ABSTRACT

Elaine A. Campbell, EQUITY AND ACCESS: EXAMINING OPPORTUNITIES OF ADVANCED PLACEMENT® FOR AFRICAN AMERICAN STUDENTS (Under the direction of Dr. Kermit Buckner). Department of Educational Leadership, August 2014.

This research study used Invitational Education Theory to examine the attitudes and perceptions educators have concerning college-level coursework and the potential impact these attitudes and perceptions had on the enrollment of African American students in AP coursework. The data acquired was obtained from educators in two high schools located in the southeastern part of the United States using the Equal Opportunity Schools Staff Survey. Findings from this research are discussed in relation to the definition, function, and characteristics of an inviting school environment. Uncovered attitudes and perceptions were analyzed and then categorized according to the four defined functioning levels of Invitational Education Theory. This assessment helped to determine the learning environment created and maintained for students and provide information targeting the school environment possibly impacting African American students' participating in AP coursework. This study seeks to contribute to the existing research regarding the disparities in enrollment existing between African American students and their White peers in Advanced Placement® coursework offerings in the high school setting.

EQUITY AND ACCESS: EXAMINING OPPORTUNITIES OF ADVANCED PLACEMENT FOR AFRICAN AMERICAN STUDENTS

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EQUITY AND ACCESS: EXAMINING OPPORTUNITIES OF ADVANCED PLACEMENT® FOR AFRICAN AMERICAN STUDENTS

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DEDICATION

I would like to dedicate this dissertation to my best friend and biggest supporter, my husband John David Campbell, Jr. I thank you for your love and the ability to adapt to the many challenges faced as I completed this work. Without your unfailing belief in me and my abilities, the completion of this research would not have been possible. Thank you for always reminding me of God's control in our lives and insisting upon gladness in the face of glitches, hope in the face of hindrance, strength in the face of sorrow, and triumph in the face of tiring. I love you.

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One of my favorite Biblical verses reads, “I can do all things through Christ who strengthens me” (Philippians 4:13 KJV). No matter what challenges faced in life, I can be victorious because of the Lord’s leading and guiding. He is the source of my strength. Due to the success He wants for me, I knew the right people would be placed in my path to help with the completion of a goal He placed in my heart many years ago. It would not have been possible without the support and vital role so many played in the completion of my dissertation and doctoral program. The many include family, friends, colleagues, and mentors who are too many to mention by name. I must however mention these individuals.

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In reflection, this has been one of the most challenging professional accomplishments I have endeavored thus far. However, I realize the completion of it has brought such joy and fulfillment to my life. For I was told that I couldn't but I now know……I CAN.

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CHAPTER 1: INTRODUCTION

"I'm calling on our nation's governors and state education chiefs to develop standards and assessments that don't simply measure whether students can fill in a bubble on a test, but whether they possess 21st century skills like problem-solving and critical thinking and entrepreneurship and creativity."

~Barack Obama, 44th President of the United States

Statement of the Problem

The culture of education in America is a complex one. Over the course of the past 200 or more years, the framework for education in the United States has emerged from one of limited beginnings to that of a means for social progress and change (Parkerson & Thattai, 2001).

Change for education has a multi-faceted mission in the 21st century. Students must be equipped with content knowledge along with the ability to demonstrate life-long skills of critical thinking, communicating with digital and media literacy, and collaborating with diverse and different thinkers (Trilling & Fadel, 2009). According to The Education Trust (2009), "We need to produce more college graduates to compete in the global economy. The United States ranks third among industrialized countries in overall degree attainment but slips to eighth when looking at degree attainment of young adults. It is predicted the United States will have a college-degree shortfall of 23 million by 2025."

Along with this change comes the steady dialogue and engaging questions framing the academic success of African American students (Ornelas & Solorzano, 2004). Changing demographics demand a greater focus on underrepresented student populations in the attainment of college degrees. Performance on the National Assessment of Educational Progress indicates that African American students in the twelfth grade perform at the same academic level as 8th grade White students (Books & Flores, 2007; Taylor, 2006). And still, although high school

graduation rates have risen for Blacks, the graduation rate for Whites is still higher (U.S. Department of Education, 2010). The lifelong consequences of poor literacy and math skills are stated as having a monumental impact on a student's life and career options.

In his book, *Results Now* (2006), Mike Schmoker repeatedly speaks of the data depicting the mediocre job being done in some of our schools to provide a curriculum with rigor, challenge, and higher-level thinking for African American students. Schmoker cites various authors and education advisors, such as Jim Collins and Robert Gordon, asking for educators to recognize reported shortcomings and conduct an honest, self-examination of a prevailing culture with practices limiting this opportunity. Citing a quote from education advisor Robert Gordon, Schmoker (2006) writes,

> "We can have an America where birth, doesn't dictate destiny. Nothing offends democratic ideals more than the fact that a typical African American 12th grader reads at the same level as a typical middle-class or White 8th grader. Nothing is a greater threat to middle-class prosperity than mediocre schools" (p. 3).

Researchers provide evidence of minority students being denied access to a more vigorous and challenging curriculum (Schneider, 2009). In systems where minority groups make up more than 80% of student population, White students remain the majority in Advanced Placement® courses (Flores, 2007; Mickelson & Southworth, 2007; Staiger, 2004). "African American students have traditionally been underrepresented in rigorous academic courses, "gifted-and-talented" programs, Honors/Advanced Placement® programs and overrepresentation in special education courses, where the curriculum is the most watered down and, in many states, teachers are least qualified" (Darling-Hammond, 2007).

With the question of "Why a continuing achievement gap?," individuals from the

education and research community continue to examine school "inputs" in the form of access to academically challenging courses and not "outputs" only which examine standardized test scores as the term achievement gap indicates (Ladson-Billings, 2007; Lee & Wong, 2004). Addressing the achievement gap emerges with educators and researchers exploring contributing factors and examining various efforts to remedy the situation (Allen & Wiggins, 2008; Chamber, 2009). Performance-driven accountability policies alone cannot narrow the achievement gap or move us forward towards equity (Lee & Wong, 2004).

Among the many researched studies attempting to challenge the traditional paradigm of focusing on accountability outputs is the examination of curriculum inputs –with the suggestion of increased minority student enrollment in more rigorous and challenging course work in the school setting; especially in the middle and high school years (Hacsi, 2004; Moore & Slate, 2008; Schneider, 2009). Educators advocating for change of inputs versus sole focus on outputs believe authentic literacy skills enabling students to examine text, understand its relevance, make connections and detect patterns, imagine alternatives, and see the world from multiple viewpoints are on the path to economic liberation and political power (Ornelas & Solorzano, 2004; Schmoker, 2006; Trilling & Fadel, 2009).

Research collected by Alfinio Flores (2007) from the University of Delaware, report patterns of disparities in the inputs for African Americans throughout the nation, citing data from the state of California as an example. He "examined data related to opportunities to learn in an effort to better understand the underlying causes of the achievement gap (Flores, 2007). One such examination found African American students in the school system of San Jose, California placed in low track classes even in cases where their standardized test scores or other

measures of academic progress were equal to or better than their White or Asian peers. According to his research, this was not an isolated case.

Data collected from all regions of the country by the National Assessment of Educational Progress (NAEP) indicated that in 2000, 32% of White 8th graders were placed in what teachers considered high ability classes while only 16% of 8th grade African Americans were in these same classes (Flores, ibid). More data showed similar patterns in advanced math classes. Caucasian 8th grade students made up 68% of the pre-algebra or algebra classes while only 47% of African American students had taken these advanced courses (Flores, ibid). In addition to these findings, he noted only 25% of African American high school graduates were enrolled in the college track courses at their high schools (Flores, ibid). Flores summarizes these findings by stating:

> "When the very students who have been given more opportunities to learn show higher achievement than students provided fewer opportunities to learn, they are perceived as more capable or having more aptitude. This manner of talking about achievement gaps without mentioning the opportunity gaps that cause them invites a focus on the students who lag behind and draws on deficit models to "explain" low performances in terms of factors such as cultural differences, poverty, low levels of parental education, and so on. Reframing the problem in terms of opportunity gaps focuses attention on examining the lack of access to the very resources that contribute to the success of more privileged students."

African American students' coursework consist of simplified and remedial coursework with very little high-quality content coupled with college readiness skills (Callahan, 2005; Moore & Slate, 2008; Southwest & Mickelson, 2007). College readiness skills are those which prepare

students with content knowledge and basic skills, core academic skills, non-cognitive or behavioral skills, and norms of performance and "college knowledge" (Roderick, Nagaoka, & Coca, 2009). African American students are less likely to be enrolled in classes with higher-order thinking strategies, rigor, and challenge in their prescribed course of study (Flores, 2007; Isaacs, 2001; Roderick et al., 2009; Southwest & Mickelson, 2007). Why are African American students not in the AP classroom? In order to close the achievement gap, it is important to understand strategies that increase minority participation in AP coursework (College Entrance Examination Board, 2002).

Using the framework of Invitational Education Theory, the learning environment can be assessed for its use of inviting practices that intentionally create success for all students (Kronenberg & Strahan, 2010). Attitudes and perceptions assessed in learning communities, responding to students as individuals, and implementing various instructional strategies revealed higher levels of engagement, leading to higher levels of reasoning and ability to handle rigor and more challenging coursework (Kronenberg & Strahan). The goal of Invitational Education Theory is to intentionally invite success for everyone with four basic elements:

- Respect: People are able, valuable, and responsible and should be treated accordingly. A successful school has this element in the policies, programs, and processes they create and maintain.
- Trust: Education is cooperative, collaborative activity where the process is as important as the product. You want to invite all in whatever processes are being developed.

- Optimism: People possess untapped potential in all human endeavors. Schools will make sure students are not limited and there is a clear direction for change. Polices, curricula, programs, processes, and the environment are based on this key component.
- Intentionality: Educators create consistently and caring schools by developing places, policies, programs, and processes designed to promote human potential. Educators in an inviting school provide purpose and direction for the success of all.

These four elements are combined with the six cultural components of Invitational Education Theory; equity, expectations, encouragement, empowerment, enlistment, and enjoyment and are crucial as an additional means to further explore the school's acceptance and celebration of diversity (Schmidt, 2007). The six cultural components of Invitational Education Theory were further explored in Chapter 2. Invitational Education Theory is utilized to assess the level schools are considered "intentionally or unintentionally inviting" (Kronenburg & Strahan, 2010; Purkey, 1990; Purkey & Aspy, 2003; Schmidt, 2007). There are other sources of literature concurring with the importance of assessing the environment of a school using these elements and components of Invitational Education Theory (Kronenberg & Strahan, 2010; Riner, 2003; Schmidt, 2007; Stafford, 1998). The researcher attempted to use the six cultural components of Invitational Education Theory; equity, expectations, empowerment, encouragement, enlistment, and enjoyment (Schmidt, 2007) as research constructs in a framework to determine the degree in which the two high schools are considered to acknowledge, value, and celebrate diversity.

Purpose of the Study

The purpose of this study was to uncover attitudes and perceptions educators have about college level courses and the impact this has for African American students' participation in

Advanced Placement® coursework in two high schools of the Chapel Hill-Carrboro City School District. Collected data indicates African American students have the lowest representation among the high school student population in the AP classroom (Testing & Evaluation Department, Chapel Hill-Carrboro City Schools, 2012).

Policy analysts state some of the educational inequalities African American students face are the lack of an enriched curriculum in K-12 schools and the tracking of these students into remedial instruction. Research further reveals these students who do not have access to these courses are therefore not afforded the extra GPA points and other college admissions benefits for taking AP classes (Moore & Slate, 2008; Schneider, 2009; Solorzano & Ornelas, 2002; Southworth & Mickelson, 2007).

Scholars report there is widespread agreement among social scientist that a critical component in achievement is the relative absence of African American students in higher-level courses and their disproportionate enrollment in lower-level ones (Southworth & Mickelson, 2007). Students in higher tracks learn more because they are exposed to broader curricula, better teaching, rigorous pedagogy, and highly motivated classmates (Henfield, Moore, & Wood, 2008; Moore & Slate, 2008; Schneider, 2009; Solorzano & Ornelas, 2002; Southworth & Mickelson, 2007). Challenges are both external and internal. External challenges include the residual effects of slavery and segregation, the stigmatization of high academic achievers by their minority peers, inadequate genes, a culture of poverty, the lack of minority role models among teachers, administrators, college administrators, and professors, and the lack of parental involvement are believed to be apparent and well-recognized (Darling-Hammond, 2007; Ogbu & Fordham, 1986). Internal challenges, include long-held traditions of inferiority over the academic ability of African American students elevates personal preference over evidence

(Ferguson & Mehta, 2004; Ogbu & Fordham, 1986; Reeves, 2007; Schmidt, 2007).

Bringing further attention to the underrepresentation of African Americans in AP coursework are the data presented in The 7th Annual AP Report to the Nation (College Board, 2011). According to the report, North Carolina's graduating class of 2011 had 29.9% African Americans seniors. Yet, its AP population from this group was only 6.8% causing the state to fall below the nation's achieved Equity and Excellence score for African American seniors of 27.9% (North Carolina's achieved Excellence and Equity score for African American seniors was 22.7%).

The formula used to measure a state's Equity and Excellence score is devised by dividing the state's demographics of a particular group by the number of its successful (score of 3 or more) AP students in that same population (College Board, 2011). The state's diversity is being examined by the College Board in its successful AP population (ibid, 2011).

Success for students gaining 21st century skills of problem-solving and higher-order thinking skills will require alternative way of instruction. With the patterns or trends of African-American students being underrepresented in AP coursework, unequal access continues to contribute to the achievement gap and foster inequities already present in today's school and society (Moore & Slate, 2008). When educators focus on internal challenges, such as the perceived intellectual inferiority of African American students, we consider a new vision of achievement, assessment, and equity (Reeves, 2007).

Data collected by the researcher on AP participation in the Chapel Hill Carrboro City School District noted similar patterns as reported in the national AP report of 2011. In 2010-2011, the system's high school population of White students was 54%. The AP participation of the White students had an average of 68%. In that same year, black student enrollment in the

high school population totaled 13% with 4% enrolled in AP coursework, noting less than half of its total enrollment (N.C. Department of Public Instruction & Chapel Hill-Carrboro City Schools, 2012). Similar patterns were reported in the 2011-2012 school year. High school population for Whites was 54% with an AP participation of 69%. Black high school population was 10% with an AP enrollment of 2%, noting less than one-third of its total population (N.C. Department of Public Instruction & Chapel Hill-Carrboro City Schools, 2013).

"Disparities in AP course enrollment should be used as a window that offers a glimpse into both overall and specific educational inequalities that exist in schools" (Solorzano & Ornelas, 2002).

Significance of the Study

Students not being sufficiently challenged in high school and end up underprepared to enroll and succeed with college goals and courses is an important social problem to which decades of research has not provided viable solutions. (Equal Opportunity Schools, 2013). There is a need for more research to be conducted at the high school level regarding the course-pattern selections of African American students.

The high schools in the Chapel Hill-Carrboro City School District in North Carolina are striving to close the achievement gap between White students and African American students. Two high schools were selected to participate in the research study based on various student demographics represented in Advanced Placement® coursework offerings. The schools are looking to bring a closer focus to possible participation gaps in Honors/AP participation.

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The College Board (2011) believes that true equity is not achieved until the demographics both of the AP classroom and of the successful AP population begin to mirror the demographics of each state's student population. Educators and leaders in the United States are being asked to take a closer look at how well African Americans are being prepared in the learning environment; especially in the middle school and early high school settings.

The results gleamed from this study will be of tremendous importance for educators in the Chapel Hill Carrboro City School District. A better understanding of variables impacting the course taking patterns of African American students in the high schools of the Chapel Hill Carrboro City Schools District will serve as a foundation for future district initiatives directed at increasing Honors/AP participation reflecting the racial demographics of the school.

Research Questions

The following questions were explored during the research of this study:

1. What are the attitudes and perceptions held by high school educators concerning college-level coursework?
2. Based on the tenets of Invitational Education Theory, what uncovered attitudes and perceptions of high school educators about college-level coursework align with inviting practices and which ones align with disinviting practices in the educational setting?
3. What is the relationship, if any between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African American students in Advanced Placement® courses?

Other inquiry of this study:

1. Is there a difference larger than 3% in the uncovered attitudes and perceptions about college-level coursework between educators at the two high schools based on years in the profession?

