asked for their attention, and students quickly gave her their attention. Marjorie did admit that, with all the group work she has students do, someone might come in and think it is a chaotic environment. Yet despite how chaotic it might seem, she’s constantly moving among students to ensure they’re working, and students are able to immediately quiet down and direct their attention to her when she needs everyone’s attention.
Beth believes that both sides of the warm-strict dynamic are well balanced. This dynamic is boosted by the fact that the classrooms are very structured. Beth states, “We use our time very well, and so [with] my timers I will call out seventeen seconds left at like these odd intervals, just so they know like I sweat every moment.” I observed this reliance on timing while observing Beth’s classroom. At every moment that the students were working independently or in groups, there was a timer displayed on the board, and Beth lets students know how much time they had left at several different points. Beth might have displayed the best balance between being both warm and strict. She would consistently stop talking when not all of the students were focused on her. Sometimes she would just wait until attention was back on her, but if this didn’t work, she would say, “Pause,” and then wait till she had everyone’s attention. Beth had a clear authoritative but also friendly relationship with her students. She would not accept students’ not listening and was very strict behaviorally, but at the same time was quick with praise or a friendly touch on the shoulder.

William believes the warm-strict dynamic helps students buy into the work:

[When] you demand a lot of them, but also in a way that you built that trust and they know that you're not just a task master who's really strict…You are praising them for the things they are doing well, encouraging them to be better inside and out of the classroom.

I feel like that's the part that really makes the students buy into [it].

A key to student buy-in is the development of trust. The warm part of the student-teacher relationship allows for raising and caring for students, which helps to build the level of trust.

William believes those who teach tenth graders, like those students in his AP World History class, have a responsibility to help students develop these relationships:
What we try to do is essentially from ninth to twelfth grade, they know the expectations that we hold them to, but to kind of gradually release our role in reminding them. Whereas tenth graders they're going to line up and at the start of class I'm going to tell them what they need to do and put a reminder on the board of what they need to have out on their desk. By eleventh grade there's less of that and by twelfth grade there's almost none of that. It's like you know what to do now.

Rather than expecting students to come into the school in ninth grade and immediately engage in college-level success behaviors, the school has recognized the importance of scaffolding those behaviors over time. William still plays a strong role in reminding students of the expectations, but manages to be warm at the same time. At the beginning of the period, students are lined up outside the classroom, with William there to greet them and allow them to enter. As each student enters the door, William greets them with a fist bump or handshake. At one point, students were getting ready to annotate a primary source, and William reminded them of the classroom expectations, “Before we begin, makes sure you have a pen to annotate. Perfect posture, sitting up.” A key thread in the relationships between teachers and students is that the relationships are intentionally built to address both students’ emotional and behavioral needs. They do this by strategically balancing the warm aspect of the relationship, which builds trust, with the strict aspect of the relationship, which helps students learn appropriate behaviors.

Data-Driven Decision Making

The school uses data to make a variety of decisions, both at the teacher/classroom level and school/network level. This is certainly evident in the AP classes, which use the rigor of the AP exams to plan curricula that map to these assessments. As stated by Peter, “We know that teaching toward that exam, using the standards that are tested on the exam to drive the course are
going to ensure the most rigorous daily experience for kids.” Data play a key role in several ways, from day-to-day work to ensure students are learning the content and skills, to more robust interim assessments and student work reviews.

**Formative assessment.** Formative assessment plays an important role in the classroom, and it is used in several different ways. Jennifer, Beth, Marjorie, and William were constantly physically moving through the classroom to check student work, ensuring the students were working, and answering any questions that arose. This is something that was observed in each classroom. In fact, as part of their lesson planning, teachers use an actual classroom map to chart how they will circulate throughout the room.

The strong focus on circulating through the classroom is a key component of a specific technique used at the school called “aggressive monitoring.” Aggressive monitoring, as described by William, is “a way where we collect data in real time with students and give them feedback and then from there decide on the next best steps to meet the lesson objective.” Circulating the classroom, according to William, allows for “feedback in real time,” which allows teachers to quickly identify and correct for misunderstandings. Per Peter, a great deal of focus in the first few months of professional development has gone to perfecting this technique so that they can “become great monitors of kids and [know] where kids are at any moment.” In each of the lessons plans from the classes I observed, specific times to circulate and what to look for were clearly marked. For example, in the first AP Seminar lesson, Beth clearly marked in the lesson plan that, during independent practice, the teacher should be intentionally monitoring students to ensure they are identifying multiple perspectives and explaining connections in detail. In William’s lesson plan, he calls for monitoring to explicitly look for students’ use of the exemplar annotation technique, called “Four Corners.”
Another formative technique teachers used is called “show call.” In this technique, teachers highlight student work to drive discussion. Peter suggested that this technique relies heavily on the teachers’ ability to “ask the right questions to get kids to analyze what other kids produce.” An important component of this technique, according to William, is that teachers chose work to showcase that is not an exemplar. Instead, William states,

It’s an example of student work that’s maybe almost there or maybe exhibits a common error that students are doing. Through discussion and through feedback with their peers the students identify what it is that needs to change about this thesis statement, or this analysis, or this short answer response. Whatever the understanding is, they can pull that from the show call and apply it to their writing right then.

Peter calls this type of strategy a “culture of error,” where students are “comfortable learning from their own mistakes and gaps and figuring out as a cohort how to improve them.” Students seem to be comfortable with this situation and are respectful of their classmates when critiquing their work. For example, in William’s class, students were asked to analyze another student’s interpretation of a document. The students used very respectful language, with one student beginning his critique by saying, “I disagree with Regina because…”

**Interim assessments.** The school’s charter network has established an interim assessment program, which is the administration of common assessments given at three points throughout the school year at each of the schools, at the same time. This schedule allows administrators and teachers to keep track of what students have learned without “over-testing them.” These assessments are designed by content developers and lead teachers in the network and are designed based on the end-of-year assessments that students will eventually have to take. In the case of the teachers in this study, they are all based on the AP exams.
These exams are locked in place prior to the beginning of a new quarter, which ensures that the assessment goals can be used when planning instruction. This, according to Peter, allows for teachers to have some autonomy in their planning while still being aligned to a specific and common end point. Jennifer, who is a lead teacher and interim assessment writer, uses these assessments to backwards map instruction to “figure out what they need to know.” Lessons are then designed with objectives and assessments that will help students to succeed on the interim assessment. On the top of each lesson plan is the assessment goal for that day, which states, “How will students demonstrate mastery of the objective?” In addition, the quarterly plans for each course focus in on the various assessments students will take, including the interim assessments, mastery quizzes, and summative assessments, and what content and skills those assessments will be testing.

Another key feature of these assessments is that they give teachers and administrators across the charter network the ability to track how students across schools are performing. These interim assessment results were a key factor in the network’s decision to begin sharing lesson plans across the charter network. Peter states,

That's one of the reasons why we're doing the lead lesson planning this year and we saw in our data last year on our interim assessments, last year we actually gave the same interim assessments across high schools, we did not share lesson plans. We wanted to see what happened…but we saw that on every interim assessment there was a wide distribution of results between schools. [We found that] when teachers are sharing plans students are all performing similarly and similarly high. That's why we built this program this year.
The charter network used the data from the interim assessments to recognize potential problems with some of their teachers’ lesson plans and come up with a solution.

**Analyzing student work.** Analyzing student work is another important aspect of data-driven decision making. After giving the interim assessments, teachers across the charter network meet to grade the assessments together and then plan, as a group, what needs to be done based on the results. William mentioned his work with the other world history teachers across the network to examine the test results and determine “next steps” and “what skills we want to really focus in on.” This review allows teachers to go back to the classroom and immediately implement any changes needed based on the results of the interim assessments.