Hypothesis

The following hypothesis tested:

Uncovered educators' attitudes and perceptions about college-level coursework will prove to align with disinviting practices thus having a negative impact on the enrollment of African American students in Advanced Placement® coursework.

The null hypothesis tested:

Uncovered educators' attitudes and perceptions about college-level coursework will prove to align with inviting practices thus not impacting negatively on the enrollment of African American students in Advanced Placement® coursework.

Operational Definitions

Academically and Intellectually Gifted – The state of North Carolina defines Academically or Intellectually Gifted (AIG) students as those who perform or show the potential to perform at substantially high levels of accomplishment when compared with others of their age, experiences or environment. Academically or intellectually gifted students exhibit high performance capability in intellectual areas, specific academic fields, or in both the intellectual areas and specific academic fields (North Carolina Department of Public Instruction, 2012).

Achievement Gap – Differences in performance on national and state tests between groups of students, the most commonly examined comparisons being by ethnic group. Often the

unequal performance of Latino and African American students compared to European American students is described as an achievement gap (Flores, 2007).

Adequately Yearly Progress – Adequate Yearly Progress measures the yearly progress toward achieving grade level performance for each student group in reading and mathematics. Student groups are: (1) the School as a Whole; (2) White; (3) Black; (4) Hispanic; (5) Native American; (6) Asian; (7) Two or More Races; (8) Economically Disadvantaged Students; (9) Limited English Proficient Students; and (10) Students with Disabilities (www.nces.ed.gov/pubs).

Advanced Placement®/Honors Program– A program enabling students to pursue college-level studies while still in high school. Through more than 30 college-level courses, each ending in a rigorous exam, AP provides willing and academically prepared students with the opportunity to earn college credit and/or advanced placement (The 7th Annual AP® Report to the Nation, 2011).

College Board - Not-for-profit organization founded in 1900 to connect students to college success and opportunity. The organization is composed of more than 5,600 schools, colleges, universities, and other educational organizations (College Board Report, 2011).

End of Course (EOCs) - Used to sample a student's knowledge of subject-related concepts as specified in the North Carolina Standard Course of Study and to provide a global estimate of the student's mastery of the material in a particular content area (N.C. Department of Public Instruction, 2012).

Equity - Behavior and treatment of people that create conditions of fairness, justice, and non-discrimination (Schmidt, 2007).

Integration - The opening of public accommodations such as restaurants, hotels, water fountains, schools, and other public facilities to Black people. This change was brought into

existence by the passing of the Civil Rights Act of 1964 (Tatum, 2007).

Invitational Education Theory - A theory of practice designed to create a total school environment that intentionally summons people in schools to realize their relatively boundless potential. It addresses the global nature of schools (Purkey, 1991).

No Child Left Behind - The No Child Left Behind (NCLB) Act of 2001 renewed and renamed the Elementary and Secondary Education Act (ESEA) of 1965. This act's goal is for all public school children to perform at grade level in reading and mathematics by the end of the 2013-14 school year. NCLB's accountability requirements are designed to tell whether schools, districts, and states are on track to meet that goal (www.nces.ed.gov/pubs).

Opportunity Gap -Term being used by some scholars to examine inputs like access to AP coursework versus the achievement gap term which traditionally focuses on differences of performance between African American and White students on standardized tests (Chambers, 2009; Flores, 2007).

Segregation - Establishment of "separate but equal" accommodations (schools, hospitals, railroads, hotels, and other public facilities) for Whites and Blacks under Jim Crow rule primarily, but not limited to, the South (Myrdal, 1944).

Other Terms

African American/Black – Socially and conventionally constructed terms used to identify cultural practices, attitudes, and behaviors of a group of people with African ancestry. These two terms will be used interchangeably to identify members of this group (Myrdal, 1944; Nasir, Mclaughlin & Jones, 2009).

Attitudes – A person's judgment of a social situation or event as to being fair, just, desirable, or right or the opposite of these based on their ideas (Myrdal, 1944).

Perceptions – The personally held beliefs, opinions, convictions, evaluations, and morals of an individual or institution based on their knowledge and experiences (DeGruy, 2005; Lawrence, 2005; Myrdal 1944).

White/Caucasian – Socially and conventionally constructed terms used to identify cultural practices, attitudes, and behaviors of a group of people with European ancestry. These two terms will be used interchangeably to identify members of this group (DeGruy, 2005; Myrdal, 1944).

Limitations of Study

The researcher focused on examining educators' attitudes and perceptions about college-level courses and their impact on African American students' participation in Advanced Placement® coursework. The researcher served as an assistant principal for one of the elementary schools in the Chapel Hill Carrboro City School District. While the researcher's role proved to be beneficial to the study (established relationships with other educators in the district), it also presented concern with individuals being willing and honest to share data uncovering attitudes and perceptions in place possibly contributing to the low enrollment of African American students in Advanced Placement® coursework.

This study involved two of the high schools in the system. Analyzing this data uncovered possible attitudes and perceptions preventing African American students from enrolling in more rigorous classes in the two high schools participating in the study from the Chapel Hill Carrboro City School District; Carrboro High and East Chapel Hill High. Therefore, findings may not be

generalized beyond the population taking the survey. The sample size was limited to the educators responding to the survey.

Overview

In Chapter 1, the researcher provided a discussion of the research problem, its role in the field of education, and the reason for the study. Three major questions along with another research inquiry guiding the research were introduced and were explored during the study. Chapter 2 gives an extensive review of related literature found to be applicable to the study. Chapter 3 provides the selected sites, participants, methods, procedures, and techniques utilized to collect and analyze data for the study. Chapter 4 synthesizes the study's results. Chapter 5 (the final chapter) discusses patterns emerging from the research questions and implications for the education community.

CHAPTER 2: LITERATURE REVIEW

"I believe that education is the fundamental method of social progress and reform."
~John Dewey, educator

Purpose of Review

While conducting the review of literature a variety of search strategies and tools were used to locate and categorize empirical research on the topic. The researcher created notebooks for each sub-topic, labeling each with an identifying cover and explored existing research pertaining to the study. The search examined research aligning with established social constructs, held tenets, and prevailing cultural paradigms in the framework of American society contributing to the established education system serving as a microcosm of its landscape. Over 150 searches were conducted and the following search strategies were utilized:

> The majority of the research was conducted by library database searches utilizing the East Carolina Joyner Library. Most of the research cited came from ERIC searches or History Info databases. The researcher searched mainly in educational arenas and had much success with finding pertinent research. Themes reviewed in the literature to examine operational framework for education were; Beginnings of American Education, Segregation, Brown vs. Board of Education, 1954, Integration, College Board, Advanced Placement® Program, Elementary Secondary Education Act (ESEA), No Child Left Behind, the Achievement Gap, Invitational Education Theory, Current Findings, and Cultural Connections. Clarity of this information can begin to deconstruct contributing factors in the underrepresentation of African American students in Advanced Placement® coursework.

Historical Perspective

American literature highlights the right to equal educational opportunities for its citizens as being a constant source of territorial struggle in the United States since establishing the education framework in the eighteenth century (Anderson, Attwood, & Howard, 2004). Now, more than 200 years later, educators and researchers present evidence indicating the lack of access to quality education for some still maintains its place in the framework of educational institutions (Flores, 2007; Isaacs, 2001; Roderick et al., 2009; Southwest & Mickelson, 2007).

Listed among evidence as lack of access for some students are "subtle practices appearing in the existence of "gifted and talented" programs for the elite, culturally biased tests in favor of White, wealthy students, and classroom placement based on parents' privilege more than academic ability" (Anderson et al., 2004; Schneider, 2009). These practices are believed to be in place to maintain the social structures rooted in a sense of entitlement (Anderson et al., 2004).

In addition to maintained practices are the perceptions of "African American students' inferior intellectual ability when compared to Whites and that African Americans can't be motivated to learn" (Welner & Oakes, 1996). Due to these believed constructed barriers--issues of equity and diversity, racism continues to plague our public schools (Singleton & Linton, 2006). The following sections outline significant events in American history influencing educational access and academic achievement of African American students.

Beginnings of American Education

Literature indicates a quality education was the not the focus of American schools in its early foundation. The Founding Fathers did not mention public schooling in the United States Constitution (Anderson, 1976; Parkerson & Parkerson, 2001). Many children were educated at

home by their parents. During the 1600s, only the wealthiest of families were able to hire tutors from England or Scotland to educate their children. In Massachusetts, a teacher would be hired if the town had fifty students in need of schooling (Parkerson &Parkerson, 2001). The Massachusetts Act of 1647 established public schooling as The Common School. The three "Rs" were reading and writing with religion being the sole reason for implementation (Allen, 2008; Parkerson & Parkerson, 2001). The teaching of arithmetic would follow later (Allen, 2008). By the 1700s, male seminary students from Yale and Harvard often were hired to teach the very wealthy. Private schooling and church run schools were the norm in the eighteenth century (Parkerson & Parkerson, 2001). But education for African Americans, free or enslaved was extremely rare during this time. Sometimes, a slave owner would allow the plantation tutor to educate the son or daughter of a house slave. And occasionally a slave might be educated by a plantation household member such as Frederick Douglass, the Black abolitionist who was taught by his owner's wife (Parkerson & Parkerson, 2001).

In 1787, Thomas Jefferson one of America's Founding Fathers, was of the first to suggest creating a public school system (Frederick & View, 2009; Parkerson & Parkerson, 2001). Though the initial plan started by Jefferson failed, his ideas formed the basis of education systems developed in the 19th century (Parkerson & Parkerson, 2001; Thattai, 2001). Jefferson believed schools should be under the control of the government and free from religious biases. He devised a plan in Virginia that would educate boys and girls. Each student would have three years of free schooling which in turn the "top ten boys" would be picked to receive more intensive training. Jefferson stated these boys would be "raked from the rubbish" (Anderson, 1976; Tate, 2004). These boys would then begin to transform their lives and better society.

In their book, *Transitions in American Education*, Parkerson and Parkerson (2001) state,

"For Jefferson, universal education was "necessary" in rendering the people……guardians of their own liberty. To be sure, he saw universal primary education and the ultimate success of a new American republic as two sides of the same coin."

But policy makers and education researchers also believe Jefferson's ideas may also have been the foundational groundwork for an ideology of intellectual superiority of White people. (Love, 2004; Tate, 2004). Though Jefferson penned the words along the lines "all men being created equal," African Americans were not intended to be the recipients of this first educational endeavor (Love, 2004; Parkerson & Parkerson, 2001; Tate, 2004). The targeted audience was to be White males. The Founders were White males and many owned slaves. White male property owners were the audience considered equal and entitled to an education (Fazzaro, & Walter, 2002).

Indeed Jefferson wrote in his notes that "the Blacks, whether originally a distinct race, or made distinct by time and circumstances, are inferior to the Whites in the endowments both of body and mind" (Love & Tate, 2004). This perspective typical of most leaders at the time, was the framework for segregation in the United States (Tate, 2004).

The premise of education becoming a means for reform and social progress did not begin to emerge until the beginning of the 19th century (Parkerson & Parkerson, 2001; Thattai, 2001). The political climate as well as the economic culture was changing. As Parkerson and Parkerson (2001) note:

"The emerging market economy fundamentally changed Americans of all religious and ethnic backgrounds. It gave them and their families a taste of the new consumer culture, it improved their material lifestyles, and it provided them with a common vision of a rational, merit-based society that promised both national and individual growth. In short, the market

revolution transformed American industry, agriculture, transportation, and social relations, and also provided a model upon which the common-school pedagogy was based" (p. 34).

By the end of the century, noted education scholars began to express the need and urgency for education to be used as a tool for change (Background Readings in American Education, 1965; Brick, 2005; James, 2008; Parkerson & Parkerson, 2001). It was believed students must become business-oriented, hard-working, and develop a keen and sharp sense of competitiveness in order to transition into the commercial and industrial occupations. The need for well-educated individuals seemed limited and interest was more in educating White children (Anderson, 1976; Thattai, 2001).

Education was limited for African Americans, free or enslaved, and they were not to be included in the new emerging economic market and changing landscape of American education (Love, 2004; Parkerson & Parkerson, 2001; Tate, 2004). Many feared that if Blacks were educated they might challenge the system and disrupt the cotton industry (Myrdal, 1944, Vol. I). In fact during slavery, Blacks were prevented from learning to read or write under penalty of death (Butchart, 2007; Chambers, 2009; James, 2008; Lee, 2009). Despite the law and threats however, many still took the risk and in secrecy sought means for their children to become literate as well as themselves (Frederick & View, 2009).

Many slaves equated freedom with literacy and fought to establish schools (Fields-Smith, 2005). African Americans also demonstrated a strong commitment to education and eagerly embraced public education in the South following emancipation (Anderson, 1988; Perry, Steele, & Hilliard, 2003 as cited by Epps, 2006). And earlier Blacks often risked their lives to establish the Black schools in Washington, DC and elsewhere (Frederick & View, 2009). Many risked punitive action as well. Blacks risked thumbs being removed so a pen could not be held, or a

hand cut off, or whippings, or could even be sentenced to death if caught reading or writing (Butchart, 2007; Lee, 2009).

Later in the nineteenth century, educators such as Horace Mann and Anna Gardner worked to end racism and racial stereotypes. These crusading educators had a profound effect on the educational opportunities of African Americans (Brick, 2005; James, 2008; Kendall, 1968; Morgan, 1937). Mann and Gardner for example were abolitionists and indicted slavery. Horace Mann wanted more than just the education of the elite and spoke repeatedly (Morgan, 1937). Promoting this idea similarly, Anna Gardner taught Blacks with a challenging curriculum and a quality education that would promote leadership, literacy, and self-determination (James, 2008). Gardner had no preconceptions about the inability of African Americans to handle critical thinking with rigor and vigor in the curriculum.

Horace Mann also argued that all children should learn in "common" schools. However, because of political pressure he failed to take a stand against school segregation in his own city of Boston (www.pbs.org/kcet/publicschools/innovator). Many believed the pressure to be too great for Mann and his efforts went virtually unnoticed for Blacks.

The education of Blacks remained a low priority until President Lincoln issued the Emancipation Proclamation in 1863 which was the first step in freeing the slaves (Thattai, 2001). During this period the literacy rate went from 5% for Blacks in the 1860s to 70% by the year 1910 (Frederick & View, 2009; Thattai, 2001).

Real change came with the establishment of the Freedman's Bureau. The Freedmen's Bureau was an organization established by the U.S. Congress in March of 1865 to help recently freed Blacks and Refugees with medical care, food needs, land acquisition and education (Frederick & View, 2009; James, 2008; Lee, 2009; Parkerson & Parkerson, 2001). These

schools were central to a renaissance in Black education in the South (Butchart, 2007; Fairclough, 2000; James, 2008; Lee, 2009; Parkerson & Parkerson, 2001). Their impact was dramatic and led to the establishment of a number of colleges to train Black teachers (Parkerson & Parkerson, 2001).

Anna Gardner was an abolitionist from Nantucket, Massachusetts. She would labor for schools in Virginia and North Carolina. She was from a family that abhorred slavery and was known for harboring run-away slaves (James, 2008). At the age of 25, she organized the first Anti-Slavery Convention on the island of Nantucket, which included the famed abolitionist William Lloyd Garrison and a new speaker who was beginning to appear on the platform about the evils of slavery, Frederick Douglass (James, 2008). Gardner spoke out against the injustices done to Blacks and sought to provide quality education for Blacks that would promote leadership, literacy, and self-determination (Butchart, 2007; James, 2008; Lee, 2009).

But Gardner and others were threatened for their beliefs. There were threats of violence from the Ku Klux Klan, from university students, and from local Whites who feared the gains that would be made by Blacks (Brown, 2004; Frederick & View, 2009; James, 2008; Lee, 2009). Even with the threat of violence however, Gardner continued her work and started her first school in Charlottesville, Virginia in November of 1865 (James, 2008). She had followed Virginia's politics closely and felt that Virginia would be the state moving towards a more egalitarian society because of consideration of racially mixed schools (James, 2008).

Gardner's school was well attended with "scholars." This is the name she and her staff called the ex-slave students (James, 2008). There were also White students in attendance. Educators delivering instruction under Ms. Gardner's leadership believed the curriculum developed was based on more than simple school house instruction of reading, writing, and

arithmetic. They wanted Blacks to have an education for Blacks that would develop autonomy and leadership (James, 2008). Students studied African American leaders, inventors, and scientist such as Benjamin Banneker, Frederick Douglass, and Toussant L'Ouverture (Butchart, 2007; Frederick & View, 2009; James, 2008; Lee, 2009).

The endeavors of Ms. Gardner and the Freedman's Bureau to educate Blacks soon came to an end by the late 1860s (James, 2008). Terror developed in the South intended to frighten the Northerners out of the business of educating Blacks (Butchart, 2007; Fairclough, 2000; Frederick & View, 2009; James, 2008; Lee, 2009). These tactics worked. Literature also reports of similar events happening in the North. While many schools in the North were integrated, serving both White and Black students, not everyone accepted the equality of Blacks and Whites. Though there were fewer events than in the South, racial prejudice against African Americans was always the counterpoint to educational progress in both the North and the South (Parkerson & Parkerson, 2001). As a result of the terror associated with Jim Crow and the decision of Plessy vs. Ferguson of 1896, education of Blacks was declining. Segregated schools now were the norm and the new thought was a public school system that taught Blacks only the basic literacy skills, number readiness, with little focus on liberation and questioning of White superiority (Fairclough, 2000; James, 2008; Lee, 2009).

Among those bringing a counter narrative to the existing situation of African Americans was Dr. W. E. B. DuBois, the first Black to earn a history PhD from Harvard University in 1895 and a founder of the NAACP. He believed that schools should promote a diverse classical curriculum for both Blacks and Whites so that Blacks could succeed in American Society (Frederick & View, 2009; James, 2008; Lee, 2009). From his point of view the current curriculum was a subtle plan to keep the Black child from learning and progressing towards

independence and knowledge (Donahoo, 2006; James, 2008). Differing somewhat from the view of Dr. DuBois was that of noted Black leader Mr. Booker T. Washington.

Mr. Washington was a graduate of Hampton University and accepted the presidency of Tuskegee Institute in 1881, both well-known Black Universities (Chaffee, 1956; DuBois, 1903; Myrdal, 1944). He believed that Blacks needed to be patient and earn their place in society with needed skills serving White society (Chaffee, 1956; DuBois, 1903). These two differing stances; "industrial" versus "classical" education would dominate the debate between conservative and radical groups of Black leaders from the late 1800s to the early to mid-1900s (Chaffee, 1956; DuBois, 1903; Hicks, 2006; Myrdal, 1944; Parkerson & Parkerson, 2001). The philosophy of Mr. Washington became the favored "education model" by southern and northern Whites alike (Myrdal, 1944; Parkerson & Parkerson, 2001). More discussion between industrial and classical education for African Americans occur later in this chapter.

Segregation

The legacy of slavery and segregation would loom large in the education of Blacks. African Americans were brought to America as slaves from Africa in 1619 and remained in that status until 1865, the end of the Civil War (Brown, 2004; Myrdal, 1944; Parkerson & Parkerson, 2001). Formal education did not exist for Blacks until 1865. Blacks living in small towns or villages might receive a fragment of education while those living in rural areas rarely received any formal education (Brown, 2004).

In the book, *Transitions in American Education* (2001), the authors Parkerson and Parkerson talk about the difficulty in place for African Americans free or enslaved to obtain a formal education. Research shows a two-tiered approach to education appeared in the South in the 1800s with most wealthy children affording private tutoring and very little to no educational

opportunities for slave children and the poor (Parkerson & Parkerson, 2001; Pilgrim, 2000). Most southern Whites fought to keep Blacks from being educated (Butchart, 2007; Fairclough, 2000; Frederick & View, 2009; James, 2008; Lee, 2009). Jim Crow laws were in effect in parts of the country during the late 1800s and early 1900s and this racial caste system dominated the South (Fairclough, 2000; Frederick & View, 2009; Pilgrim, 2000).

Jim Crow laws were established in 1876 and continue in some form even today. Lynchings were used outside of the criminal justice system to intimidate and keep Blacks from demanding civil rights (Dudziak, 2004; James, 2008; Pilgrim, 2000; Reed, 1994). Under Jim Crow, Blacks were relegated to the status of second class citizens (Brown, 2004). Institutions such as hospitals, theatres, churches, cemeteries, prisons, public restrooms, and other public accommodations designated "For Colored" and "Whites Only" (Fairclough, 2000; Ferguson & Mehta, 2004; Frederick & View, 2009). This appeared to be the same conditions for private and public schools during Jim Crow.

Two cases appearing before the United States Supreme Court fostered the two-tiered system written of earlier by authors Parkerson and Parkerson. The first was The Dred Scott vs. Sanford of 1857. Dred Scott and his master had moved to a free territory thus making him a free man. The courts did not rule in his favor upholding the theory of Blacks were property and not equal with Whites. Chief Justice Roger B. Tawney declared that Blacks could never be granted equal protection under the law or civil rights, because they were inherently inferior to Whites, and forever would be (Marable, 2000; Pettigrew, 2004).

Another key decision of the nineteenth century was the Plessy vs. Ferguson case of 1896. Though this case focused on segregation of transportation facilities, it would set the operational framework of education for the next 58 years (Parkerson & Parkerson, 2001; Pettigrew, 2004).

Homer Plessy was a man who had one Black great-grandparent. He was 7/8 Caucasian and 1/8 Black (ruling him Black). He had been arrested for riding a rail car that was reserved for Whites Only under a Louisiana law. He sued and the courts rejected his plea. This lead to the doctrine of "separate but equal." States now had permission from the courts to keep facilities separate, including schools separate with the notion they would be kept equal (Donahoo, 2006; Parkerson & Parkerson, 2001; Pettigrew, 2004).

However, education research shows facilities were separate but certainly not equal. Many states could barely afford to keep one facility adequate let alone a separate facility for Blacks with the same amenities and most states had no intentions of providing adequate facilities for their Black citizens (Frederick & View, 2009; Love, 2004; Pettigrew, 2004; Parkerson & Parkerson, 2001). The result of this system was that wealthier, White counties in many states received the vast majority of state monies for public education and most of that money went to schools serving the White student population (Fairclough, 2000; LeMelle, 1995; Parkerson & Parkerson, 2001; Pilgrim, 2000).

Many times the facilities for Black students were older. The buildings were dilapidated, dirty, decrepit structures such as run-down churches and old hospitals being used to house students for class (Fairclough, 2000; Ferguson & Mehta, 2004; Frederick & View, 2009; James, 2008; Parkerson & Parkerson, 2001). These schools had inadequate lighting, toilets, heating, and washing facilities. Most schools were grossly inferior to those of the Whites. In the Washington, DC area, many schools were built before the Spanish-American War fought in 1898 (Frederick & View, 2009). During this period, many Black teachers had training that was truncated and incomplete when compared to their White counterparts (Brown, 2004; Butchart, 2007; Fairclough, 2000). Several schools did not have desks or chairs for as many as seventy-

five students (Fairclough, 2000; James, 2008). However, Blacks believed that in order to become empowered their students would need an education. As we have seen it was widely held among Blacks that literacy and learning were essential to their freedom (Fairclough, 2000; Frederick & View, Lee, 2009).

Contrasting views were being developed during the latter part of the eighteenth and early nineteenth centuries among leading Black social scientist and intellectuals (Parkerson & Parkeson, 2001). These issues complicated the development of African American education after the Civil War. There was intense debate among African Americans as well as Whites on the aims of African American education. Some of the questions posed causing the debate: What would be the main emphasis of education for African Americans? Would it include the full range of training from elementary to graduate and professional education? Or would it consist of smattering of basic elementary education and vocational technical/agricultural training for a people who were mostly farmers and unskilled workers and who, in the opinion of most southern Whites, were not capable of higher education (Chaffee, 1956; Dunn, 1993; Parkerson & Parkerson, 2001). Among the leading protestors of what many believed to be a less than mediocre education for Blacks was Dr. W. E. B. DuBois.

DuBois believed the education of Blacks should be equal to that of Whites stressing the importance of liberal arts, humanities, and sciences (Chaffee, 1956, DuBois, 1903; Dunn, 1993; Myrdal, 1944; Parkerson & Parkerson, 2001). He and others with this philosophy thought an education with this rigor and challenge would provide African Americans with the cognitive and technical competencies to achieve true emancipation and full rights in the social order of American society (Chaffee, 1956, DuBois, 1903; Dunn, 1993; Myrdal, 1944; Parkerson

& Parkerson, 2001). He would not succeed to compromise; the needs for Blacks were too great Dubois believed to wait for delayed change over time.

There was sharp criticism to this ideology from southern Whites, liberal northerners and some Blacks (Myrdal, 1944; Parkerson & Parkerson, 2001). Among the most prominent Black leaders opposed to this curriculum for the African American was Mr. Booker T. Washington. He believed the African Americans should have a curriculum engaging them in vocational training making each more marketable in the segregated workforce (Chaffee, 1956, DuBois, 1903; Dunn, 1993; Myrdal, 1944; Parkerson & Parkerson, 2001). Mr. Washington dismissed the ideology of Dr. DuBois and those of his thought because he believed it to be too intellectual and theoretical for the masses of African Americans (Chaffee, 1956; Dunn, 1993).

He was supported by northern philanthropists and missionaries who assisted with the development of Black colleges and schools in the late nineteenth century. Wealthy philanthropists such as Andrew Carnegie, Collis P. Huntingdon, H. H. Rogers, and Julius Rosenwald would support the development of schools as long as they continued to accommodate the dominate/subordinate relationship between Whites and Blacks in the South (Bond, 1939; Chaffee, 1956; DuBois, 1903; Dunn, 1993; Fairclough, 2000; LeMelle, 1995; Myrdal, 1944; Parkerson & Parkerson, 2001). Mr. Washington's favorable position with Whites made him one of the few Black leaders able to get money for his school and for others following his ideology of educating Blacks (Chaffee, 1956; Dunn, 1993; DuBois, 1903; Myrdal, 1944; Parkerson & Parkerson, 2001).

The attitude of the southerners was quite clear. The freedman might have schools and colleges, but his education must remain poor (Brown, 2004; Frederick & View, 2009; James, 2008; Lee, 2009; LeMelle, 1995). The educating of Blacks need not to be of quality due to the

fact Whites would always prescribe a certain way for them to live (Brown, 2004; James, 2008; Love, 2004; Myrdal, 1944). There would be very little need for Blacks to concern themselves with rights or cause a potential threat to the dominance of Whites dictating the order of things (Donahoo, 2006; James, 2008). Dr. DuBois vehemently disagreed with this and wanted African Americans to have the same rights as Whites such as voting. He saw Mr. Washington as an accommodator to the status quo for not challenging the beliefs held by the majority of white society (Chaffee, 1956; Dunn, 1993; DuBois, 1903; Myrdal, 1944; Parkerson & Parkerson, 2001). The two would find themselves on the opposite side of this educational debate for decades.

Still, Black universities and schools continued to be established by southern Blacks. At the turn of the twentieth century, Mary McLeod Bethune and Lucy Laney were noted educators who started their own private schools for the education of Black students in the South. Ms. Bethune and Ms. Laney operated schools affording Blacks opportunities to learn in both the elementary and secondary settings (Parkerson & Parkerson, 2001).

Brown vs. Board of Education 1954

The twentieth century ushered in constant reminders of inadequate education in place for African Americans. Some gains were made towards ending segregated education such as Pearson vs. Murray (1936) and Missouri ex rel Gaines vs. Canada (1938). But these cases centered on postsecondary education and did not address segregation in the elementary or secondary setting (Donahoo, 2006; Frederick & View, 2009). While the above renderings made it illegal for law schools and universities to deny one acceptance based solely on one's race, it did not make it illegal for states to maintain segregated school systems.

The institution of slavery had been justified based on the belief that Blacks were innately

inferior to Whites with sub-human qualities (Fairclough & Pilgrim, 2000; James, 2008; Reed, 1994; Verdun, 2005). It was not until mid-twentieth century with Brown vs. Topeka Board of Education (1954) that separate but equal was ruled unconstitutional (Brown, Ferguson, & Mehta, 2004; Donahoo, 2006; Love, 2004; McAndrews, 2009; Peterson et al., 2007). Thirteen parents and twenty of their children were the plaintiffs in this landmark case. Presenting this case before the courts was the lead counsel for the National Association for the Advancement of Colored People (NAACP), Mr. Thurgood Marshall. In 1967, attorney Marshall would be appointed as the 96th and first African American justice to the Supreme Court of the United States.

Oliver Brown, the lead plaintiff, and other parents were suing the Topeka, Kansas School System. It was stated Mr. Brown's eight year old daughter Linda and other students of named plaintiffs were forced to walk several blocks to catch a bus to their segregated school a mile away when a few blocks away was a school serving only White students (Brown, 2004; Donahoo, 2006; Ferguson & Mehta, 2004; Parkerson & Parkerson, 2001). In previous cases, the courts had decided cases with very little evidence from social scientist or researchers. Mr. Marshall and his colleagues incorporated the testimony of leading psychologists and social researchers of the time. Among them were Jerome Bruner, Isidor Chein, Stuart Cook, Otto Klineberg, and Daniel Katz along with leading African American psychologist Kenneth Clark (Brown, 2004; Ferguson & Mehta, 2004; Pettigrew, 2004). Dr. Clark and others told of the psychological and sociological damage being done to Black children, separated solely on the basis of their race from White children of same age and similar likes (Background Readings in American Education, 1965; Brown, 2004; Ferguson & Mehta, 2004; Pettigrew, 2004).

The court's decision was in favor of Brown, handed down on May 17, 1954. The ruling

was unanimous (9-0) decision stating that "separate educational facilities are inherently unequal" (Jackson, 2007; Parkerson & Parkerson, 2001; Pettigrew, 2004; Thattai, 2001; Verdun, 2005). This landmark case was thought to bring about the end of racially segregated public schools and end the 60 year old separate-but-equal rule of Plessy vs. Ferguson in the United States (Donahoo, 2006; Ferguson & Mehta, Love, 2004; Verdun, 2005). The 1954 decision of Brown vs. Board of Education appeared to be a moral victory for African Americans and subsequently other minority groups seeking educational opportunities (Donahoo 2006; Parkerson & Parkerson, 2001; Taylor, 2006). It also helped to provide satisfactory perceptions to the world concerning the United States efforts to address racism within its borders (Dudziak, 2004; Reed, 1994; Taylor, 2006).

Integration

But there was no immediate end to segregation in education following Brown vs. Board of Education (Parkerson & Parkerson, 2001). American society made very slow progress towards the goal of racial equality. Without enforcement provisions, timelines, or funding southern White schools simply closed rather than allow Black children to attend (Brooks, 2007; Donahoo, 2006; Ferguson & Mehta, 2004; Jackson, 2007; Taylor, 2006; Verdun, 2005). Columbus, Ohio as one example maintained a dual and segregated school system for twenty-four years after the Brown vs. Board of Education decision (Verdun, 2005). The state of Texas provided the attorney general $50,000 dollars to help defeat pro-desegregation cases within the courts (Donahoo, 2006). And during The 1950s and 60s many Whites left the cities and moved into the suburbs and the South in order to send their children to school (Brown, 2004; Donahoo, 2006; Jackson, 2007).

While Brown vs. Board of Education (1954) made it illegal to practice racial segregation

in public education Brown II (1955) demanded that desegregation move "all deliberate speed" for the implementation (Brown, 2004; Donahoo, 2006; Jackson, 2007; Parkerson & Parkerson, 2001; Verdun, 2005). Nevertheless, the term all deliberate speed was ambiguous so many school districts simply ignored the ruling until they were forced to act (Brown, 2004; Donahoo, 2006; Jackson, 2007).

Some educators and social scientists argue that the Brown Decision lacked the compelling mandate of enforcement because many White teachers, administrators, and parents did not embrace Black students and still believed they were inferior to their White counterparts (Donahoo, 2006; Gross et al., 2008). As a result, the process of desegregation was a slow and difficult one fraught with violence (Brown, 2004; Donah, 2006; Jackson, 2007; Verdun, 2005).

Thurgood Marshall and other members of the NAACP were now looking to President Dwight Eisenhower to be instrumental in implementing the Brown Decision (1954) across the country. The term all deliberate speed was being interpreted differently across the nation and school systems were deliberate in delaying plans of desegregation (Brown, 2004; Donahoo, 2006; Ferguson & Mehta, 2004; Taylor, 2006; Verdun, 2005). However, President Eisenhower did not give approval to the High Court's decision and waited almost three years before giving force to compliance with the ruling nation-wide (Brown, 2004; Jackson, 2007; Pettigrew, 2004).