In addition to reviews of the interim assessments, teachers also work with their coach to review and respond to student data. In their interviews, Jennifer and Marjorie both pointed to work they do with their coaches to determine how they should respond to data they are seeing. William also discussed working with his coach to review the final, end of quarter world history exam for the 9th graders in order to know what he needs to work on as they enter the 10th grade class. Beth did mention that the school does this data analysis, but not in the context of her own practice because she is the first teacher of AP Seminar at the school and network.

**Commitment to Teacher Support**

A commitment to teacher support for all teachers was quite evident. There is a variety of supports available to teachers, and these supports, according to Beth, are the reason she decided to teach at this school. William believes teachers have many instructional supports at the school. He believes this is “a systematic approach to making sure everyone is ready to teach the course.” These supports allow for individual as well as group development, and ensure teachers are
trained on common approaches and techniques, while also allowing for the development of individual competencies for the teachers.

**Common lesson plans.** The school’s charter network decided to align lesson plans for nineteen subjects, including all the AP classes, across all high schools. These lesson plans are designed by a group of teachers who have taken on a content development role. Peter describes the role here,

What this program means is that we have one person who's planning the lesson centrally this year and [these top teachers’] lesson plans are at a level so that a novice teacher or someone who's learning the content, which is incredibly important for AP, someone who's maybe new to the course, but has great potential, is able to take their lessons, spend time with them, internalize them, make them their own, make them responsive to their kids, and get ready to teach them.

These centralized lesson plans ensure that new teachers have the chance to use highly effective lesson plans starting on their first day in the classroom. Jennifer, who is a lead lesson planner, describes her process,

The first thing I would do is look at the curriculum guide that the [College Board] releases, and I would look at released exams…You have to know the exam and you have to know it really well…You then are able to scope out the year, and leave enough time for review. Then you focus on the quarter and break it down by unit, by how many days you need, what are you doing to do? When I’m planning down for a daily basis, I look at the mastery quiz that I have them take, based on the interim assessment that I based off of the AP exam, and I figure out what they need to know.
This process allows Jennifer to meticulously plan her lessons in a way that supports the interim assessments and, ultimately, the end goal, which is the AP Exam. Beth, who is also a lead planner, feels this meticulous planning is important,

> We know that if we are working the students who are multiple grade levels behind they are going to need a lot of intentional supports. We think a lot about even scripting our questions ahead of time of what we are going to ask. We even script what is the ideal student response, and if the student doesn’t give it to us, what are the questions that we are going to follow-up with to get them there?

This careful scripting of student supports ensures that new teachers are able to help their students in ways that might not come naturally to new teachers. In turn, students are still getting highly effective support that might not come naturally to a new teacher.

It is important to note that, despite the implementation of common lesson plans, the principal and teachers all agreed that they have some autonomy with the lessons. For example, Peter shared a scenario in which a lesson might be targeting a specific topic or skill, but based on the results a mastery quiz, teachers might have another skill they need to focus on. In this case, the teachers would work with their coaches to script out what they are going to do. William discussed this process, admitting that he often needs to modify the lessons to fit his needs. In fact, he shared that on the day of the interview that he had planned two different lesson plans for his third and seventh period classes based on the differing needs of each class. Jennifer feels free to move around her lesson plans, though she does admit that this might be because she is a lead teacher. Marjorie also shared that she feels free to make modifications to the lessons as needed, but did admit that she’s more likely to change the AP Calculus lessons over the honors calculus plans, as she is not as familiar with the content of the honors calculus course.
Teachers also have the opportunity to begin developing their own lesson plans. Teachers who have a track record of success can design their own unit, though this does require the teachers to put a request in with the principal and their coach. Peter admits this happens mostly in English, as that content area has the most experienced teachers and has done the most work to align their curricula across the network. In English, teachers across the network use the same novels. Teachers who are given the opportunity to design their own unit will then choose a different text to use in developing lesson plans. These lessons, it should be noted, must align to the interim assessment. Peter states this is because the interim assessment, [is] fixed, it's locked in place before the quarter begins, and so that is our common snapshot in time where we track how students across the schools are performing. As much as we want to allow for that autonomy over time from the right people and the right innovation, we're still all aligned in our end point.

This alignment to the interim assessment allows coaches and administrators to ensure that any new units are still helping students develop the skills necessary for the course.

**Instructional leadership.** The school has put a plan in place to ensure each teacher has access to an instructional coach. These coaches, for the most part, are still in the classroom. Peter believes this structure is a key component of the school, stating “Our bread and butter as a network is people development.” All teachers have coaches, including those who might be considered as a veteran teacher. For example, Beth coaches three teachers, yet she still has her own instructional coach to work with. These coaches assist teachers through a variety of means, including planning meetings and observations.

Planning meetings take place at least once per week. The number of meetings, according to Peter, can be adapted based on the areas in which teachers are struggling. Marjorie and Beth
both shared that these meetings are tailored to what each teacher needs at that moment in time. For example, Beth stated the meetings focus “either on planning practices, execution practices, classroom management, and increasingly [close to interim assessments] data analysis and re-teaching.” One of the key tasks of a coach, according to Peter is helping teachers with internalizing the lesson plans:

[Teachers] get the lesson plan at least one week in advance of the lesson actually happening…There are workshops for a week prior to that with one of the coaches, so within that week they are working to internalize the lesson. Internalizing means not only are they becoming content experts, which includes writing their own exemplars, taking the student handout as if they’re a student, time stamping the lesson, rehearsing the lesson, but the key part is, in addition to the content, is becoming responsive to their own students' data.

William shared that his coach and he work together frequently to help him internalize the lesson plans.

In addition, teachers are observed at least once per week, with coaches debriefing with teachers after the observation. In addition, at any moment teachers might have an administrator or another teacher enter their classroom for observation. During the observations for this study, there was another adult observing the class in five of the eight observations. Teachers are required to keep a copy of the lesson plan in a clipboard on the wall. According to Peter, there are several reasons for this:

The way we assess whether the execution of a lesson is rigorous is by first looking at the plan, and tracking right away where is the teacher in the plan and is everything aligned. Does the exit ticket at the end align with the objective and standard? Actually, now in the
front what most classrooms should have is an AP task that aligns to that day. We check for that alignment, and then we check for the fidelities of the plan, and if the teacher's making adjustments, are they adding rigor or undermining rigor? If it's undermining we ask why, and we study why, and then we give feedback to their coach.

**Schoolwide development.** The school has made a strong commitment to schoolwide professional development. Every Friday, students leave school three hours early so that teachers can have weekly professional development. These sessions, according to Jennifer touch on topics of teaching, culture, and anything else they need to focus on. For example, several professional development sessions in the beginning of the school year were devoted to aggressive monitoring to ensure teachers could learn and use the technique effectively from the beginning of the school year. Additionally, William shared that at least one professional development session per quarter is spent having discussions around issues of equity and access.

Jennifer did share that the professional development sessions are sometimes only geared toward new teachers,

The focus isn’t really on you as a veteran teacher. I think it’s hard because I am in no way, shape, or form, even now, a veteran teacher. I feel like there’s so much I still need to learn. Unfortunately, a lot of the PDs we do have are targeted more for new teachers.

Fortunately, the school does seem open to providing outside professional development opportunities to teachers. Jennifer and another teacher were awarded a fellowship that allowed them to engage in STEM-focused PD. This is important, as she believes the school tends to be humanities-focused. In addition to this outside opportunity, William shared that all AP teachers go to an official College Board AP training.

**Chapter Summary**
This chapter summarized the themes that emerged from the interviews, observations, and artifacts of the principal and four teachers who teach at a high school that demonstrates success for Black students in AP classes. The school and its focus on AP education for all students was described. This was followed by a description of the principal and four teachers who participated in the study. The data pointed to the following four themes: High expectations with appropriate supports, warm but strict student-teacher relationships, data-driven decision making, and commitment to teacher support.