Researchers and educators believed more was needed to make sure Black students received a fair and equitable education. Reported victories and setbacks occurred along the way. In another landmark decision, the U.S. Supreme Court ruled against the school system in New Kent County, Virginia. Then in Green vs. County School Board (1968), the courts mandated that the segregated or dual system of education be dismantled "root and branch" (Ferguson & Mehta, 2004). However, the ruling of the court's decision in Milliken vs. Bradley

(1974) appeared to reverse the direction. The court overruled a plan where the children of the Detroit school system would integrate with the mostly White suburbs (Ferguson & Mehta, 2004; Pettigrew, 2004). It did establish in a companion case of Milliken vs. Bradley II, a requirement for the state of Michigan to provide resources for remedial and compensatory education (Ferguson & Mehta, 2004).

While Mr. Marshall believed the desegregation framework should be in place and completed by the fall of 1956, this did not happen (Jackson, 2007). This was not to happen. Most of the desegregation in the schools began after the Civil Rights Act of 1964 (ten years after the Brown Decision) and it would take another twenty years for most Americans to digest and accept that segregation was wrong (Ferguson & Mehta, 2004; Jackson, 2007; Parkerson & Parkerson, 2001; Pettigrew, 2004;Verdun, 2005).

College Board

While issues of segregation and racism persisted in American schools, other educators were questioning the rigor (or lack thereof) of schools across the nation. For many, it appeared students enrolling in colleges and universities were not transitioning well into higher education nor were those who were going into the workforce prepared as viable contributors to society (Drown, 1903; Overn, 1937; Nightingale, 1897; Willingham, 1966). Well-known professors from the very elite university and college settings had feelings of inconsistent and incongruent collaborations between the secondary schools and the colleges (Hacsi, 2004; Nightindale, 1897; Willingham, 1966). It was not uncommon for many high schools to give different types of courses for pupils intending to go to college than for those who did not have these aspirations, giving voice to the feelings of inconsistent and incongruent secondary education (Overn, 1937; Nightingale, 1837; Willingham,1966).

Towards the end of the nineteenth century, a committee was appointed by the National Education Association to make recommendations regarding the reconstruction of secondary school curricula in the United States (Nightingale, 1897; Overn, 1937). This was a joint venture between the departments of higher education and of secondary education with meetings beginning in 1893 (College Board, 2011; Dill, 1977; Nightingale, 1897; Wraga, 1998).

The committee, known as the Committee of Ten, comprised of the following: Dr. Nicholas Murray Butler, Columbia University; B. A. Hinsdale, University of Michigan; Dr. James E. Russell, University of Colorado; Dr. Paul H. Hanus, Harvard University; W.C. Jones, University of California; Charles H. Thurber, Morgan Park Academy; John T. Buchanan, Boys Classical High School, New York City; J. R. Bishop, Walnut Hills High School, Cincinnati; Dr. William H. Smiley, Denver High School and A. F. Nightingale, Superintendent of high schools, Chicago (Nightingale, 1897). Two prominent educators of the time, Charles William Eliot from Harvard and Nicholas Murray Butler from Columbia University were very influential in creating the College Board Entrance Exam to address this problem (Hacsi, 2004; Nightingale, 1897; Overn, 1937). The College Entrance Examination Board (CEEB now known as the College Board) was established as a non-profit organization to help facilitate an effective transition for students from high school to college (College Board, 2001; Dill, 1977; Hacsi, 2004; Overn, 1837; Willingham, 1966).

This CEEB made recommendations based on their research and in 1901, the first College Entrance Examination Board tests were given to a little less than 1,000 high school students (Atkinson & Geiser, 2009; Hacsi, 2004). The establishment of the original College Board had two important standardizing functions; (1) to make secondary schools more alike in what they taught while raising their standards and (2) to make colleges more alike in how they

made admission decisions (Dill, 1977; Hacsi, 2004; Nightingale, 1897; Ravitch, 2010; Willingham, 1966; Wraga, 1998). In addition to this stated and written purpose, other scholars argued that the establishment of the CEEB was a means to ensure the status of middle and upper class children and allowing their social mobility thus furthering the system of inequality (Atkinson & Geiser, 2009; Drown, 1903; Hacsi, 2004).

Though questions arose along with much more conversation and discussion for change, the original exams were received reasonably well with some criticisms concerning various disciplines being tested from school officials (Hacsi, 2004; Overn 1937). Exams were reviewed and a big change came in 1915 with subject exams based on practices at Harvard University making test more comprehensive and extensive (Hacsi, 2004; Overn, 1937; Willingham, 1966). This would not be the only change as the relatively small organization continued to review and expand its practices and examinations, becoming influential in courses being offered in the secondary setting (Hacsi, 2004; Overn, 1937; Willingham, 1966).

The Committee of Ten recommendations led to the development of the College Entrance Examination Board along with establishment of the school year that has been used throughout many parts of the country; six years in the elementary setting and six years in the high school setting with these six years being divided into a junior and senior part (Hacsi, 2004; Overn, 1937; Willingham, 1966).

According to the *College Board Research Report 2011*, this group continues to be a mission driven not-for-profit organization that connects students to college success and opportunity. It reports 5,900 of the world's leading educational institutions in its membership, promoting equity and excellence in education. According to statistics presented in this report, the College Board helps more than seven million students prepare for the transition from

high school to college through the various programs and services offered. These programs include the SAT® and the Advanced Placement® program. The College Board also serves the educational community through research and advocacy on behalf of the students, educators, and schools.

The Advanced Placement® Program

During the 1920s, the College Board designed subject exams, believed to have influence over what secondary schools offered and the Scholastic Aptitude Test (SAT) that influence college admissions (Dill, 1977; Donelan et al., 1994; Hacsi, 2004; Schneider, 2009). The subject exams were designed to assess the curriculum and deliver instruction in the secondary setting while the Scholastic Aptitude Test determined a student's capability for engaging successfully with college work (Dill, 1977; Donelan et al., 1994; Hacsi, 2004; Schneider, 2009). The Scholastic Aptitude Test took a more modern form in 1941 and eventually its name was changed to Scholastic Assessment Test due to lack of clarity between achievement and aptitude (Hacsi, 2004). Both tests served as the gateways from high school to college (Atkinson & Geiser, 2009; Cooper et al., 1960; Donelan et al., 1994; Hacsi, 2004; Santoli, 2002; Wraga, 1998).

During the next several years, the College Board continued to develop tests to assess subjects being taught in the high school setting (Dill, 1977; Hacsi, 2004; Schneider, 2009). Although the changes made were seen as necessary, many educators felt there was not enough being done to address the needs of the students appearing to be academically gifted and talented. Many believed the school's emphasis on a comprehensive curriculum rather than a specialized one, contributed to the inability of American students to be competitive in context of

the Cold War (Dill, 1977; Donelan et al., 1994; Hacsi, 2004; Parkerson & Parkerson, 2001; Schneider, 2009; Wraga, 1998).

Meetings occurred during the mid-twentieth century to address the problem. In 1947, after several years of discussion, the CEEB, the Carnegie Foundation, and the American Council on Education joined to create another non-profit corporation known as the Educational Testing Service (College Board, 2011; Hacsi, 2004). This organization would handle exam testing except for those programs related to the CEEB's own admission program. The CEEB moreover would continue researching ways to address the popular thought prevailing about public schools being responsible for strengthening America's international position with students benefitting from advanced and accelerated learning (Dill, 1977; Hacsi, 2004; Donelan et al., 1994; Schneider, 2009; Wraga, 1998).

As a result of various meetings, two significant projects are noted as setting the framework for the Advanced Placement® program presently operating in the United States. In 1950, meetings were held between several Headmasters of high-status secondary schools such as John Kemper of Phillips Andover (now known as Phillips Academy Andover in Massachusetts) and well-known university leaders from Harvard, Princeton, and Yale (Cooper et al., 1960; Santoli, 2002; Schneider, 2009). These regular meetings became known as the School and College Study of Admission and Advanced Standing which were supported by the Fund for the Advancement of Education started in 1951 by the Ford Foundation (Cooper et al., 1960; Hacsi, 2004; Santoli, 2002; Schneider, 2009). Their primary focus was the academically gifted and talented students, a term that became synonymous for identifying the White student population throughout the nation's schools (Chubbuck, Hacsi, 2004; Parkerson & Parkerson, 2001; Schneider, 2009).

A second project, in 1952 known as the Kenyon Plan, brought together school teachers

from high-status schools, university professors, and individuals from the Educational Testing Service who developed high school course outlines, syllabi, and test based on the outlines (Santoli, 2002; Schneider, 2009). Students from these participating schools, who were high-achievers, would take a test to determine if they could earn college and university credit while still in high school. These tested outlines were first administered in 1954 to 532 students with the possibility to get a score of 1(indicating below-average understanding) to 5 (indicating complete comprehension). Later, 929 placement tests were administered at 18 participating schools (Santoli, 2002; Schneider, 2009). The following year in 1955, The College Board took over the program and it became known as the Advanced Placement® program with Charles Keller becoming its first director (Atkinson & Geiser, 2009; Cooper et al., 1960; Roberts, Scheaffer, & Watkins, 1999; Santoli, 2002; Schneider, 2009).

Now that the Advanced Placement® program was in place, many educators believed the academically gifted needs were addressed. But according to some researchers, its design was to benefit high-achieving students at high-status schools in the United States as part of an effort to create an academic elite (Schneider, 2009). Clearly there were concerns with the AP concerning race and poverty especially with the ruling passed by the courts of Brown vs. Board of Education (1954), declaring the segregation of schools illegal (Donelan et al., 1994; Hacsi, 2004; Schneider, 2009; Tyack, 1991). It would be the latter part of the twentieth century, in the 1970s, before the College Board would begin to examine these issues more closely. Recommended changes continue to be offered from the College Board to the nation's schools addressing the noted underrepresentation and participation of African American students in AP coursework (8th Annual Report to the Nation, 2012).

Recent information reported from the College Board (2011) shows that the Advanced

Placement® program offers 17,000 plus secondary schools worldwide AP exams, with more than 122,000 teachers in nearly 15,000 schools authorized to teach these courses. The program has 5,000 plus college faculty develop and score the AP exams then scores are sent to 3,600 colleges and universities.

Elementary Secondary Education Act (ESEA)

With the Advanced Placement® framework established, a program had now been developed that enabled students believed to be academically gifted an opportunity to study advanced curriculum and gain college credit (Hacsi, 2004; Parkerson & Parkerson, 2001; Santoli, 2002; Schneider, 2009). The Supreme Court's 1954 Brown vs. Board of Education declared racial segregation in public schools to be illegal (Brown, 2004; Donahoo, 2006; Jackson, 2007; Parkerson & Parkerson, 2001; Verdun, 2005). American education continued to evolve.

However some educators and policymakers continued to voice concerns over the lack of educational opportunities being offered to the disadvantaged and underprivileged children in the United States (Kantor, 1991; Parkerson & Parkerson, 2001; Spraggins, 1968; Thomas & Brady, 2005).

Researchers note many opinions as to why there was a need for change in 1960. Three of the most cited are said to be (1) domestic policy, which included educational policy as a way to address the inequalities in American life; (2) interest groups and policy intellectuals who believed the way to equalize differences in education between the poor and wealthy would be government expansion in public education; (3) the need for American education to compete with foreign policy interest and train workers to defend their individual political and economic rights (Kantor, 1991; Spraggins, 1968; Thomas & Brady, 2005). All of the above mentioned and

pressure from civil rights activists served as catalysts to address poor students attending schools where resources were limited and teachers were unqualified. This was the beginning of President Lyndon Johnson's support for the Elementary and Secondary Education Act (Parkerson & Parkerson, 2001).

This shift in priorities began when Walter Heller then chairman of the Council of Economic Advisers, met with President Johnson the day after President Kennedy was assassinated in November 1963 to discuss the plans of Kennedy's "War on Poverty" (Cannon, 1985; Kantor, 1991; Parkerson & Parkerson, 2001). Upon meeting again in January of 1964, research states that Heller advised Johnson of "education being at the core of any successful campaign against poverty." Heller and others stated it was President Kennedy who initiated the War on Poverty but researchers agree it was President Johnson who made the war a reality (Cannon, 1985; Kantor, 1991; Parkerson & Parkerson, 2001; Thomas & Brady, 2000).

He developed a new commission on education referred to as the Gardner Commission (Cannon, 1985; Kantor, 1991; Thomas &Brady, 2005). This was chaired by John W. Gardner, a psychologist and President of the Carnegie Corporation. The primary task of the Gardner Commission was to develop new ideas and thinking on the issue of federal education aide (Cannon, 1985; Kantor, 1991; Thomas &Brady, 2005). President Johnson had been a teacher and witnessed poverty's impact on his students. He believed that equal access to education was the vital key for a student to lead a productive life (Vinovskis, 1999).

President Johnson adopted this approach, orchestrated and introduced the Elementary and Secondary Education Act (ESEA) to the Eighty-Ninth Congress. The bill was passed in a record eighty-seven days with very little debate (Vinovskis, 1999). This would be the first major federal aid to education programs targeted to help children throughout the country who were

disadvantaged (Cannon, 1985; Kantor, 1991; Parkerson & Parkerson, 2001; Spraggins, 1968; Thomas & Brady, 2005; Vinovskis, 1999). In 1965, ESEA put approximately $1 billion dollars in schools and districts designated having high concentrations of disadvantaged students with a total reaching $3.5 billion dollars by the end of the 1960s (Parkerson & Parkerson, 2001; Thomas & Brady, 2005). Title I of that bill provided most of the funds and set federal educational policy in a new direction that has continued for more than four decades.

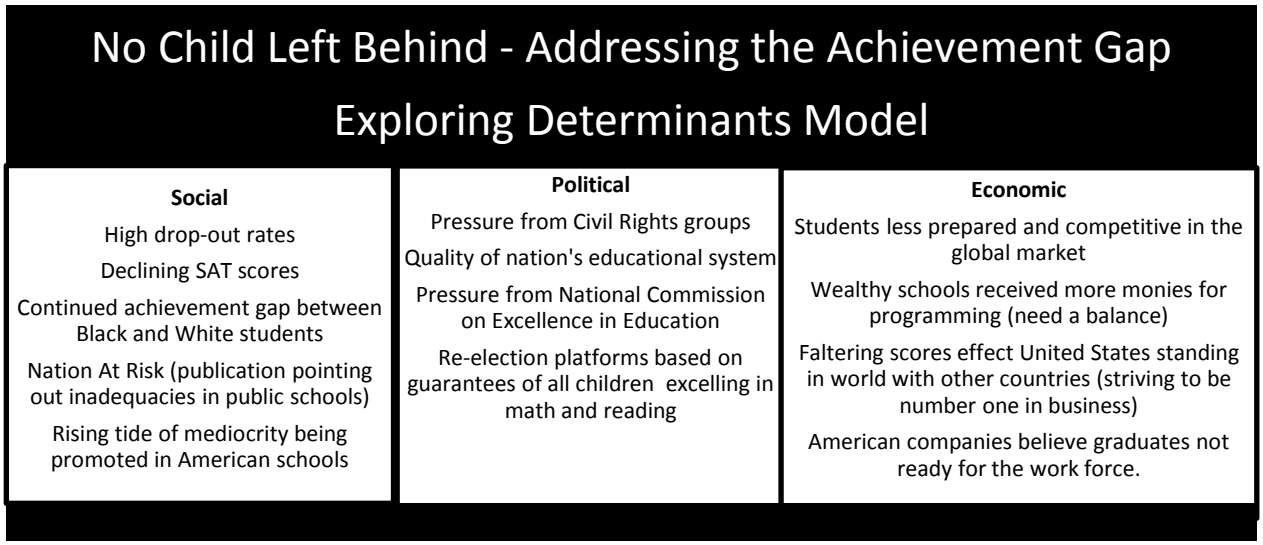
President Johnson and many members of Congress had high expectations of the new education legislation of 1965. They believed it would help disadvantaged children and close and eliminate much of the large academic achievement gap observed between poor students and their counterparts who had economic advantages. Yet still, data collected over the years subsequent the passing of this legislation by educators and policy analysts demonstrated that certain student populations were still lagging behind in spite of the passing of ESEA (Contreras & Valverde, 1994; Kantor, 1991; Parkerson & Parkerson, 2001; Thomas & Brady, 2005; Vinovskis, 1999).

No Child Left Behind

With disparities between White students and their Black counterparts still being noted in the twentieth century, finding ways to close or at least reduce the gap was still a focus. The priority given to this endeavor under ESEA had not produced the results hoped for (Boykin & Noguera, 2011). A new urgency to address this goal as a national priority would emerge in a federal policy monitoring racial gaps in achievement with accountability elements (Arce, Luna, Borjian, & Conrad, 2005; Boykin & Noguera, 2011; Hess & Petrilli, 2006; Mayers, 2006; Ravitch, 2010).