The data showed that teachers have high expectations for students, but provide appropriate supports for success. These supports met students’ cognitive needs and focused on student engagement. In order to meet students’ cognitive needs, teachers modified their curriculum to scaffold the skills and practices that students need throughout high school and college, while still maintaining a rigorous AP curriculum. These skills and practices were both instructional and behavioral. Additionally, the school itself has a strategic plan for scaffolding students’ development, both instructionally and behaviorally, from ninth through twelfth grade. Teachers also supported students’ success with a focus on student engagement. Students were actively engaged through all part of instruction, and teachers mainly used two different techniques to attain this engagement. First, snaps were used throughout the school for a variety of purposes, including praise, agreement, and for quick formative assessments. Second, the turn and talk strategy was used to ensure all students were engaged in important classroom discussions. This strategy was built into lessons and used as a spur of the moment tool, based on classroom engagement, to have students learn from each other. In addition, lower level students were intentionally paired with stronger students so they had the support of their partner.
Second, the data indicated that teachers and students shared a warm, but strict relationship. This teacher-student relationship style allowed teachers to balance the warmth needed to build student trust with the strictness needed for high behavior expectations. Teachers worked hard to maintain the balance between the two, and teachers of ninth and tenth grade students take a more active role in helping students develop appropriate behaviors.

Third, teachers and the school were engaged in data-driven decision making. The data being used for decision making included formative assessments, interim assessments, and student work. Teachers consistently used formative assessments in their classrooms, and this was often done through a technique called aggressive monitoring. This technique keeps teachers physically moving among their students to offer students feedback on their work. Another formative assessment technique used by teachers is “show call,” which allows teachers to use student work to teach other students. By having students analyze work that is not an exemplar, but instead makes some common errors, students are working at the time of the lesson to learn from each other’s mistakes. Interim assessments were also an important form of data used by the school. These assessments allow the school to keep track of where students are in their mastery of the learning goals. These assessments, which are tied to the AP exam, help the charter network to ensure the lesson plans being used by teachers meet the objectives of the course. In addition, the assessment results help to target specific teachers who may be having problems. Teachers and the school also analyzed student work in order to make data-driven decisions. Teachers worked with their coaches to analyze student work. This analysis drove teachers’ understanding of next steps and what skills needed to be focused on in the classroom.

Finally, the school showed a commitment to teacher support using common lesson plans, instructional leadership, and schoolwide development. Common lesson plans ensure all teachers
are using highly effective lesson plans with their students. The meticulous planning that goes into developing these lesson plans ensured that teachers’ curriculum was aligned to the AP exam, and that teachers understood what supports students might need. Teachers were also supported through instructional leadership, which ensures each teacher has an instructional coach. This relationship gave new teachers the opportunity to practice upcoming lessons and analyze student data. Regular observations allowed for teachers to receive support from their coach and other leaders in the school. Schoolwide development is also an important focus of the school. Teachers have weekly three-hour professional development that addresses a variety of topics. The school uses this professional development to help teachers learn pedagogical techniques that are being used by the whole school, such as aggressive monitoring. Additionally, teachers had the opportunity to engage in professional development with providers outside of the school.
Chapter Five: Discussion of Research

This constructivist case study (Ponterotto, 2006) examined how teachers with a high proportion of Black students helped their students succeed in Advanced Placement (AP) coursework. Two research questions guided this research. The first research question aimed to determine the pedagogical practices AP teachers at an urban high school used to help their Black students find success in AP coursework. The second research question focused on how that high school helped support the pedagogical practices of AP teachers with successful Black students.

In Chapter 4, I presented findings that came from two sources. The first source was an interview with the principal of a school with Black students who are successful in AP classes. The second source was the interviews, observations, and artifacts from four AP teachers whose students are successful in AP. The answers to the study’s two research question were found within four themes: High expectations with appropriate supports, warm but strict student-teacher relationships, data-driven decision making, and commitment to teacher support. This chapter will explore the significance of these themes, provide recommendations for practice and future research, and discuss the limitations of this study.

Themes

High expectations with appropriate supports. The first theme that emerged from the data was high expectations with appropriate supports. Teachers, and the school as a whole, had high expectations for student achievement. Ladson-Billings (1995b) found that teachers who effectively used culturally relevant pedagogy had a belief that all of their students were capable of academic success. The culturally relevant pedagogy theoretical framework puts strong emphasis on high expectations for students as a component of equity and excellence (Brown-Jeffy & Cooper, 2011). In this research study, the focus on high expectations and academic
success was perhaps best evidenced by the school’s having every student enroll in AP classes. By all accounts, students enter this school with the understanding that there will be high expectations for them, which is important as “high expectations breeds high performance” (Pringle, Lyons, & Booker, 2010, p. 39). If students believe teachers have high expectations for them, they feel more motivated to learn (Woolley, Strutchens, Gilbert, & Martin, 2010). Despite putting all students regardless of achievement level in AP, all teachers in this research study believed that the students were able to meet these expectations. This is important, as it has been found that teachers who expect more from their students provide higher-quality instruction (McKown & Weinstein, 2008). This research study supports the idea that when teachers have high expectations for student success, students will rise to meet those expectations.

**Meeting students’ cognitive needs.** All of the participants in the study recognized the importance of providing supports for student learning and behavior. These supports are often referred to as differentiated instruction, which Tomlinson (1999) defines as “specific ways for each individual to learn as deeply as possible and as quickly as possible, without assuming one student’s road map for learning is identical to anyone else’s” (p. 2). Providing specific supports for students allow teachers to create a learning environment in which all students can succeed (Lawrence-Brown, 2004). A variety of supports was provided to students to meet their cognitive needs. These supports worked together to scaffold the skills that would support student success in both high school and college, while still maintaining appropriate rigor for AP level classes. The scaffolded aspect of these supports is important, as scaffolding has been found to be an effective method for helping students learn (Dennen, 2003). The school was very intentional in the supports they used, with nearly every aspect of classroom practice outlined in the *Gradual Release Vision* with specific supports based on grade level, from ninth grade through college.
The intentionality of the supports is significant, as Conway and Andres (2016) found that a schoolwide approach to pedagogy can increase student achievement.

The use of cognitive supports aligns with the culturally relevant pedagogy theoretical framework, which suggests that teachers of minority students must consider developmental appropriateness by using strategies that meet the specific needs of students (Brown-Jeffy & Cooper, 2011). However, it is not just the use of supports that is important. It is the use of those supports combined with the rigorous curriculum, which Ford and Moore (2013) found positively influences students’ ability to achieve academically. Additionally, the intentionality of the support strategies validates Harris’s (2001) finding that teachers are more likely to achieve positive development when principals provide a clear vision for improvement, which this school did with their Gradual Release Vision. This research study indicates that providing students with a rigorous curriculum bolstered by supports is an effective way to help them achieve academically. Additionally, this research study indicates that these supports work best when part of a bigger, schoolwide vision. As part of this, it is important to recognize that a schoolwide vision is more likely to be adopted when teachers feel some ownership over the vision (Conway & Abawi, 2013).

**Focus on student engagement.** Along with meeting students’ cognitive needs, teachers also focused on strategies specifically designed to improve student engagement. Brown (2004) found student engagement to be an important part of culturally responsive teaching. The two most prevalent strategies, snaps and turn and talk, helped teachers keep students actively engaged in the lesson. Teachers used these strategies for a variety of purposes, including praise, formative assessment, and student-student interaction.
This focus on student engagement supports research that shows students’ engagement in academic activities will improve their learning (Brophy, 1988; Johnson, Crosnoe, & Elder, 2001). Student engagement also requires students to have a role in their own learning. This research study, then, also validates research that shows the amount of effort a student puts into their own education has a direct correlation to student achievement (Carbonaro, 2005; Stewart, 2008). Additionally, the focus on student-student interaction confirms the notion that students are more likely to achieve when they believe they have the support of their peers (Wentzel, 1999). This research study supports the idea that teachers should design lessons and classroom structures that are supportive of student engagement, as this engagement has a direct effect on student achievement. These engagements should help ensure that students are not only engaged with the content of the lesson, but also engaged with their peers.

**Warm but strict student-teacher relationships.** The second theme that emerged from the data was warm but strict student-teacher relationships. Brown (2001) found that urban students may have a greater need than suburban students for developing close relationships with their teachers. Ladson-Billings (2009) suggests that culturally relevant teachers engaged in culturally relevant pedagogy show a connectedness with their students. All of the teachers in the study had cultivated a relationship with their students that was referred to as warm-strict. This student-teacher relationship style was intentionally chosen by the school’s administrators, who did a great deal of work with teachers to help them develop this style. The purpose of this style is two-fold. First, the warmth aspect allows teachers to build their students’ trust. Adkins-Coleman (2010) suggests that teachers who engage in culturally relevant pedagogy must show they are committed to their students through both words and action. Second, the strict aspect of the relationship keeps students aligned with high behavior expectations. On this side of the
dichotomy, culturally relevant teachers must show clear authority and insist on high behavioral expectations (Adkins-Coleman, 2010). There was a strong focus on maintaining a balance between the two, with teachers of younger ninth and tenth grade students doing the brunt of the work to help students understand what are deemed appropriate behaviors.

The school’s focus on the student-teacher relationship aligns with the research on the importance of these relationships. The culturally relevant pedagogy theoretical framework (Brown-Jeffy & Cooper, 2011) described the importance of aligning high expectations for students with a relationship of caring and respect, which mirrors what is happening at this school. Perhaps it is not surprising then that positive teacher-student relationships have been shown to have a positive effect on student’s achievement (Murray & Malgrem, 2005). The teachers at this school clearly care about and respect their students, and they believe this is reciprocated by the students. Goodman (2009) found that students who feel respected by their teachers in turn show their teachers respect. This is important, as students’ academic tenacity has been shown to be directly related to how they perceive the quality of their relationship with their teacher (Dweck, Walton, & Cohen, 2014). The focus the school and teachers placed on developing these relationships corroborates Wiggan’s (2008) finding that students describe effective teachers as those who were committed to developing relationships with their students. The results of this research study indicate that building student-teacher relationships that allow for both warmth and strictness will help increase student achievement while also helping them to learn appropriate behaviors.

**Data-driven decision making.** The third theme that emerged from the data was data-driven decision making. Mandinach (2012) defines data-driven decision making as “the systematic collection, analysis, examination, and interpretation of data in form practice” (p. 71).
Teachers at the school used a variety of data inputs to drive classroom practice. Data-driven decision making is not a specific focus that is called out in the theoretical framework. However, the framework does support the use of varying teaching styles to support a variety of learning styles (Brown-Jeffy & Cooper, 2001), which I suggest is managed in this case at least in part by changes to classroom practice that come out of reviewing student work. Additionally, analyzing data allows teachers to target instructional strategies that meet students’ specific needs (Datnow, Park, & Kennedy-Lewis, 2012), which is specifically called out in the theoretical framework.

*Formative assessments.* All teachers in the study consistently used formative assessments within their lessons. Formative assessments provide teachers with qualitative insight into students’ learning (Shepard, 2006). In this research study, formative assessment mainly took the form of a technique called aggressive monitoring. This technique, which is the first one addressed in the Daily Academic Curriculum section of the Gradual Release Vision, was intentionally chosen by the administration to be used in every classroom, and teachers were given several sessions of professional development on this technique to ensure it was being used correctly and across all classrooms. The formative assessments used by teachers helped them to continuously give students feedback on their work and improve their overall learning (Harris, 2007). Additionally, teachers focused students’ attention on student work that included common errors to ensure that students could correct common errors and learn from each other’s mistakes.

The formative assessment techniques used at the school allow teachers to continually monitor student progress and provide constant corrective feedback. Brophy (1988) found that students learn best when teachers monitor their performance and provide corrective feedback, which is clearly supported by what was happening in these teachers’ classrooms. These teachers engaged in informed decision making about students’ areas of need, which allowed changes to
practice to be effectively geared toward student progress (Harris, 2001). It should be noted that there is research that is critical of formative assessments, specifically because of differing opinions on what formative assessment is (Dunn & Mulvenon, 2009). However, this is not an issue at the school, as all teachers have a shared understanding and use specific formative assessment strategies. In fact, the use of common formative assessment strategies has been shown to improve teacher understanding about what students do and do not know, which in turns affects student achievement (Bernhardt, 2009). This research study supports engaging in regular formative assessments to aid teachers in understanding student mistakes and misconceptions, especially when they are part of a bigger, schoolwide effort.

**Interim assessments.** The school, and the charter network it belongs to, use interim assessments to track student progress, both to inform teacher practice and across-network calibration. Interim assessments are benchmark assessments that are meant to provide schools and districts with diagnostic data about their students (Shepard, 2009). The interim assessments, which are given quarterly, are tied to the AP exams, which allows teachers to monitor how students might succeed on the AP exam. Additionally, the interim assessments allow for the creation of lesson plans that are tied directly to the objectives being met by the interim assessments. Mathumbu, Rauscher, and Braun (2014) found that when lesson plans are designed based on planned assessments, they are more likely to address higher cognitive demand and meta-cognitive thinking.

The findings of this research study are in-line with the importance researchers have placed on data-driven decision making as a means to improve instruction in targeted ways that specifically reflect student performance (Harris, 2001; Muijs & Harris, 2006). However, it is important to discuss here that the research on the usefulness of interim assessments is mixed.
Christman et al. (2009) found that there was a lack of evidence that interim assessments at the school or district level leads to improvements in student achievement. This research, while important, may not align with practice at this school for two reasons. First, the school uses common lessons plans that are specially aligned to the interim assessments. Perie, Marion, Gong, and Wurtzel (2007) suggest that interim assessments are most effective when aligned with the school or classroom curriculum. Second, teachers go through grading and discussion sessions that ensure they are finding meaning from the assessment results. Marsh, Bertrand, and Huguet (2015) found that teachers were more likely to alter their instructional practice when student data was analyzed with a group of teachers rather than alone. Regardless of the differing research, there is support that, in this case, interim assessments are providing meaningful support to teachers and students.

Analyzing student work. Another way teachers at the school use data is by analyzing student work. Bella (2004) promotes the analysis of student work as a way for teachers to make ongoing evaluations about their students’ academic progress. Analyzing student work allows teachers to make data-driven decisions about their classroom practice. Through work they did with their instructional coaches, teachers at the school made changes to their lesson plans to focus on specific skills and content with which their students are having problems.

Analysis of student work, when used to improve instruction, has the ability to improve student practice (Campbell & Levin, 2009; Herman, Wardrip, Hall, & Chimino, 2012). However, the method for this analysis is significant. Teachers at this school are able to work in collaborative teams with their instructional coach to analyze data, which allows for the development of school-wide strategies that are beneficial to students (Stegall & Linton, 2012). Collaboration in general has been found to be a key component of effective data analysis.
(Campbell & Levin, 2009; Holmlund Nelson, Slavit, & Deuel, 2012). In fact, Marsh et. al. (2015) found that instructional coaches play a large part in helping teachers appropriately respond to data. This research study supports teachers’ analyzing data in a collaborative environment as a strategy to improve student achievement.

**Commitment to teacher support.** The final theme that emerged from the research was commitment to teacher support. Smylie (1996) has found that ongoing teacher development is an essential component of effective schools. Teachers at the school had a variety of supports available to help them improve their pedagogical practice. This theme is not directly addressed in the culturally relevant pedagogy framework, but this is not surprising as this theme focuses on best practices for teachers supporting students. However, Johnson and Marx (2009) built a Transformative Professional Development (TPD) framework which outlines effective professional development practices in urban schools and is based on Ladson-Billing’s (1995b) theory of culturally relevant pedagogy. TPD “is based upon the premise that through effective, sustained, collaborative professional development, climates of schools, as well as beliefs and practices of teachers can be positively transformed over time” (Johnson & Marx, 2009, p. 118). The use of TPD in schools can lead to an increase in teacher effectiveness (Johnson & Fargo, 2010).