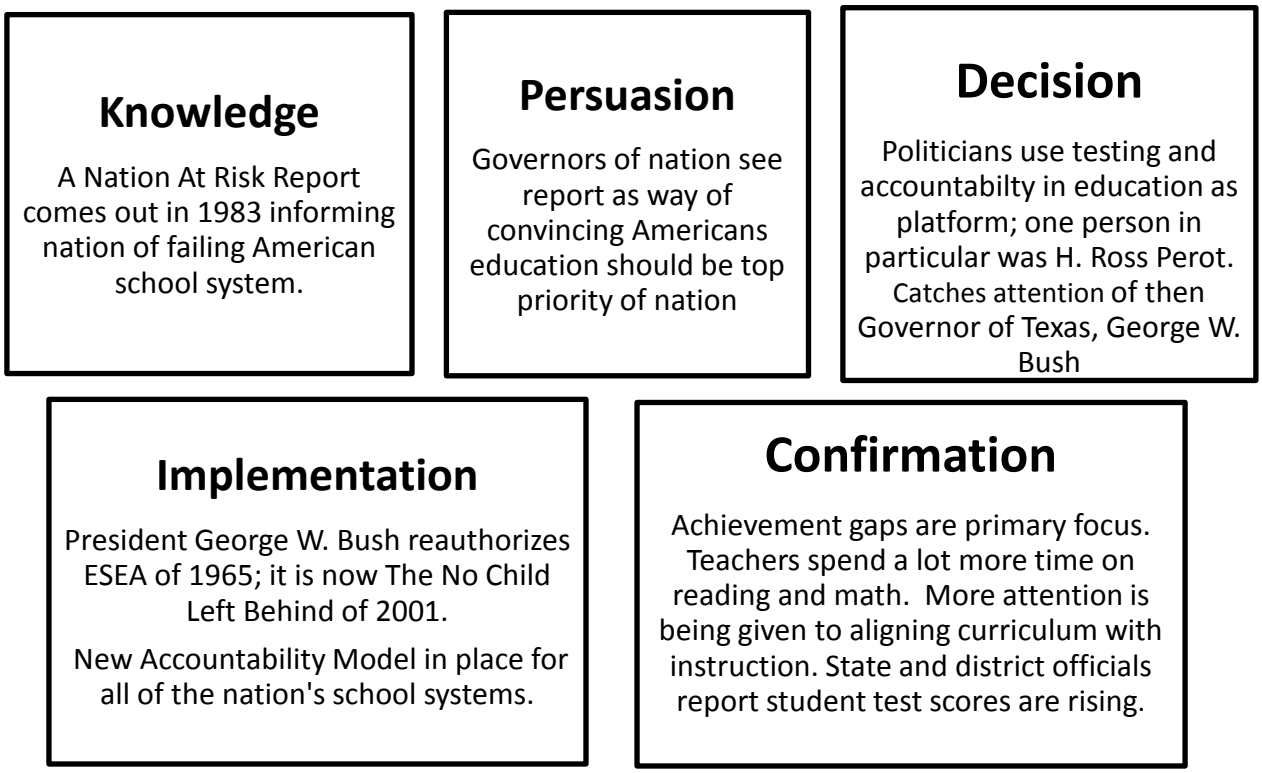
The reauthorization of the Elementary and Secondary Education Act (ESEA) was signed into law on January 8, 2002 by President George W. Bush as the No Child Left Behind Act (NCLB) (Arce et al., 2005; Hess & Petrilli, 2006; Mayers, 2006; Ravitch, 2010). It is said to be one of the most comprehensive and largest interventions by the federal government impacting education in the history of the United States (Darling-Hammond, 2007; Gay, 2007; Hursh, 2007). Educators, researchers, and analyst saw this as an ambitious agenda in improving the quality of education for all students and closing the racial/ethnic achievement gap (Darling-Hammond, 2007; Gay, 2007; Ravitch, 2010; Shirvani, 2009).

Social, political, and economic issues along with declining SAT scores had raised public concerns about the quality of our nation's educational system and helped to push the NCLB (see Figure 1). Twenty-first century civil rights advocates initially hailed the Bush Administration's No Child Left Behind as a step forward in the long battle to improve education for children traditionally left behind in American schools (Darling-Hammond, 2007; Gay, 2007; Ravitch, 2010). Particularly of targeted interest named in the bill were students of color, those living in poverty, new English learners, and students with disabilities (Boykin & Noguera, 2011; Darling-Hammond, 2007; Gay, 2007; Riordan & Aguilar, 2009). Strategies to be used would impact elementary and secondary education. Focus on raising test scores, making sure teachers are highly qualified, and providing choice in education are the themes appearing to run across this reauthorized legislation (see Figure 2). This was to ensure all students from various ethnic, social, racial, cultural, economic, and ability background would receive the same high-quality education (Boykin & Noguera, 2011; Chapman, 2007; Darling-Hammond, 2007; Gay, 2007; Riordan & Aguilar, 2009; Shirvani, 2009).



Source: (Handbook of Education Politics and Policy, 2008).

Figure 1. Innovation and Diffusion Model of Policy Adoption & Possible Determinants.



Source: (Handbook of Education, Politics, and Policy, 2008).

Figure 2. Possible diffusion stages of No Child Left Behind.

With the framework outlined, states would be required to set standards for their school districts. Standards would be set with testing and accountability to be measures for monitoring student performance. Accountability measures required teachers and administrators to close the achievement gap. States would develop content standards to determine what students should know; administer assessments to measure whether students are meeting those standards; institute accountability mechanisms to ensure that all students attain the proficiency standards (Boykin & Noguera, 2011; Lagana-Riordan & Aguilar, 2009; Ravitch, 2010). As a result states began to test regularly and assess Adequate Yearly Progress (AYP). Calculating AYP is different for each state and all states must develop objectives that are aligned with AYP (Ravitch, 2010).

The goal was for 100% of United States students to reach proficiency in reading and math by school year 2013-2014 (Chapman, 2007; Lagana-Riordan & Aguilar, 2009; Ravitch, 2010). Schools not making AYP for two consecutive years will be identified as schools in need of improvement (Darling-Hammond, Gay, Hursh, & Shirvani, 2007). The policies of NCLB have promised to increase education opportunities for all children and at the same time increase our ranking on the global level of education. Many believe groups of disenfranchised children are being brought to the table for the first time when looking at the education system in America (Boykin & Noguera, 2011; Darling-Hammond et al., 2007; Ravitch, 2010).

While the goals of NCLB were appealing to many educators, the punitive nature of the program soon disillusioned teachers, administrators, parents, and students. The high stakes testing educational environment moreover was seen as counterproductive to learning (Boykin & Noguera, 2011; Darling-Hammond et al., 2007). In recent years, support for NCLB has fallen.

The Achievement Gap

While there has been great improvement in the achievement gap over the years, research

shows that African American students continue to show gaps academically in the 50 plus years since Brown (Darling-Hammond, 2007; Ferguson & Mehta, 2004; Mickelson & Heath, 1999; Petersen & Gross, 2008).

Elements of discussion around "the gap" since Brown vs. Board of Ed. are still in place. Twenty-first century research indicates educators and policy makers still focus on schools providing quality resources and facilities-not just the lack of academic performance and inferiority of the students (Darling-Hammond, 2007; Ladson-Billings, 2006; Love, 2004; O'Connor, 2006; Taylor, 2006; Wiggan, 2007).

Education researchers and analyst have provided data confirming the inferiority premise established prior to and after Brown invalid (Chambers, 2009; Myrdal, 1944; O'Connor, 2006; Singham, 2003). This research demonstrates conclusively there is no genetic or immutable traces to race that could be the cause of the achievement gap, so it can and should be solved (Love, 2004; Reyna, 2008; Singham, 2003). So analyst and educators alike are asking the question, "Why do gaps remain between African American students and their White peers?"

Invitational Education Theory

Exploring gaps between Black and White students continue to focus on performance level of each group with connections to students' preparedness and academic ability (Callahan, 2005; Roderick et al., 2009; Staiger, 2004). In recent years, researchers have provided a deeper understanding of the essential dynamics to increase student performance with supportive classroom interactions (Kronenberg & Strahan, 2010).

Beginning in the late 1980s and early 1990s, researchers began looking at the work of Dr. William Watson Purkey, professor of counselor education (now Professor Emeritus) at the University of North Carolina Greensboro and Dr. Betty Siegel, president of Keenesaw State

University in Georgia (now President Emeritus and Distinguished Chair of Leadership, Ethics & Character at Kennesaw State University) (Purkey, 1991; Purkey & Aspy, 2003). They are the co-founders of a theory of practice entitled, "Invitational Education Theory." Invitational Education Theory is designed with "the skills of becoming" (Purkey, 1991). The approach is to intentionally summon success for everyone. Students thrive in a school environment guided by a belief system that embraces, celebrates, and honors diversity (Kronenberg & Strahan, 2010). The belief by Purkey and Siegel is that when teachers view students as able, valuable, and responsible, they are more likely to plan lessons that tap potential and respond with encouragement (Purkey, 1991; Purkey & Aspy, 2003).

Invitational Education Theory operational framework is based on four principles:

- Respect: People are able, valuable, and responsible and should be treated accordingly. A successful school has this element in the policies, programs, and processes they create and maintain.
- Trust: Education is cooperative, collaborative activity where the process is as important as the product. You want to invite all in whatever processes are being developed.
- Optimism: People possess untapped potential in all human endeavors. Schools will make sure students are not limited and there is a clear direction for change. Polices, curricula, programs, processes, and the environment are based on this key component.
- Intentionality: Educators create consistently and caring schools by developing places, policies, programs, and processes designed to promote human potential. Educators in an inviting school provide purpose and direction for the success of all.

Intentionality is the keyword of Invitational Education Theory. There are many learning

environments that are created through good practice unconsciously and disappear the same way. Collected data by Purkey and others reveal schools typically functioning in this manner spend a lot of time with questions such as “Why do we have such high dropout rates?” “Why are the teachers so unhappy?” “Why do we have so many discipline problems” “Why are our test scores so low?” (Purkey, 1991).

The aim of Invitational Education Theory is to understand what it takes to create and sustain an inviting environment (Haigh, 2011). Dr. Purkey has what is known as the five “Powerful Ps” of invitational practice that help guide this process; *people* are able, valuable, responsible, and should be treated as such, *places* of learning should be engaged in cooperative activity, *policies* are not separated between the means and the end product, *programs* are established helping teachers to realize the full potential of their students, and *processes* intentionally invite engagement and development (Haigh, 2011; Purkey, 1991; Purkey & Aspy, 2003). These invitational qualities must be woven into the culture of the learning environment.

In addition to the four levels of functioning (see Table 1) and the five factors mentioned above creating and sustaining an inviting environment, invitational theorists and researchers such as Dr. John J. Schmidt (professor emeritus of counselor education at East Carolina University and the former Executive Director for the International Alliance for Invitational Education Theory) became aware of a need to present invitational practices from a culturally, sensitive perspective. Dr. Schmidt, Dr. Purkey, and others began to work together to further expand this concept.

These theorists of Invitational Education Theory believe when individuals can comprehend personal, social, and cultural concerns from an invitational perspective, people are then able to distinguish external causes from internal attitudes and perceptions, understand related

Table 1

Invitational Education Theory's Four Levels of Functioning

	Inviting	Disinviting
Intentionally	Individuals understand and use language skills and actions required to effectively communicate in positive and negative situations.	Individuals who intentionally discourage, defeat, demean, and destroy with words and actions. Most toxic and negative of human functioning.
Unintentionally	Individuals who positively communicate with others but do not know or understand how they are effective or successful in given situations.	Individuals who may hurt or harm but have no idea why due to lack of consistency, direction, or purpose. Intentions or harm not there but damage is done.

Note. (What is Invitational Education Theory and How Does it Work? - Purkey,1990).

responsibilities, and choose behaviors to address challenging situations and concerns (Schmidt, 2004, 2007). By adding the component of a cultural context to Invitational Education Theory professionals empower diverse students to make appropriate decisions giving a positive direction to their lives (Schmidt, 2004). And to do so on a consistent basis, professionals want to understand other aspects of Invitational Education Theory that are related to processes of establishing beneficial relationships in terms of accepting, embracing, and celebrating diversity (Schmidt, 2004, 2007). Dr. Schmidt suggests using the elements of equity, expectations, encouragement, empowerment, enlistment, and enjoyment from an invitational perspective with a cultural context (Schmidt, 2007).

1. *Equity* refers to the behaviors and treatment of people that create conditions of fairness, justice, and non-discriminating practices. An equitable culture from an invitational perspective ensures all students have access to AP coursework. The school's policies regarding academic rigor and challenge will safeguard against unearned privileges for a select few. This might upset the balance of fairness within the larger community.
2. *Expectations* in Invitational Education Theory are about the human relationship formed with the students within the learning environment. Students are expected to achieve academic excellence regardless of socio-economic background, ethnic heritage, or family history. There is an expectation that all students can participate in AP coursework and be successful.
3. *Encouragement* refers to generating self-confidence and self-esteem in students and not the use of praise. Students are made to realize the importance of effort as it relates to their part in a successful experience with AP coursework. An inviting environment

exudes encouragement for the potential long-lasting effects it will bring to students and the benefits to the greater community. Praise tends to produce short-term results.

4. *Enlistment* has schools looking at policies, practices, and strategies employed to provide all students accessibility to AP coursework. In an invitational environment, multiple invitations are created for the most influential to the most vulnerable student/stakeholder.
5. *Empowerment* combats oppression and minimizes marginalization in an inviting school setting. Teachers have established nurturing relationships with students thus allowing them a sense of power and authority over the decisions they make. Teachers and students will work together to choose course offerings in AP.
6. *Enjoyment* in the Invitational Education Theory setting is having the ability to enhance one's life with the cultures and diversity which may be represented in the student and teacher population. Students participating in the AP program from various backgrounds provide opportunities to seek ways to celebrate differences.

Invitational Education Theory has been applied throughout the United States and Canada in many diverse educational settings, including elementary, secondary schools, entire school systems, and higher education (Kronenberg & Strahan, 2010; Purkey, 1991; Purkey & Aspy, 2003; Riner, 2003). Several hundred schools have received the Inviting School Award presented by the International Alliance for Invitational Education Theory, centered at the University of North Carolina at Greensboro (Purkey, 1991). Douglas Byrd Junior High School in North Carolina was noted as one of these schools.

In 1990, Douglas Byrd Junior High School in Cumberland County was the 7th largest junior high school in North Carolina. Student population consisted of 59% Caucasian, 34%

African American, 2% Hispanic, 4% Native American, and 1% Asian. Over 50% of the students were on free or reduced lunch (Purkey, 1991). Data showed out of the 12 junior high schools in Cumberland County, Douglas Byrd had the highest dropout rate, highest absentee rate for staff and students, lowest test scores, and high teacher turnover rated (ibid, 1991). The principal and central office administrators contacted Dr. Purkey and enlisted help in transforming the culture of the school into an "intentionally inviting" learning environment.

Data collected at the end of the 1990-91 school year revealed; teacher and student attendance increased significantly, parent attendance at PTA meetings increased 100%, use of library by students increased, dropouts decreased by 44%, test scores increased significantly, nine-long term students suspensions down from fifteen the previous year, short-term suspension decreased from 97-80, student retention rates dropped by 10%, staff professional development hours went from 220 hours in the previous year to 3,099 hours, and not a single Douglas Byrd teacher requested a transfer (Purkey, 1991).

Researched literature gives details of nine of the lowest performing schools in Washington, DC. These schools were closed in the summer of 2001 and reopened two months later. By centering itself around the components of Invitational Education Theory, these nine schools were provided a guiding model and language that would help transform the culture into an intentionally inviting environment (Purkey & Aspy, 2003). At the end of the 2001-2002 school year, results were believed to be impressive. Three of the nine schools were labeled "exemplary" in meeting reading and mathematics goals, three other schools received special recognition for their outstanding performance, and all nine schools showed improvement (ibid, 2003). Educators in the district believed the results to be so great that the District of Columbia Public Schools provided funding to further develop Invitational Education Theory in the nine

schools for the 2002-2003 school year with five additional schools being added to the project (ibid, 2003).

Current Findings

Various theories of practice have been initiated to examine and understand student academic performance, especially that of the African American student. The achievement gap narrative uses White students' average performances as the benchmark (Sherman & Grogan, 2003; Taylor, 2006; Wiggan, 2008). Researchers, analysts, and policy makers have long been interested in understanding challenges that negatively impact student achievement. Indicators used to examine measured achievement rates are school grades, test scores, retention/dropout rates, and college entrance rates. These indicators are constantly being collected and examined to monitor progress between sub-groups of students.

According to a report furnished by the American Association of State College and Universities (AASCU, 2007) there has been in the twentieth century, since the 1990s, a dramatic increase in the study of public policy that focuses specifically on policy dealing with Advanced Placement® programming. There is an emerging belief that exposure to academic rigor and challenge prepares students and motivates them for college, whether they take or pass the AP exams.

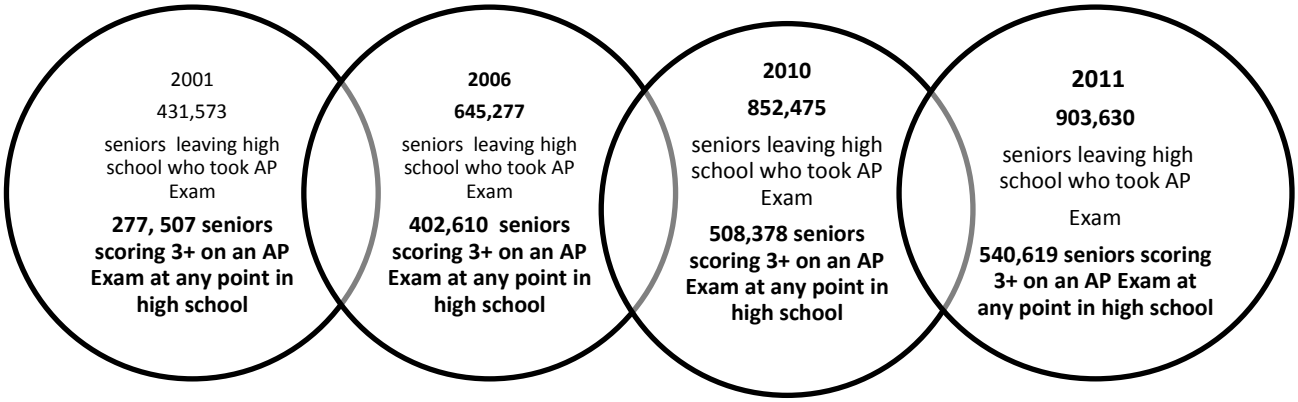
New research from the National Center for Education Statistics (2013) shows there has been a drop in freshman students taking remediation classes. The study showed there to be a decrease from 26.3% in 1999-2000 to 20.4% in 2007-2008. Looking further at the study shows the lowest-remedial course taking rates were amongst White students. In 2007-08, the most recent academic reviewed, there were 19.9% of White students reported enrolling in remedial classes while 30.2% of African American students enrolled in these same courses.

In an article entitled, *White House Targets Black Achievement* (Education Week, August 2012), President Obama cites reasons for a new initiative aimed at improving educational outcomes for African Americans. President Barak Obama's Executive Order establishing the new initiative has been launched and aimed at providing a "complete and competitive education for all Americans from cradle to career" (www.ed.gov). Despite steady progress being made in high school graduation rates and college preparedness, African American still trail behind their White and Asian peers.

In both the 7th and 8th Annual Reports to the Nation (2011, 2012) researchers report overall participation in the AP Program since 2001 has demonstrated growth. The number of students succeeding in AP course work today exceeds the number of students who took the exam nearly ten years ago (see Figure 3). In addition to increased participation noted in both reports, there is also mention of scoring on the exams.

The researchers from the 7th Annual Report to the Nation (2011) state counting students scoring 3 or higher only once, regardless of how many exams taken, the percentage measures the proportion of graduates receiving preparation and access to a successful AP experience. The research also states that restricting access to AP will not inflate this percentage. Students scoring 1s or 2s neither increase nor reduce the percentage. By looking at all seniors-not just the ones in the AP classroom, educators and policymakers can better determine the extent to which their overall population is succeeding in advanced academics in high school.

This report also provides two strategies to be employed by school systems offering Advanced Placement® programs:



Source: (The 8th Annual AP Report to the Nation, 2012).

Figure 3. AP Participation-growth over a decade.

1. States with high percentages of exams receiving scores of 3 or higher, but who are serving a lower percentage of their high school populations should implement policies for serving a greater proportion of the highs schools.
2. States with high percentages of exams receiving scores of 1 or 2 should focus on the sort of Pre-AP strategies that prepare a diversity of students for eventual enrollment and success in AP classes.

In addition to the strategies recommended in the above report, the 8th Annual Report to the Nation list the current findings based on data collected in the 2010-2011 school year. Strategies are again noted for increase in minority participation in AP coursework. While efforts have been made to increase access to AP classrooms, hundreds of thousands of prepared students were left out of an AP subject (8th Annual Report to the Nation, 2012). This research from the College Board found African Americans to be the most underrepresented group in AP classrooms. The data collected showed 80%, four out of five African Americans were either left out of an AP subject for which they had potential or attended a school that did not offer the subject.

Other findings included in the report stated African American students in Texas earned higher grades in college than those who did not participate in AP courses. Minority and low-income students participating in AP courses, and particularly those scoring a 3 or higher on the exam, are much more likely to attain a college degree within five years when comparing students not participating in AP courses. Data collected also indicated African American female students who took AP math and science exams were much more likely to major in related subjects than those not taking AP courses. The study showed the correlation between AP participation and diversifying the pool of students majoring in math and science. The report researchers stated this

in turn may lead to more diversity among those who are employed in these fields (The 7th Annual AP Report to the Nation, 2011).

Researchers are not surprised that students in high-track classrooms outperform their low-track counterparts. However the reported concern arises when individual characteristics and school infrastructure dictate student placement (Callahan, 2005; Staiger, 2004). Various reports suggest Advanced Placement® programs and academically gifted programs have become synonymous with the notion of being White (Callahan, 2005; Chubbuck, Staiger, 2004; Taliaferro & Decuir-Gunby, 2008). Various reports indicate while minority participation has increased, the gaps still remain. Initiatives and polices being implemented such as the Common Core States Standards is believed to provide opportunities to reevaluate and reframe policies and practices impacting all students at all levels (ACT, 2010).

In 2010, ACT (formerly known as American College Testing) presented material related to the adopted Common Core State Standards. As of 2013, the CCSS had been adopted by forty-five states. Over 250,000 11th grade students in several states were administered select forms of the ACT Plus Writing exam in the spring of 2010 as part of their state's annual testing program. The sample of students selected were representative of 11th graders found in typical high schools across the country, with a range of abilities and aspirations, and included those tested under standard and accommodated conditions (ACT Annual Report 2011). The intent of the exams was to measure the college and career readiness skills of the selected 11th graders. One of the primary forces behind the Common Core State Standards is to increase college and career readiness of high school graduates (ACT, 2010).

The report revealed results based on ACT College Readiness Benchmarks due to performance indicators not yet established for the Common Core State Standards (researchers

suggest data be used as a starting point for assessing achievement relative to the Common Core full state implementation - ACT, 2010). The data analysis indicated only one-third to one-half of all of the 11th graders tested reached a level of proficiency as it related to college and career readiness skills. This proved to be the case across all domains, strands, and clusters. Even more of a concern was the data revealing White students were uniformly higher than the corresponding percentages of African American students tested (see Table 2). The report suggests educators across the nation begin strengthening teaching and learning in all areas of the Common Core, with a particular focus on raising college and career readiness rates for African Americans and other underserved students (ACT, 2010).

Overall Population for AA – 13.7% AP Participation – 6.9%; Gap (6.8%)

A key point the researchers ask educators, analysts, and policy makers to examine are the possible ways "masking" can occur with the Advanced Placement® program due to increase in participation. Disaggregating the data by racial/ethnic groups allows important differences in the availability of opportunity for entrance into AP course work by all sub groups.

Looking at the data for North Carolina, there is a reported need for an increase in the participation for some minority groups, especially African Americans (The 7th Annual Report to the Nation, 2011). As previously stated the Equity and Excellence indicators used to measure participation in AP coursework are below the national average for African Americans students. Upon contacting the North Carolina Department of Public Instruction and the Chapel Hill Carrboro City Schools, in the school year 2010-2011, CHCCS had a high school population of 3,500 plus students with 70 AP coursework offerings in the three high schools (www.http://apps.schools.nc.gov). Data collected from Chapel Hill Carrboro City Schools during the years 2010-11 and 2011-12 indicated similar findings occurring throughout the nation with

Table 2

Percentages of ACT-Tested Students Meeting or Exceeding Performance Level of College and Career-Ready Common Core State Standards

Common Core State Standard	Strand	All 11th Graders	White Students	African American Students
English Language Arts	Language (Conventions of Standard English)	54%	63%	27%
Literacy	Reading (Range of Reading & Level of Text Complexity)	31%	38%	11%
Math	Number & Quantity (Real Number System, Quantities, The Complex Number System, Vector & Matrix Quantities)	34%	42%	10%

Note. (A First Look at the Common Core and College and Career Readiness, ACT, 2010).

that of low enrollment of African American students in Advanced Placement® coursework (see Tables 3 and 4). Unless the opportunity for advanced coursework is made available to underserved student populations, many students will be unable to avail themselves of opportunities of higher education and be successful and competitive in the workforce (Educational Testing Services, 2008).

In another published report by Educational Testing Service, *Access to Success: Patterns of Advanced Placement Participation in U.S. High Schools* (2008), similar disparities are noted. Growth has been observed in overall Advanced Placement® programs. Between 1997 and 2006, the number of students participating in this coursework increased 142% and the number of exams taken increased by 165%. This same report gave racial composition of AP participation and gaps as compared to overall student population of graduating seniors. Reported Gaps:

Overall Population for Whites – 65%, AP Participation – 61.8%; Gap (3.2%).

Cultural Connections

Data collected by researchers and educators support lingering remnants of discrimination against African American students in educational institutions (Dunn, 1993; Lee, 2009; Parkerson & Parkerson, 2001). Overrepresentation in remedial classes, lack of access to rigor and challenging coursework, and low expectations of African American students' academic abilities are well documented, discriminating practices (Anderson et al., 2004).

However some social scientists, scholars, and researchers believe attitudes of defeat and self-sabotage of African American students and their parents contribute more to Black students' poor academic performance pertaining to grade point average, low scores on standardized tests, and enrollment in Advanced Placement® courses (Horton, 2004; Ogbu, 2004). In addition to the

Table 3

Demographic Percentages of Students from CHCCS (Chapel Hill Carrboro City Schools) for 2010-2011

School	Total Enrollment	AP Participation Enrollment	AP Courses	Whites	AA	Latinos	Asian
Chapel Hill High	1,306	516	28	62.8%	3.3%	7.8%	14.8%
East Chapel Hill High	1,410	629	27	62.6%	4.8%	5.4%	20.7%
Carrboro High	838	283	19	78.7%	3.2%	6.4%	4.3%

Note. Chapel-Hill Carrboro City Schools and North Carolina Department of Public Instruction, 2011.

Table 4

Demographic Percentages of Students from CHCCS (Chapel Hill Carrboro City Schools) for 2011-2012

School	Total Enrollment	AP Participation Enrollment	AP Courses	Whites	AA	Latinos	Asian
Chapel Hill High	1,321	569	27	6505%	1.41%	6.68%	17.22%
East Chapel Hill High	1,438	651	28	58.22%	3.53%	6.14%	25.81%
Carrboro High	872	300	20	81.67%	2.33%	4.33%	4.33%

Note. Chapel-Hill Carrboro City Schools and North Carolina Department of Public Instruction, 2012.

attitudes of defeat and self-sabotage noted in African American students and their families, researchers have added other variables possibly contributing to the achievement gap such as differences in genes, "culture of poverty," single parenthood, a lack of will, and a condoning of weakness and failure (Cooper et al., 2008; Harris, 2006). Racism is believed to have very little to do with the achievement gap and discrimination alone can't explain it.

In 1997 UC Berkeley anthropology professor John Ogbu spent nine months in Shaker Heights, Ohio. At the time, Shaker Heights was considered one of the best school systems in the nation with 85% of its students going to college and 52% of its 5,000 students being African American (Horton, 2004; Ogbu, 2004; Wiggan, 2008). Data collected by Ogbu also indicated the town's households were highly educated, 61% of the residents graduated from college with incomes of more than 50,000 a year (Horton, 2004).

All of this appeared to be favorable. Yet Ogbu's observations in Shaker Heights concluded African American students did not pursue excellence in education due to various held tenets in the African American community (Horton, 2004; Ogbu, 2004; Wiggan, 2008). Ogbu noted the African American community shared what he referred to as collective identity. Collective identity is the theory used to describe the tenets of a particular group shaped by their attitudes, feelings, behaviors, and language or dialect (Ogbu, 2004). Collective identity usually develops due to a people's collective experience through war, colonization, force labor, enslavement, outcast status, or mass emigration (ibid, 2004). An identifying marker in collective identity for African Americans is opposition. Ogbu found Black students engaged heavily in opposing the larger society's standards pertaining to education (Harris, 2006; Horton, 2004; Ogbu, 2004).

Analyzing opposition in Ogbu's data revealed African American students in Shaker Heights believed there to be fewer opportunities for them in society regardless of the education

they received. Due to this belief there was no real effort put into school work or homework (Cooper et al., 2008; Harris, 2006; Horton, 2004). Ogbu found this to be among Black students in every grade level and the effort decreased markedly from elementary to high school (Horton, 2004). This internalized sense of defeat has proven to be lethal to African American students and their families (Jenkins, 2006).

Another factor revealed in Ogbu's data believed to hurt the academic performance of Black students was their opposition in adopting what was believed to be "White" attitudes and behaviors conducive to making good grades (Horton, 2004; Ogbu, 2004). These White attitudes and behaviors observed in the Black students from Shaker Heights included speaking standard English, enrollment in Honors and AP classes, acting smart during classes, and having too many White friends (Ogbu, 2004). Black students demonstrating these perceived White behaviors presented negative pressure and behavior from their peers and friends (Harris, 2006; Ogbu, 2004).

Similar findings were gathered by John Hopkins University professor Dr. James Coleman. In 1966 a report was released entitled, "*Equality of Educational Opportunity*" commonly known as The Coleman Report (Coleman, 1966). Coleman and other education consultants were commissioned by the National Center for Educational Statistics of the U.S. Office of Education to examine the equalization of educational opportunities in schools. Coleman collected data from across the nation pertaining to students in the 1^{st}, 3^{rd}, 6^{th}, 9^{th}, and 12^{th} grades from six ethnic groups; Black, White, Asian American, American Indian, Puerto Rican, and Mexican American (Coleman, 1966). Of interest for this research is the data collected on Black students. While he noted differences in the academic performance of African American students based on where they lived in the country (the academic gap between southern Blacks and southern Whites was

greater than the academic gap between northern Blacks and northern Whites) similar themes appeared to run within the Black community throughout the nation impacting the academic performance of African American students (Coleman, 1966).

Coleman's research noted integration had very little or nothing to do with academic achievement and narrowing academic gaps between White and Black students. Data revealed school facilities and curricula had little to do with helping Black students overcome deficiencies possibly caused by "non-school" factors such as lack of literary resources in the home, poverty, community attitudes of non-assimilation with "White" society, low education levels of parents, and lack of commitment to academic excellence (Coleman, 1966). Conclusions from Coleman and Ogbu suggest forces in the Black community discouraged academic engagement (Coleman, 1966; Ogbu, 2004).

The research of Coleman and Ogbu provide for discussion, reflection, and a possible perspective for African American students and their families. Tenets of oppositional theory continue to generate intense interest in the field of education as an explanation for low academic achievement of African American students (Jenkins, 2006; Wiggan, 2008). This theory remains popular among researchers, educational practitioners, and the general public (Harris, 2006).

Summary

The complexity of disproportionately lower academic performance for African American students continues to garner the attention of educational researchers (Chubbuck, 2004). Challenges of education faced by African Americans beginning in the 17th century when brought to the nation as slaves and education was primarily for the wealthy. The 18h century saw the formalization of schooling becoming a notion for the American people. African Americans

rarely benefitted from the developing system due to laws prohibiting the instruction of reading or writing skills to slaves.