**Common lesson plans.** Teachers in all AP subjects used common lesson plans, which were in place across the entire charter network. There is little research on common lesson plans. Foster’s (2004) research does suggest that scripted curricula can be detrimental to student achievement because it sets a ceiling for learning which students cannot rise above. I would suggest, however, that this research does not apply in this situation. Although teachers are given pre-written lesson plans, these plans were written by in-network teachers who understand the end
goals of the interim assessments. Two of the teachers in the study, who were lesson plan developers, explained that meticulous planning ensures the lesson plans were aligned to the AP exam. Wiggins and McTighe (2005) have found that planning lessons with the assessment in mind allows teachers to create lessons that lay out the most effective method for achieving specific results. Additionally, teachers worked with their instructional coaches to practice the lessons, and they have some autonomy to change the lessons based on their students’ specific needs. Mittenfelner Carl (2014) found that teachers’ perception of scripted curricula is affected by whether or not they have autonomy to make adjustments to the curriculum. This study supports the use of common lesson plans that are written at the school and tied to interim assessments as a potential strategy for improving student achievement.

**Instructional leadership.** All teachers expressed the importance of their instructional coach in their development as teachers. Sailors and Shanklin (2010) defined the role of instructional coaches as “sustained classroom-based support from a qualified and knowledgeable individual who models research-based strategies and explores with teachers how to incorporate these practices using the teacher’s own students” (p. 1). Teachers worked with their instructional coaches to plan and practice upcoming lessons, as well as to analyze student data. Roehrig, Walton Duggar, Moats, Glover, & Mincey (2008) found that coaches play an important role in helping teachers find the bridge between data analysis and instruction. Coaches also observed teachers weekly and debriefed with teachers on what they observed and how it might be improved. Mittenfelner Carl (2014) found that teacher monitoring affects whether or not, and to what degree, teachers deviate from scripted curricula.

The focus placed on instructional leadership at the school strongly supports the research on the importance of instructional leadership as an aspect of teacher development. The coaching
relationships at this school reinforce Muijs and Harris’s (2006) research on the importance of giving teachers the opportunity to collaborate to make changes to their practice. The use of in-school, classroom teachers as coaches confirms the assertion that instructional coaches are most effective when they are able to use their teaching experience and pre-formed relationships with colleagues to help improve instructional practice (Margolis & Huggins, 2012). The use of colleagues as coaches also corroborates Taylor, et.al. (2011), who found that teachers are more likely to take advice from peers they believe understand the experiences of being a teacher. The research supports using instructional coaches to help teachers improve their pedagogical practice.

**Schoolwide development.** The school had a strong focus on schoolwide professional development. Johnson and Fargo (2010) found that professional development is most effective when it is undertaken by the whole-school, sustained over a long period of time, and allows for collaboration. Teachers in this school engaged in weekly professional development sessions on a variety of topics. Many of the practices that were being used schoolwide, such as aggressive monitoring and turn and talk, were learned and developed during these professional development sessions. Along with in-school development, teachers also engaged in outside professional development, such as week-long summer trainings for AP teachers.

Weekly professional development sessions give teachers the opportunity to work with their colleagues on improving teacher practice and student achievement. This is supported by research that found teachers work most effectively when they are working with their colleagues to support each other’s practice (Harris, 2001). Additionally, the use of professional development to focus on schoolwide strategies is supported by research that shows effective professional development should include alignment with school reforms and policies and last over an extended period of time (Steeg & Lambson, 2015). This research study supports engaging in
regular schoolwide professional development sessions that allow for the development of schoolwide strategies for improving instruction and student achievement.

The Themes and the Theoretical Framework

The culturally relevant pedagogical framework theoretical framework developed by Brown-Jeffy and Copper (2011) name five tenets of culturally relevant pedagogy: identity and achievement; equity and excellence; developmental appropriateness; teaching the whole child; and student-teacher relationships. In order to understand the role of cultural relevance at this school, it is important to compare the tenets of the framework with the themes that emerged from the research study.

Identity and achievement addresses a variety of aspects, including identify development, cultural heritage, multiple perspectives, affirmation of diversity, and public validation of home-community cultures (Brown-Jeffy & Cooper, 2011). Perhaps the aspect of identity and achievement that most aligns with the themes is the idea that students’ voices should be heard, and students need to know that their voices matter (Brown-Jeffy & Cooper). While not specifically about voice, I would suggest that the focus on high expectations is aligned with identity and achievement. As students in this school are required to take AP courses, which have disproportionate enrollment for White and Asian students, they are being given a voice and are shown that their voices matter in higher-level coursework.

Equity and excellence encompasses the following concepts: dispositions, incorporation of multicultural curriculum content, equal access, and high expectations (Brown-Jeffy & Cooper, 2011). This school places a high importance on this tenet of culturally relevant pedagogy. They have made equal access to higher-level AP courses a focus of their entire school. This has ensured that students at this school are enrolling in AP classes at a much higher percentage than
the national average for Black students (College Board, 2016b). Per Brown-Jeffy and Cooper (2011) Whiteness should not be the only determinant of entry into high-level courses and programs because equity and excellence are not the exclusive ownership of Whites. Additionally, high expectations, which is a component of equity and excellence, was one of the themes that emerged from this research study. Teachers have high expectations for both the achievement and behavior of their students, which also addresses the idea that excellence is not just for White students.

Developmental appropriateness encompasses the following concepts: learning styles, teaching styles, and cultural variation in psychological needs such as motivation, morale, engagement, and collaboration (Brown-Jeffy & Cooper, 2011). This tenet of culturally relevant pedagogy was woven throughout several of the themes that emerged from this study. First, the school put a strong focus on high expectations for student achievement, but they had a well-thought out plan for student supports. Developmental appropriateness acknowledges the importance of knowing where children are in their cognitive development (Brown-Jeffy & Cooper, 2011), which is what this school was doing by building cognitive supports into their daily instruction. Second, student engagement and collaboration are important parts of classroom instruction at this school, which is described as a part of developmental appropriateness in culturally relevant pedagogy. Third, the use of data-driven decision making theme addresses development appropriateness by allowing teachers to constantly maintain an understanding of students’ cognitive needs. Additionally, the use of interim assessments helps teachers plan where students need to be in their learning (Brown-Jeffy & Cooper, 2011), and then determine where they actually fit within that spectrum.
The tenet of teaching the whole child includes the following concepts: skill development in a cultural context, home-school-community collaboration, learning outcomes, supportive learning community, and empowerment (Brown-Jeffy & Cooper, 2011). This tenet aligns most closely with the warm but strict student-teacher relationships. The warm aspect of the student-teacher relationship helps teachers to build a supportive learning community. Another way this school exhibits this tenet of culturally relevant pedagogy (that is not one of the themes of this study) is in their use of cultural context in skills development. Some of the teachers wove cultural context throughout their curriculum. For example, Beth’s students were writing research papers that addressed questions that were important to them culturally, such as the mass incarceration of Black men, citizenship for illegal immigrants, and racial discrimination in New York’s Section 8 housing.

The tenet of student-teacher relationships includes the concepts of caring, relationships, interaction, and classroom atmosphere (Brown-Jeffy & Cooper, 2011). This tenet aligns directly with the warm but strict student-teacher relationship theme that emerged from this research study. Brown-Jeffy and Cooper (2011) state that, “The teacher is an important significant other in the lives of students…Students need to know teachers care and teachers should recognize and respect their students” (p. 77). Caring and respect are key components of the warm but strict student-teacher relationship. Along with the warm aspect is the strict. Brown-Jeffy and Cooper (2001) state the importance of the student-teacher relationship includes a facilitation of learning and building of students’ learning capacity, which allows teachers to maintain high standards for excellence and equity.

A commitment to teacher support was a major theme that emerged from this research study that went beyond the culturally relevant pedagogy framework. However this is not
surprising. The culturally relevant pedagogy framework is specially geared toward describing pedagogical practices that culturally relevant teachers and schools should use. I would suggest that a school who is committed to culturally relevant pedagogy must have systems in place to ensure teachers are able to effectively engage with the five tenets of culturally relevant pedagogy.

Conclusion

Black students are less likely to take AP courses and when they take the courses, they are less likely to pass the AP exams (College Board, 2014). Therefore, there was a need to examine ways in which teachers with a high proportion of Black students helped their students succeed in AP coursework. This study aimed to answer this problem of practice with two research questions. First, what pedagogical practices did AP teachers at an urban high school use to help Black students succeed in AP courses? Second, how did a school with successful Black AP students support teachers’ pedagogical practices? The themes that emerged from this research study helped to provide answers on what teachers and schools can do to improve Black students’ achievement in AP courses.

There are three findings in terms of pedagogical practices teachers of Black students can use to help their students find success in AP. First, teachers and schools should begin with a schoolwide implementation of classroom supports that allow for high expectations while helping students to achieve them. Second, along with high expectations for student achievement and behavior, teachers should cultivate a caring and supportive student-teacher relationship that helps build their students’ trust. Finally, teachers and schools should have a consistent and strong focus on using data to improve instructional practice.
There are two findings in terms of how schools can support the success of teachers with Black AP students. First, as with the first research question, the school must have a consistent and strong focus on using data to improve instructional practice. The school’s role in this process is providing teachers with the time and support they need to analyze data. Additionally, schools must give teachers regularly scheduled individualized and schoolwide professional development that focuses on improving their pedagogical practice.

Although the school in this study created an environment and the necessary supports to help Black students succeed, there were issues that emerged from the data that could hinder their continued success. As this school is relatively new, the administration has been fairly stable. Yet as the administration begins to shift, they will need to think about how they can guard against a new principal coming in and throwing out their plan. Per Béteille, Kalogrides, and Loeb (2012), principal turnover can result in instability and the loss of institutional memory. The school and its charter network will need to work to ensure that the original vision of the school stays in place. Hochbein and Cunningham (2013) suggest districts can combat this by creating a succession plan.

An additional issue is the school’s professional development focus on the building of school-wide instructional strategies. While this system provides a meaningful way for new teachers to learn the school’s strategies, they are going to need to determine what professional development to use with experienced teachers who are proficient in these techniques. This issue was mentioned during my interview with Jennifer, and it will continue to grow if the teacher population stays stable. Flint, Zisook, and Fisher (2011) suggest that professional development sessions that focus on skills important for new teachers do not help experienced teachers improve their own instructional practice. Experienced teachers do become lesson plan writers and
instructional coaches, but I think there will need to be a professional development plan for experienced teachers. Mahmoudi and Özkan (2015) suggest professional development for experience teachers should involve the following activities: mentoring and coaching of peers, reading professional literature, educational conferences, and observational visits to other schools.

**Recommendations for Practice**

**High expectations with appropriate supports.** Having teachers with high expectations for students has a strong influence not only on student success, but also on whether students believe that their teachers care about them (Pringle, Lyons, & Booker, 2010). Equally as important, however, is providing students with instructional supports that help them to reach these expectations. These supports are especially crucial for students who may be below grade level in their skills development (Brown-Jeffy & Cooper, 2011).

This research study identified specific steps that teacher took to help their students reach the high expectations they had for them. Teachers used specific techniques to help meet students’ cognitive needs, while also focusing on student engagement within the classroom. Also important was the *Gradual Release Vision*, which provided specific strategies to elicit a variety of behaviors, along with a scaffolding plan that built students’ capacity for self-monitoring by the time they enter college. Institutions looking to improve the achievement of Black students should first ensure that everyone has high expectations for student achievement. They can do this by ensuring that all students have the opportunity to take AP courses. Along with providing access, institutions will also need to create a plan for supports teachers can use to bring students up to grade level, while still maintaining high rigor and expectations.

**Warm but strict student-teacher relationships.** Students need to know that their teachers care about them (Brown-Jeffy & Cooper, 2011). When teachers show students that they
care about them, students are more likely to want to do well (Boynton & Boynton, 2005). Yet teachers should be careful when working with minority students to ensure that the student-teacher relationship does not come from a place of pity over students’ social circumstances (Rojas & Liou, 2017). Rather, teachers should be sympathetic to students’ experiences, while still maintaining high expectations (Rojas & Liou, 2017). At the same time, teachers need to be strict when it comes to expectations for students’ behavior. It is important that teachers find a balance between the two.

Teachers who are looking to improve their relationship with their students should work on building one that balances the warmth students need to feel cared for with the strictness that is needed to help students understand important behavior expectations. Ideally, a school or district would undergo a plan wherein all teachers implement this relationship style. As younger students need more intentional support, institutions who implement this style should focus on providing much more guidance to young students. As students become more self-guided, teachers should gradually release guidance in order to help older students become self-guided.

**Data-driven decision making.** The use of data to drive instructional decisions is an effective way to improve instruction. Teachers and schools that use data to make decisions about instruction and learning are successful in informing their instructional decisions (Muijs & Harris, 2006). Formative assessments, specifically, are an important classroom tool as they improve student achievement through the use of immediate teacher feedback (Sargent & Curcio, 2012). Yet the mere act of teachers’ analyzing data might not be enough if it is not done in the correct setting. Teachers and schools will find the most benefit from analyzing data if they do this analysis in groups (Donhost & Anfara Jr., 2010). Additionally, schools need to ensure that
teachers understand how to make actionable classroom changes from student data (Mandinach, 2012).

This research study found data-driven decision making is an important part of making changes at both the classroom and school level. Teachers should embed specific formative assessment strategies in their daily lessons and then use these assessments to make constant adjustments to their teaching. Additionally, school-wide teams should be created so that teachers can work together to analyze their student data. However, it is important that leaders build teachers’ capacity for understanding data so that they are able to analyze the data and make meaningful changes to classroom practice.

**Commitment to teacher support.** This research study found that teachers were able to improve their classroom practice when they had the opportunity to (1) work one-on-one with a coach and (2) engage in regular, school-wide professional development. Teacher support can take a variety of forms, but regardless of the form, teacher support is most effective when there is a school-based component and when it incorporates time for teachers to reflect on their own practice (Mphahlele & Rampa, 2014). Instructional coaches are in a good place to aid in this reflection, as they should act as a mentor to help new teachers learn effective instructional practices (Knight, 2004). Another important benefit instructional coaches can provide to teachers is in assisting them with analyzing classroom data (Snodgrass Rangel, Bell, & Monroy, 2016).

A commitment to teacher support will help institutions improve the pedagogical practices of their teachers. This is particularly important for those institutions that have an inexperienced teacher population, which commonly occurs in schools with a high proportion of Black students (Barton, 2003). Schools should provide support to teachers in a variety of ways. Ideally, teachers
will have the opportunity to work with an instructional coach to improve their practice. Additionally, schoolwide professional development should take place regularly, and the time should be used to help teachers develop their instructional practice.

**Additional recommendation.** The role that intentionality played in the results of this school cannot be understated. Nearly every move that teachers made was carefully planned by administration. The *Gradual Release Vision* provides insight into the intentionality of all supports provided to students. Almost everything that happened in the school, from the classroom to the lunchroom to the hallway was deliberately planned by administration. Having a clear vision for improvement that is effectively shared with teachers will increase the chances that teachers will work toward achieving this vision (Harris, 2001). Institutions who want to improve student achievement should spend the time deciding as an organization the expectations for student behavior and achievement, as well as the supports students will need to reach these expectations. Once these expectations are set, the organization needs to create a clear plan that explains to teachers and students these expectations. Additionally, the institution should focus professional development time on working with teachers to perfect strategies that will help students meet these expectations.