The Emancipation Proclamation of 1863 began to make progress towards the freeing of African Americans in the 19th century but the majority had limited skills and remnants of slavery left little for Blacks to navigate in the changing economy (Chubbuck, 2004; Lee, 2009; Myrdal, 1944). The Dred Scott case of 1857 helped to establish and Plessy vs. Ferguson of 1896 made it legal for separate but equal usually leading to inadequate educational services for African American students (Dunn, 1993; Lee, 2009; Parkerson & Parkerson, 2001). The educational curriculum was believed to be the best way to help with the skill acquisition for Blacks after the Civil War.

This established the well-known debates between Dr. W.E.B. DuBois and Mr. Booker T. Washington. The two men contrasted sharply on the curriculum Black students should receive. Washington and DuBois' differing stances; industrial versus classical education would dominate the debate between conservative and radical groups of Black leaders from the late 1800s to the early to mid-1900s (Chaffee, 1956; DuBois, 1903; Hicks, 2006; Myrdal, 1944; Parkerson & Parkerson, 2001).

With the Brown decision of 1954 passed by the Supreme Court making separate but equal no longer the law of the land, many believed discrepancies in resources for African Americans would soon dissipate when comparing to services provided to White students (Darling-Hammond, 2000; Lee, 2009; Parkerson & Parkerson, 2001). Research provides evidence of a rough transition from separate but equal.

However, the passing of the Elementary Secondary Education Act of 1965 (ESEA) help to make substantial gains in educational attainment for Blacks (Diamond, 2006). Its reauthorization

in 2002 as No Child Left Behind was to ensure even more quality education for African American students (Darling-Hammond, 2000; Diamond, 2006).

An equally important part of the discussion is the research presented indicating that discriminatory practices in society and in schools are not enough to explain the differences in the low academic performance of African American students (Coleman, 1966; Horton, 2004; Ogbu, 2004). Education practitioners, researchers, and theorists have conducted studies with outcomes establishing that poverty, lack of will, opposition to academic progress for fear of being isolated from peers, and "acting White" are some of the beliefs and practices impacting the academic progress of African American students and continue to foster the achievement gap (Horton, 2004; Ogbu, 2004; Wiggan, 2008).

But in the 21st century, how do we begin to examine the pattern across the United States indicating that African American students are the most underrepresented group in Advanced Placement® coursework? This same pattern has been noted in research collected on the two high schools in the Chapel Hill Carrboro City School District located in the Central Region of the state of North Carolina. This is the focus for this study. Chapter 2 provided a summary of literature examining the history of educational equity and its impact on Advanced Placement® participation in high schools across America. Methods used in the study to collect and analyze data are discussed in Chapter 3.

CHAPTER 3: METHODOLOGY

"The whole history of the progress of human liberty shows that all concessions yet made to her august claims have been born of earnest struggle….If there is no struggle, there is no progress. Those who progress to favor freedom, and yet deprecate agitation, are men who want crops without plowing up the ground, they want rain without thunder and lightning. They want the ocean without the awful roar of its many waters."

~Frederick Douglass, abolitionist and educator

Introduction

This chapter describes the methodology utilized to answer the questions guiding this study. The research study is a mixed-method, casual-comparative study. A mixed-method design provides the researcher the opportunity to give priority to both quantitative and qualitative data. The researcher values both quantitative and qualitative data and sees them as approximately equal sources of information in the study (Creswell, 2005). Mixed methods designs are procedures for collecting, analyzing, and linking both quantitative and qualitative data in a single study (Creswell, 2005). The combination of both forms of data provides a better understanding of a research problem than one type of data alone (ibid, 2005).

Using both quantitative and qualitative methods, this examined the attitudes and perceptions educators have about college-level coursework. Analyzing this data uncovered possible perceptions and attitudes preventing African American students from enrolling in more rigorous classes in two high schools participating in the study from the Chapel Hill Carrboro City School District; Carrboro High and East Chapel Hill High.

This chapter begins with a description of the setting where the study was conducted. Next, the researcher describes the design of the study and the participants involved in the study, followed by a discussion of the research instrument, data collection procedures, and data analysis.

Research Questions

The following questions were explored during the research of this study:

1. *What are the attitudes and perceptions held by high school educators concerning college-level coursework?* This information was collected through survey data. Items assessing attitudes and perceptions of educators was analyzed for responses given to stated questions and statements. Percentage of educators selecting a given answer to survey items was recorded. Totals were given for each item being assessed to determine emerging attitude or perception for given item. Educators' responses were coded as school 1 and school 2. Creswell (2005) describes this method as attitudinal measures. Researchers (EOS/Harvard Ed/Lab) developed an instrument created with questions to measure feelings towards an educational topic (e.g., attitudes and perceptions about college-level coursework).
2. *Based on the tenets of Invitational Education Theory®, what uncovered attitudes and perceptions of high school educators about college-level coursework align with inviting practices and which ones align with disinviting practices in the educational setting?* The data collected was gathered from the survey. Survey items analyzing educators' attitudes and perceptions was assessed for inviting and disinviting practices based on the four levels of functioning defined in Invitational Education. Items were labeled with function to determine category of inviting and disinviting. Total percentage of each category was provided to decide what setting exists in the learning environment.
3. *What is the relationship, if any, between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African*

American students in Advanced Placement® courses? A one tailed t test analysis was not conducted to compare the overall percentage of inviting practices used by educators to number of African American students participating in Advanced Placement® coursework. The Equal Opportunity Staff Survey did not differentiate between African American students and other underrepresented minority student groups. The variable of African American AP participation data was collected from the district. This data was then compared to findings determining attitudes and perceptions discovered in research and how this impacts African American students participation in AP coursework.

Other inquiry of this study:

1. *Is there a difference larger than 3% in the uncovered attitudes and perceptions about college-level coursework between educators at the two high schools based on years in the profession?* Demographic information on study participants was collected from survey. This information was tagged and coded to identify years of service. Study participants' sites were labeled as school 1 and school 2. The researcher coded and tagged study participants into three groups; 1 = less than year, 2 = 1-3 years, and 3 = 4 or more years. The researcher used the coded information to run a statistical procedure. The Pearson chi-square test was used to identify if there is a significant difference in participants' responses from the two school cites based on educators' years in field of education.

Hypothesis

The hypothesis for this study:

Uncovered educators' attitudes and perceptions about college-level coursework will prove to align with disinviting practices thus having a negative impact on the enrollment of African American students in Advanced Placement® coursework.

The null hypothesis for this study:

Uncovered educators' attitudes and perceptions about college-level coursework will prove to align with inviting practices thus not having a negative impact on the enrollment of African American students in Advanced Placement® coursework.

Independent Variables: Educators' years in education and educators' attitudes and perceptions on college-level coursework.

Dependent Variables: African American students' enrollment in AP coursework, Invitational Education Theory level of functioning.

Context of the Study

CHCCS has the state's highest district-wide SAT score at 1,194, or 1,776 when the writing component is included (Chapel Hill Carrboro City Schools, 2012). The state average is 1,008 and the national average is 1,017. This high average was attained while more than 85% of the district's eligible students took the test. More than 1,500 high school students are enrolled in challenging Advanced Placement® (AP) courses. This participation has earned the district's high schools ranking in the Washington Post's list of top high schools. In 2011, Carrboro High ranked 145, East Chapel Hill High ranked 158 and Chapel Hill High ranked 165 out of a list of 1,000 schools (Chapel Hill Carrboro City Schools, 2012).

While there appears to be much to emphasize as positive aspects of the CHCCS schools,

an ongoing priority of the CHCCS Board has been to eliminate achievement gaps and to implement an environment in which all students achieve their potential, without regard to race, ethnicity, economic status, or disability. Incorporated in the goals for educational excellence is the critical expectation that accelerated progress will be made in substantially reducing these achievement gaps. While many subgroups attained all-time high results, the performance of some groups did not meet or exceed these increased standards. As a result, only five district schools made Adequate Yearly Progress (AYP) in all of its target areas in the 2011 school year (www.ncreportcards.org, 2011).

According to the NC Report Card (see Tables 5 and 6) the subgroups continuously found not meeting targeted goals are students belonging to minority populations, including that of African American students. In 2010-2011 in all three high schools Carrboro High, Chapel Hill High, and East Chapel Hill High White students' proficiency levels on End of Course (EOCs) assessments exceeded more than 95% while African Americans achieved proficiency levels of 73.4% at Carrboro High, 70.9% at Chapel Hill High, and 68% at East Chapel Hill High (www.ncreportcards.org). This provides more than a 25% achievement gap. The subsequent year of 2011-2012 found similar results for White students with slight declines for African American students. Data at all three high schools reported White students' proficiency levels were above 95% with African American achieved proficiency levels at 69.7% for Carrboro High, 60.6% for Chapel Hill High, and 66% for East Chapel Hill High (www.ncreportcards.org). These differences in achievement levels equates to more than a 30% achievement gap.

Description of Setting

The Chapel Hill-Carrboro City Schools (CHCCS) is one of two public school systems in Orange County, NC. Established in 1909, CHCCS is located near the campus of the University

Table 5

Chapel Hill Carrboro City Schools End of Course (EOCs) Assessments, 2010-11

High School	Carrboro High	Chapel Hill High	East Chapel Hill High
African American Students' Total Proficiency Levels (% reading & math)	73.4%	70.9%	68%
White Students' Total Proficiency Levels (% reading & math)	95>	95>	95>
Achieved Gap	21.6%	24.1%	27%

Note. (www.ncreportcards.org.2012).

Table 6

Chapel Hill Carrboro City Schools End of Course (EOCs) Assessments, 2011-12

High School	Carrboro High	Chapel Hill High	East Chapel Hill High
African American Students' Total Proficiency Levels (% reading & math)	69.7%	60.6%	66%
White Students' Total Proficiency Levels (% reading & math)	95>	95>	95>
Achieved Gap	25.3%	34.4%	29%

Note. (www.ncreportcards.org.2012).

of North Carolina (UNC) and Research Triangle Park (RTP). As a result of the district's proximity to higher education and research facilities, its community boasts of one of the highest educated populations in America. The district operates three high schools, four middle schools, ten elementary schools, a school for young people being treated at UNC Hospital and an alternative high school.

Chapel Hill Carrboro City Schools (CHCCS) serves a population of more than 11,700 students. Their demographic breakdown is 56% White, 20% African American, 10% Latino, 13.5% Asian, and .2% Indian American. More than 200 CHCCS educators hold certification from the National Board for Professional Teaching Standards (NBPTS). Forty-three percent of teachers hold a master's or doctorate degree. The CHCCS teacher turnover rate is 13%, four percentage points below the state average of 17%. CHCCS employs 1,885 staff members, of whom 1,178 are teachers or administrators.

In a recent article entitled, “America’s Best High Schools” published in the May 28, 2012 issue of Newsweek Magazine, East Chapel Hill High ranked 88 out of a list of 100 high schools due to its effectiveness in turning out college-ready students (complete list can be found at www.thedailybeast.com). Nearly 92% of 2011’s graduating senior class went on to two or four-year institutions of higher learning. Thirty-seven students in 2012’s graduating class were named National Merit Finalists. CHCCS has North Carolina's second highest four-year cohort graduation rate at 89.0%. CHCCS has the state's lowest dropout rate at .95%. East Chapel Hill High School was recognized by the North Carolina State Board of Education having one of the state’s top 10 highest graduation rates. Thirty-three percent of the district's students are identified as gifted. More than 87% of students in grades 3-8 are proficient on state-mandated End-of-Grade tests in reading, while more than 93% of them are proficient on

the End-of-Grade tests in mathematics. At the high school level, 88% of students are proficient on state-mandated End-of-Course tests. For the 2010-2011 school year CHCCS had one of the state's highest per pupil expenditures at $10,625.00.

Population of Interest

Chapel Hill Carrboro City Schools

The high schools chosen for this study are part of the Chapel Hill Carrboro City School (CHCCS) District. The educators who took the survey were from two high schools in this district. The system is in the southern part of the United States, located centrally in the state of North Carolina.

In 2003, CHCCS became part of a group known as the Triangle High-Five Regional Partnership. A key component of this effort is the closing of the achievement gap. This group of superintendents (including CHCCS) from five surrounding counties collaborated on strategic and intense plans to increase opportunities for student success and achievement. Though the partnership may have ceased in its collaborative effort, Chapel Hill Carrboro City Schools' superintendent maintains the district's efforts to increase the level of academic rigor for all students. The School Board and system superintendent are requiring its education instructors to take a stronger focus in examining its instructional program, including increasing the level of academic rigor for all students.

Participants in this study were collected from two high school settings in the Chapel Hill Carrboro City School District. The portfolio of schools that applied and were accepted to join the Equal Opportunity Schools (EOS) project were divided into a series of groups of similar schools, or "blocks", and then randomly assign to "treatment" or "control" from within those blocks. School districts having multiple schools included in the study are treated as their

own block and single school districts are assigned to blocks with each other based on their having similar characteristics. Harvard/Ed Labs used random number generator to do the random assignments.

The treatment group consisted of the following schools: Carrboro High and East Chapel Hill High Schools. The treatment schools each have several Advanced Placement® course offerings and similar student demographics meeting the study qualifications. The high school selected to be in the control group has been established the longest in the school district. This school was related to the treatment schools in relative school size, student demographics, and student achievement levels. Creswell (2005) refers to this matching as the matched sample method. Matching is the process of identifying one or more characteristics that influence the outcome and assigning individuals to the experimental and control groups equally matched on that characteristic. The following information provides a brief description along with tables housing data of each school's African American population in Advanced Placement® coursework.

Carrboro High School

Carrboro High School is the newest addition to the Chapel Hill Carrboro City School district. It was the third high school added to this system in 2007. It has a student population of more than 800 students and a 70 plus member faculty. The 70 plus member faculty consists of teachers, counselors, and administrators. These are the individuals who will be asked to participate and respond to the survey. More than half have obtained advanced degrees. In addition to this, 45% of the faculty have ten or more years of experience in the field of education. Students reportedly have taken an active role from the very beginning in every aspect of the school; designing of the mascot, serving on the Academy of International Studies Advisory

Committee, writing of the student handbook, and helped with determining technology needs of their peers. Carrboro High is known for its academic rigor, diversity, 21st century equipped classrooms, and unique architectural design.

East Chapel Hill High School

East Chapel Hill High was the second high school added to the system in 1996. With a student population of over 1,400 it was ranked as an Honor School of Excellence by the North Carolina State Department of Public Instruction in 2012. There is a 100 plus member faculty and these members consisting of teachers, counselors, and administrators will be asked to participate in the survey. As noted earlier, it was also ranked 88th in the list of 100 schools in the country for college readiness by Newsweek (May, 2012). The school's projection rate for students continuing their education at the college or university level is 95%. Their AP test scores remain at 4s & 5s. East Chapel Hill High is also known for its state of the art classrooms offering students access to the latest technology and media resources.

Both high schools meet the study qualifications (see Tables 7 and 8). The qualifications are:

- The school has student populations of White, African American, Latino, and Asian.
- The school has fifteen or more course offerings following the Advanced Placement® framework.
- The school's Advanced Placement® enrollment is more than 50% from its White student population.
- The school has low enrollment from its African American student population participating in AP coursework.

Table 7

CHCCS High School Advanced Placement Participation for 2010-2011 School Year

Carrboro High		Chapel Hill High		East Chapel Hill High	
Total Enrollment:	838	Total Enrollment:	1,306	Total Enrollment:	1,410
AP Courses:	19	AP Courses:	28	AP Courses:	27
AP Enrollment:	283	AP Enrollment:	516	AP Enrollment:	629
Whites:	**78.7%**	**Whites:**	**62.8%**	**Whites:**	**62.6%**
Afr. Am:	**3.2%**	**Afr. Am:**	**3.3%**	**Afr. Am:**	**4.8%**
Hispanic:	6.4%	Hispanic:	7.8%	Hispanic:	5.4%
Asian:	4.3%	Asian:	14.8%	Asian:	20.7%

Note. Chapel Hill Carrboro City Schools - Demographic Enrollment of Student Population, 2011.

Table 8

CHCCS High School Advanced Placement Participation for 2011-2012 School Year

Carrboro High		Chapel Hill High		East Chapel Hill High	
Total Enrollment:	872	Total Enrollment:	1,321	Total Enrollment:	1,438
AP Courses:	20	AP Courses:	27	AP Courses:	28
AP Enrollment:	300	AP Enrollment:	569	AP Enrollment:	651
Whites:	**81.67%**	**Whites:**	**65.55%**	**Whites:**	**58.22%**
Afr. Am:	**2.33%**	**Afr. Am:**	**1.41%**	**Afr. Am:**	**3.53%**
Hispanic:	4.33%	Hispanic:	6.68%	Hispanic:	6.14%
Asian:	4.33%	Asian:	17.22%	Asian:	25.81%

Note. Chapel Hill Carrboro City Schools - Demographic Enrollment of Student Population, 2012.