**Recommendations for Future Research**

To ensure that the participants in this study were teachers of Black students, the study site was specifically chosen because of its high-proportion of Black students. Additionally, to interview and observe multiple teachers, the site was specifically chosen for the high number of teachers with Black students who were successful in AP classes. The results of this study show that the school was very intentional in the supports they provided to both teachers and students. Therefore, a question emerged about how teachers without the support of their school help their
students find success on AP exams. A new research study could focus specifically on an AP teacher who is finding success with Black students, unlike other teachers at the same school. Focusing on one teacher exhibiting excellence in isolation would provide new data that are focused specifically on one teacher’s practice, rather than school-based supports. These new data may prove to be more beneficial to teachers who wish to improve their own practice without the benefit of school-wide reforms. Additionally, this study focused on Advanced Placement teachers only. A new research study could determine how these intentional supports are applied at the study site in classes other than Advanced Placement.

While there was a research question that aimed to determine the supports a school provides to teachers of successful Black AP students, the focus on intentionality opens up a new research question. Specifically, what process did the administration use to choose the specific supports outlined in the Gradual Release Vision? Additionally, a review of the professional development sessions in the beginning of the year would provide insight into how administration builds teacher competency with those supports. The principal appeared to be the driving force behind the supports found in the Gradual Release Vision. A future research study could look further into his importance in the process of developing this document as a model for other principals who are looking to develop a school improvement plan.

Due to the conflicting research on interim assessments, an additional research study at this charter network might provide insight into the processes that make their interim assessments effective. This research could in turn provide important insight into improving existing, ineffective interim assessment programs. Additionally, as I did not have an opportunity to see teachers engage with each other in analyzing data, it would be helpful to develop an
understanding of the process they use to analyze data that makes the process so helpful to teachers.

In the same vein, a lack of research on common lesson plans offers an opportunity to conduct a new research study at the charter network that would provide more detailed insight into the development and use of their common lesson plans. While I was able to review the lesson plans as artifacts and speak to teachers about how they use them, I wonder how the actual process of developing the lessons occurs. As well, I wonder how instructional coaches help teachers to internalize and modify the lessons. As such, a start to finish analysis of the common lesson plan process could be a new study that comes out of this research. This analysis could provide administrators with an actionable plan for integrating common lesson plans into their own schools and districts.

Limitations

This constructivist case study was limited to four teachers and the principal at one school. Through interviews and observations, it became clear that the school had intentionally chosen many of the strategies and techniques that were observed. Intentionality means students are seeing these techniques all day, every day; that every teacher in the school is using them; and the results might not transfer to one teacher doing the techniques in isolation. Therefore, the results cannot be generalized to all teachers.

An additional limitation is in the applicability of these results to a public-school setting. This school was part of a charter network, which means they did not have to follow some of the requirements as set forth by the teacher’s union. As part of a charter network, the school is in a unique position in terms of autonomy for implementing change. As such, there are practices
here, such as common lesson plans and interim assessments, that a public school might not be able to implement.

**Conclusion**

Advanced Placement courses provide students with not only the potential to earn college credit, but improved performance in college as well (Morgan & Klaric, 2007; Patterson & Ewing, 2013). Yet these benefits do not often reach Black students, who take and pass these classes in lower rates than any other racial group (College Board, 2016b). This research study has described specific steps that teachers and schools can take to improve Black students’ achievement in AP coursework and chance for success in college. Schools with a high proportion of Black students should ensure that they have high expectations for students, but also support those students so that they are successful in these expectations. Student-teacher relationships should be warm, so that students trust their teachers, but also strict so that students learn appropriate behaviors. The use of data in making decisions about student learning is an effective way to ensure classroom practices are supporting students’ specific needs. Finally, teachers need to engage in regular professional development activities that provide both individualized and group support for improved pedagogical practices.
References


Appendix A: Principal Contact Email

Subject Line: Request for Participation in a Research Study

Dear ____________,

My name is Donna Hurrle and I am a doctoral student in the Curriculum, Teaching, Learning, and Leadership program at Northeastern University. I am currently working on my dissertation, which examines ways in which teachers with a high proportion of African American students help these students succeed in Advanced Placement (AP) coursework. I am an AP instructional designer with the College Board, and I hope to use the results of this study to build teacher support for schools and teachers aimed at improving AP results for African American students.

I am contacting you because I have identified your school as a possible site due to your inclusion in the College Board’s Spotlight on Success series as a school that has a high proportion of African American students succeeding in AP courses. With your permission, I would like to interview you and AP teachers at your school to gain a better understanding of the pedagogical practices used in your AP courses. If you agree to participate, I would request from you a list of AP teachers at your school so that I might email them a request for an interview. These interviews will take approximately 1 hour each, and will not require teachers to participate during classroom time. In addition, I would like to observe two sessions of the AP classes of those teachers participating in the study.

If you have any questions, please do not hesitate to contact me at hurrle.d@husky.neu.edu. I can also be reached via phone at (917) 226-8198. I look forward to hearing from you.

Sincerely,
Donna Hurrle
Appendix B: Principal Informed Consent Form

Informed Consent Form
Northeastern University College of Professional Studies
Doctor of Education Program

Title: Improving African American Student Success in Advanced Placement Courses
Principle Investigator (PI): Dr. Corliss Brown Thompson, Northeastern University
Co-Investigator: Donna Hurrle, Northeastern University

Informed Consent to Participate in a Research Study
We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?
You are being recruited for this research study because your school has high access and success for African American students in Advanced Placement (AP) courses.

Why is this research study being done?
The purpose of this research study is examine ways in which teachers with a high proportion of African American students help these students succeed in AP coursework.

What will I be asked to do?
Provide a list of AP teachers at the school site.
Participate in about an hour-long confidential, audio-recorded interview. You may also be asked to participate in a short follow-up interview by phone as needed.
Allow AP teachers at your school site to participate in an interview for the research study. They will not be required to participate during classroom time.
Allow the researcher to access and observe the AP classes of those teachers participating in the study.

Where will this take place and how much of my time will it take?
The interviews for this study will take approximately one-hour. Effort will be made to conduct the interviews at your school site. However, if scheduling does not allow, the interviews may take place over phone, Skype, or Goggle Hangout. The follow-up interviews, if needed, will take place over phone, Skype, or Goggle Hangout, and will take no more than 30 minutes. Additionally, two sessions of each of your AP teachers’ classes will be observed by the researcher.

Will there be any risk of discomfort for me?
There is no foreseeable risk or discomfort.
Who will see the information about me?
Your identity as a participant in this study will not be known. That means no one other than the researchers will know that the answers you give are from you.

In order to securely maintain the data, all study data, including sound files, notes, transcripts, and coded data will be kept in two locations: the researcher’s hard drive and a separate back up disk. All folders will be password protected to ensure access to data is limited to those with the password. All participants’ names will be coded to provide participant anonymity. A key with the name coding will be kept in a separate, password-protected folder.

Can I stop my participation in this study?
Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time.

Who can I contact if I have questions or problems?
Please contact Donna Hurrle at (917) 226-8198 or via email at hurrle.d@husky.neu.edu or Dr. Corliss Brown Thompson who is overseeing my research at co.brown@neu.edu if you have any questions about this study. If you have questions about your rights as a participant, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University Boston, MA 02115. Telephone: 617-373-7570, email: irb@neu.edu. You may call anonymously if you wish.

I agree to take part in this research.

Signature of the person agreeing to take part Date

Printed name of person above Date

Donna Hurrle, Student Researcher Date
Appendix C: Participant Contact Letter

Subject Line: Request for Participation in a Research Study

Dear ____________,

My name is Donna Hurrle and I am a doctoral student in the Curriculum, Teaching, Learning, and Leadership program at Northeastern University. I am currently working on my dissertation, which examines ways in which teachers with a high proportion of African American students help these students succeed in Advanced Placement (AP) coursework. I am an AP instructional designer with the College Board, and I hope to use the results of this study to build teacher support for schools and teachers aimed at improving AP results for African American students.

I am contacting you because you have been identified by your principal as an AP teacher. With your permission, I would like to interview you to gain a better understanding of your classroom practices. This interview will take approximately 1 hour and will not require you to miss any classroom time. Additionally, I would like to observe two sessions of your AP course or courses.

If you are interested in participating in this study, please contact me at hurrle.d@husky.neu.edu. In your email, please include the number of years you have been an AP teacher at your school site. If you have any questions, please do not hesitate to contact me at hurrle.d@husky.neu.edu. I can also be reached via phone at (917) 226-8198. I look forward to hearing from you.

Sincerely,
Donna Hurrle
Appendix D: Participant Consent Form

Informed Consent Form
Northeastern University College of Professional Studies
Doctor of Education Program

Title: Improving African American Student Success in Advanced Placement Courses
Principle Investigator (PI): Dr. Corliss Brown Thompson, Northeastern University
Co-Investigator: Donna Hurrle, Northeastern University

Informed Consent to Participate in a Research Study
We are inviting you to take part in a research study. This form will tell you about the study, but the researcher will explain it to you first. You may ask this person any questions that you have. When you are ready to make a decision, you may tell the researcher if you want to participate or not. You do not have to participate if you do not want to. If you decide to participate, the researcher will ask you to sign this statement and will give you a copy to keep.

Why am I being asked to take part in this research study?
You are being recruited for this research study because you are an Advanced Placement (AP) teacher at a school that has high achieving African American AP students.

Why is this research study being done?
The purpose of this research study is examine ways in which teachers with a high proportion of African American students help these students succeed in AP coursework.

What will I be asked to do?
If you decide to take part in this study, you will be asked to participate in a confidential, audio-recorded interview. You may also be asked to participate in a short follow-up interview by phone as needed. Additionally, two sessions of each of your AP classes will be observed by the researcher.

Where will this take place and how much of my time will it take?
The interview for this study will take approximately one-hour. Effort will be made to conduct the interview at your school site. However, if scheduling does not allow, the interview will take place over phone, Skype, or Google Hangout. The follow-up interview will take place in-person, over phone, Skype, or Google Hangout, based on your preference, and will take no more than 30 minutes.

The classroom observation will take place over two class sessions for each of your AP classes, at a date to be chosen by the principal, the researcher, and you.

Will there be any risk of discomfort for me?
There is no foreseeable risk or discomfort.
Who will see the information about me?
Your identity as a participant in this study will not be known. That means no one other than the researchers will know that the answers you give are from you.

In order to securely maintain the data, all study data, including sound files, notes, transcripts, and coded data will be kept in two locations: the researcher’s hard drive and a separate back up disk. All folders will be password protected to ensure access to data is limited to those with the password. All participants’ names will be coded to provide participant anonymity. A key with the name coding will be kept in a separate, password-protected folder.

Can I stop my participation in this study?
Your participation in this research is completely voluntary. You do not have to participate if you do not want to and you can refuse to answer any question. Even if you begin the study, you may quit at any time.

Who can I contact if I have questions or problems?
Please contact Donna Hurrle at (917) 226-8198 or via email at hurrle.d@husky.neu.edu or Dr. Corliss Brown Thompson who is overseeing my research at co.brown@neu.edu if you have any questions about this study. If you have questions about your rights as a participant, you may contact Nan C. Regina, Director, Human Subject Research Protection, 960 Renaissance Park, Northeastern University Boston, MA 02115. Telephone: 617-373-7570, email: irb@neu.edu. You may call anonymously if you wish.

I agree to take part in this research.

__________________________________________  ____________________________
Signature of the person agreeing to take part Date

__________________________________________  ____________________________
Printed name of person above Date

__________________________________________  ____________________________
Donna Hurrle, Student Researcher Date
Appendix E: Administrator Interview Protocol

Thank you for agreeing to participate in this study. Do I have your permission to record this interview? I will also be taking written notes. I can assure you all responses will be confidential and only a pseudonym will be used when quoting from the transcripts. The course instructor and I will be the only person privy to the tapes which will be eventually destroyed after they are transcribed. If transcribed data is used in future research, only a pseudonym will be used. After the interview is transcribed, I will provide you with a copy of the transcript for your review by XXXX. Please review it by XXXX and let me know any changes you’d like to make.

This interview should take about an hour. During this time, I have several questions that I would like to cover. Do you have any questions at this time?

I’d like to start with a few questions about your experience as an administrator.

Q1. How long have you been a principal at this school?
Q2. Have you had any administrative experience at other schools? Please describe.
Q3. Did you ever have the chance to teach AP level courses?
   Follow-up question if yes, what was that experience like for you?
Q4. What do you think is important for teachers teaching an AP class? How is different from teaching a regular HS class? Do you think AP courses are important for students? Why?
Q5. As you know, I selected your school to interview because of the success of diverse, specifically AA students in AP classes. What are your thoughts about diversity in AP classes? Why is this important?

Now I have a few questions about your school.

Q6. What can you tell me about the socioeconomic and cultural background of your students?
Q7. Can you describe the community that your students come from?
Q8. Describe your expectations for your students. Would you describe your school as having high-expectations for students?
Q9. Describe your teaching staff to me. Are they mostly new teachers? What’s the average length they’ve been teaching?
Q10. What supports do you have for your teachers?
Q11. Is professional development important at your school?
Q12. What are some ways the school supports teachers’ pedagogical practices?

Now let’s talk a little bit about the curriculum and instruction at your school

Q13. Why do you think your African American students are so successful in their AP courses?
Q14. How do your teachers and students interact? How would you describe the teacher-student relationship at your school?
Q15. What are teachers doing pedagogically that you find particularly successful?
Q16. Who designs the day-to-day curriculum used by teachers?
Q17. How much autonomy do teachers have in designing their curriculum and implementing instruction?

Q18. Is there anything else you would like to share about the change processes you went through?
Appendix F: Teacher Interview Protocol

Thank you for agreeing to participate in this study. Do I have your permission to record this interview? I will also be taking written notes. I can assure you all responses will be confidential and only a pseudonym will be used when quoting from the transcripts. The course instructor and I will be the only person privy to the tapes which will be eventually destroyed after they are transcribed. If transcribed data is used in future research, only a pseudonym will be used. After the interview is transcribed, I will provide you with a copy of the transcript for your review by XXXX. Please review it by XXXX and let me know any changes you’d like to make.

This interview should take about an hour. During this time, I have several questions that I would like to cover. Do you have any questions at this time?

I’d like to start with a few questions about your experience as a teacher.

Q1. In which subject area do you teach?
Q2. How long have you been an AP teacher?
Q3. What do you think is important for teachers teaching an AP class? How is different from teaching a regular HS class? Do you think AP courses are important for students? Why?
Q4. As you know, I selected your school to interview because of the success of diverse, specifically AA students in AP classes. What are your thoughts about diversity in AP classes? Why is this important?
Q5. How would you describe your role as a teacher?
Q6. How do you feel about the idea that all students can succeed?

Now I have a few questions about your school.

Q7. Describe your students to me.
Q8. Does your school have high-expectations for students?
Q9. What supports do teachers at your school have available to them?
Q10. Is professional development important at your school?
Q11. In what ways does the school support the development of your pedagogical practices?

Now let’s talk a little bit about the curriculum and instruction at your school

Q12. Why do you think your African American students are so successful in their AP courses?
Q13. How do you interact with your students? How would you describe the teacher-student relationship at your classroom?
Q14. What are you doing pedagogically that you find particularly successful?
Q15. Who designs your day-to-day curriculum?
Q16. How much autonomy do you have in designing your curriculum and implementing instruction?
Q17. Is there anything else you would like to share about the change processes you went through?
### Appendix G: Observational Data Collection Grid

<table>
<thead>
<tr>
<th>Identity and Achievement</th>
<th>Equity and Excellence</th>
<th>Developmental Appropriateness</th>
<th>Teaching Whole Child</th>
<th>Student-Teacher Relationships</th>
</tr>
</thead>
</table>

Other, significant observation that doesn’t fit the above categories