Quantitative Study

The Researcher's Role

"As state and even national expectations increase, the Chapel Hill-Carrboro City Schools will be required to take a closer look at our instructional program including increasing the level of academic rigor for all students. This will be a most difficult task for an already high-achieving district" (Dr. Tom Forcella, Superintendent-Chapel Hill Carrboro City Schools, Strategic Plan, 2011-2012). As a part of this effort, in April 2013 the Chapel Hill Carrboro City School District selected to participate in the *Equal Opportunity Schools Equity & Excellence Project*. There will be a two-year period for the collection, analyzing, and interpreting of data from the 79 schools participating in the project study. This project will be evaluated by the Education Innovation Laboratory at Harvard University. The researcher has partnered with Equal Opportunity Schools (EOS) to gather data from the project study for the important focus of this study.

The researcher's role in this study was to focus on educators' current attitudes and perceptions around college-level courses and the possible impact this has on the participation of African American students in Advanced Placement® coursework at Carrboro High and East Chapel Hill High schools. During the time of this study, the researcher held the role of assistant principal at one of the elementary schools in the CHCCS district. The researcher was solely responsible for the analysis of the data received from Equal Opportunity Schools (EOS). The findings from this study provides educators dedicated in the district the ability to enable greater access to and success in Advanced Placement® coursework for African Americans and other underrepresented student groups.

Research Design

The research study is a mixed-method, casual-comparative approach. It was used to analyze educators' attitudes and perceptions around college-level coursework and the impact to provide an inviting school environment for African American students' participation in Honors/Advanced Placement® courses. In an inviting school environment, the students are respected with programs and policies establishing support of their talents and educational goals. There is a wide scope of human concerns. A disinviting school environment is described as one in which the scope is narrow and human concerns are not a focus. Students are tracked or labeled. Programs are not enhanced for growth and development of the students and people in the school setting (Kronenberg & Strahan, 2010). This comparative study explored the extent to which educators' responses to the Equal Opportunity School (EOS) Staff Survey invites the enrollment of African American students in Honors/AP courses.

Convenience sampling was the most appropriate method to use. According to Creswell (2005), the intent of convenience sampling is to choose individuals who are willing and able to be studied. The sample studied can provide useful information for answering questions and an hypothesis even though the researcher can't say with confidence the individuals are representative of the population (Creswell, 2005, p. 149). The quantitative research was organized and evaluated using descriptive statistics such as:

- Mean = general tendencies gathered from the data
- Range = the spread of scores
- Demographics = role in education, years in education, high school faculty
- Percent = a specified amount in or for every hundred collected in the data
- Count = determining the total number from data

- P-Value = determine statistical significance

The qualitative component added to the study was to explore thoughts educators have about the Advanced Placement® program currently implemented in the high school. Through questions developed by Equal Opportunity Schools (EOS), all educators participating from the treatment high schools in the Chapel Hill Carrboro City School District were allowed to respond in their own words, thoughts about Advanced Placement® coursework.

Statistical procedures were performed on the quantitative data set. A frequency count was used to describe the demographic characteristics, a codebook with questions and statements from survey with responses was created, and the Pearson chi-square test was utilized to determine if there is a significant difference in the responses of study participants based upon years in the field of education.

Instrumentation

The instrument used for this research was a survey created by Equal Opportunity Schools (EOS) in partnership with Harvard/Ed Lab. EOS is a non-profit organization working with schools and districts to ensure that Advanced Placement® participation reflects the racial and socio-economic demographics of the school. EOS is supported by Harvard University. The survey the researcher used was designed to uncover attitudes and perceptions educators have about college-level courses and the impact this had on the participation of African Americans in AP coursework.

In quantitative and qualitative research, a survey is one type of design that can be used. The researcher seeks to describe trends in a large population of individuals. The survey is given to a group of people called the *sample* in order to identify trends in attitudes, perceptions, opinions, behaviors, or characteristics of a large group of people called the *population.* In this

procedure, survey researchers collect qualitative and quantitative, numbered data using questionnaires or interviews and statistically analyze the data to describe trends about responses to questions and to test research questions or hypotheses. (Creswell, 2005).

The Equality Opportunity Schools (EOS) Staff Survey is a nineteen item constructed instrument containing personal, attitudinal, behavioral, closed-ended questions and statements with multiple choices provided and open-ended statements and questions for deeper probing about Advanced Placement® coursework. It was designed to collect qualitative and quantitative data. The researcher was allowed to modify the survey (see Appendix A) with the removal of three questions pertaining to educators identifying students possibly qualifying for Advanced Placement coursework but not enrolled (permission given by Equal Opportunity Schools).

The Chapel Hill Carrboro City School district has taken on an initiative to increase opportunities of student success and achievement and to increase the level of academic rigor for all students. By examining possible factors influencing students' decisions to enroll in AP coursework or educators' selection of students in AP coursework, specifically those related to an inviting or non-inviting environment, the school district may be able to determine and employ specific actions used to increase the number of African American students enrolled in Honors/AP coursework at the high school level. The literature review on the 6 E's of Invitational Theory presented the theoretical framework that supports the design of this study (Schmidt, 2007).

The study's design was to examine inviting or disinviting (see Table 1) attitudes and perceptions in the learning environment (Schmidt, 2007). The researcher conducted a comprehensive literature review (Anderson, Attwood, & Howard, 2004; Boykin & Noguera,

2011; Chambers, 2009; College Board, 2012; Diamond, 2006; Haigh, 2011; Hanwerk, Tognatta, Coley & Gitomer, 2008; Harper, Patton & Wooden, 2009; Henfield, Moore & Wood, 2008; Isaacs, 2001; Kronenberg & Strahan, 2010; Maxwell, 2012; Moore & Slate, 2008; Purkey, 1990; Purkey & Aspy, 2003; Riner, 2003; Roberts, Schaeffer & Watkins, 1999; Roderick, Nagoaka & Coca, 2009; Russell, 2007; Santoli, 2002; Schneider, 2009; Schmidt, 2007; Smith, 2007; Soloranzo & Ornelas, 2004; Southworth & Mickelson, 2007; Staiger, 2004; Taliaferro & DeCuir-Gunby, 2008; Taylor, 2006; U.S. Department of Education, 2013; Willingham, 1966; Zirkel, 2004) examining research which described an inviting school environment as based on Invitational Education Theory.

A table was created (see Appendix E) to collect participants' responses to those questions analyzed for inviting or disinviting practices. Participants' responses were recorded as inviting (Inv.) or disinviting (D-Inv.) A table was created (see Appendix C) to collect and record participants' answers to years in education, high school serving, and role as teacher or other. Participants' demographics were recorded as; high school: 1= Carrboro High, 2= East Chapel Hill High; years in education: 1= less than year, 2= 1-3 years, 3= 4 or more years; role in education: 1= teacher, 2= other. The instrument used a Likert scale to measure participants' responses to the survey items. Each statement or question had three to six possible responses, with anchor points of : very good predictor to not a predictor (3); strongly disagree to strongly agree (6); yes to unsure (3); not at all important to extremely important (6); major reason to not a reason (3).

The survey was analyzed to determine percentage of educators using or not using inviting practices based on their attitudes and perceptions of college level coursework. This analysis was conducted to uncover possible barriers in place preventing African Americans

from participating in more rigorous coursework. Most of the statements and questions from the Equal Opportunity Schools (EOS) survey were written positively. To maintain balance and clarity (Creswell, 2005), some statements were written negatively. The researcher knew which were written in this order when providing code for responses.

Content Validity

The review of literature focused on African American students' underrepresentation in Honors/AP coursework, optimal learning environments for student success, and strategies to help increase African American student achievement. The researched literature confirmed the importance of the four levels of functioning addressed through Invitational Education Theory, as displayed in Table 1.

The survey statements/questions were analyzed based on the six constructs reflecting elements of diversity by which researchers and practitioners can assess organizations in terms of accepting, embracing, and celebrating diversity (Schmidt, 2007). These constructs are based on literature relating to working within organizations to assess invitational approaches when working with different, various groups (ibid, 2007). The researcher chose questions from the Equal Opportunity Schools/Harvard Ed Lab survey which align with the six constructs (see Appendix D) to measure inviting and disinviting practices.

1. *Equity* refers to the behaviors and treatment of people that create conditions of fairness, justice, and non-discriminating practices. An equitable culture from an invitational perspective ensures all students have access to AP coursework. The school's policies regarding academic rigor and challenge will safeguard against unearned privileges for a select few. This might upset the balance of fairness within

the larger community (Callahan, 2005; Schmidt, 2007; Taliaferro & DeCuir-Gunby, 2008).

2. *Expectations* in Invitational Education Theory are about the human relationship formed with the students within the learning environment. Students are expected to achieve academic excellence regardless of socio-economic background, ethnic heritage, or family history. There is an expectation that all students can participate in AP coursework and be successful (Kronenberg & Strahan, 2010; Schmidt, 2007).
3. *Encouragement* refers to generating self-confidence and self-esteem in students and not the use of praise. Students are made to realize the importance of effort as it relates to their part in a successful experience with AP coursework. An inviting environment exudes encouragement for the potential long-lasting effects it will bring to students and the benefits to the greater community. Praise tends to produce short-term results (Dill, 1977; Schmidt, 2007).
4. *Enlistment* has schools looking at policies, practices, and strategies employed to provide all students accessibility to AP coursework. In an invitational environment, multiple invitations are created for the most influential to the most vulnerable student/stakeholder (Kronenberg &Strahan, 2010; Schmidt, 2007).
5. *Empowerment* combats oppression and minimizes marginalization in an inviting school setting. Teachers have established nurturing relationships with students thus allowing them a sense of power and authority over the decisions they make. Teachers and students will work together to choose course offerings in AP (Dill, 1977; Kronenberg &Strahan, 2010; Schmidt, 2007).

6. *Enjoyment* in the Invitational Education Theory setting is having the ability to enhance one's life with the cultures and diversity which may be represented in the student and teacher population. Students participating in the AP program from various backgrounds provide opportunities to seek ways to celebrate differences (Purkey & Aspy, 2003; Dill, 1977; Kronenberg &Strahan, 2010; Schmidt, 2007).

Data Collection

The Equal Opportunity Schools (EOS) Staff Survey was given to the administrators of Carrboro and East Chapel Hill High Schools. The administrators met with staff to discuss the purpose and design of the study. After the initial meeting with participants from each school (185 educators), a week later letters were sent to participants via email (see Appendix B) reviewing the purpose of the study, the reason for their participation, and notifying them of access, directions, and deadline of participation to the survey. Administrators were delegated to guide participants to gain access to survey at http://www.qualtric.com. All certified educators were required to complete the survey ensuring 100% participation from the treatment schools. This format allowed the researcher to conclude data collection in six weeks or less (Creswell, 2005). Researchers have noted following a specific outline has yielded 50 to 60% response rate when dealing with the general public and an even higher response with specialized populations (Salant & Dillman, 1994). Most educational journals report a response rate of 50% or better depending on close follow of recommended procedure (Creswell, 2005).

The researcher partnered with Equal Opportunity Schools (EOS) and was given permission by the directors of the project to analyze collected data for this study. Collected responses from educators allowed a clear analysis of the six research constructs based on Invitational Education Theory and the relationship between attitudes and perceptions of

educators about college-level coursework. An analysis of nearly 771,000 graduates with AP potential found that nearly 478,000 (62%) did not take a recommended AP subject. Underserved minorities appear to be disproportionately impacted: 80% of African-American students were either left out of an AP subject or attended a school that did not offer the subject (8th Annual AP Report to the Nation, 2012).

Data Analysis

Once responses were collected and recorded from the survey, the researcher was responsible for carefully analyzing the data. The Statistical Package for the Social Sciences (SPSS) 19 and 20 was used to determine if correct percent and counts were recorded from the educators' responses on attitudes and perceptions about college-level coursework. The researcher used the percent and counts to determine the school environment as inviting or disinviting for African American students' participation in Advanced Placement® coursework. This type of approach allowed the researcher to describe the impact of this selected population.

The researcher conducted a statistical analysis using the Pearson's chi-square test to learn if there is a significant difference of educators' attitudes and perceptions about college-level work between the two schools based on years of experience in the field of education. This was done by using the information from the observed count in each cell (each cell represents a case or study participant). The computed value is called the p-value and used to determine the probability of results due to chance (Boslaugh, 2013).

Qualitative Study

The Researcher's Role

The researcher's primary role is to gather information on educators' attitudes and perceptions about college-level coursework and identify areas in need of improvement towards a

more inviting school environment. Taking intentional steps to change possible areas in need of improvement will hopefully result in an increase in African American students' participation in Honors/AP courses. Information gathered from educators was reported while ensuring participants' confidentiality was maintained. It was clear from the onset that the purpose of the study is strictly for school improvement efforts and information gathered will be used solely for that purpose.

Research Design

The qualitative component added to the study was to explore thoughts educators have about the Advanced Placement program currently implemented in Carrboro High School and East Chapel Hill High School. Through questions developed by Equal Opportunity Schools (EOS), all educators participating from the two treatment high schools in the Chapel Hill Carrboro City School District were allowed to respond in their words, thoughts about Advanced Placement® coursework. Educators answered open-ended statements and questions on the Equal Opportunity Schools (EOS) Staff Survey, one of the suggested ways to conduct qualitative research (Creswell, 2005). The goal was to further explore reasons for African American students not enrolling or being invited to participate in Honors/AP coursework, thus possibly clarifying further responses given on the survey.

Sample

Educators participating in this study are from two high schools in the district. The researcher was interested in gaining a deeper understanding of processes and procedures inviting students to enroll in more rigorous coursework. The researcher utilized the qualitative method of convenience sampling.

According to Creswell (2005), convenience sampling selects certain sites or people

because they are available and willing to be studied. Individuals are purposefully selected based on membership in a subgroup that has defining characteristics. The individuals selected were educators who are familiar with initiatives of equity in the district and procedures for admittance to Academically Gifted and Honors/Advanced Placement® coursework in their perspective settings. This group served as the sample to address the questions relating to factors contributing to the underrepresentation of African Americans in Honors/AP coursework.

Instrumentation

The participants were asked to take and complete the survey independently. The following open-ended statements and questions were asked:

1. To begin, please share your thoughts about the strengths and/or weaknesses of the AP program at East Chapel Hill High or Carrboro High. Identify the school.
2. What programs or practices would you put in place (or expand) to ensure success for all AP students?
3. We welcome any additional ideas and feedback you would like.

Data Collection

All educators from the two treatment schools were asked to answer questions and statements specifically to collect qualitative data. They were asked to write or type answers in their words.

Data Analysis

Qualitative research is considered to be interpretive research in which you make a personal assessment as to a description that fits the situation or themes capturing the major categories of information (Creswell, 2005). One of the primary forms suggested for reporting this interpretive research is a narrative discussion. There is no set formula for this narrative but a

typical method used by qualitative researchers is to summarize the findings with a general recap of the general findings (Creswell, 2005). The researcher created a narrative discussion to summarize the findings collected in the survey completed by the participants. A general recap was created with the restating of each individual research question or statement again with provided findings.

The researcher looked for overlapping themes in the open-ended data and counted the number of themes or the number of times participants mention the themes. Categories were developed to organize educators' information. In developing the coding categories, each theme was given a number. Coded educators' information was based on, (1) strengths and/or weaknesses of current AP program at participants' high school; (2) programs or practices that would be placed (or expanded) to ensure success for all AP students; (3) any additional ideas and feedback shared about AP program. The researcher's intent was to analyze the information reported and find common themes addressing the impact of attitudes and perceptions of educators and their potential impact on African American students being selected for or enrolled in Honors/AP coursework.

Confidentiality and Institutional Review Board Requirement

District educators from the two treatment high schools offering Honors/AP coursework Were asked to participate in this study. Appropriate measures were used to ensure all Institutional Review Board (IRB) guidelines are adhered to throughout the study. The researcher worked closely with the Equal Opportunity Schools (EOS) Partnership Director and the Director of Testing and Accountability in the CHCCS district to obtain necessary information for this study. Educators from the two high schools consented to participate in the study. Each participants' ID # was housed at the survey site. Educators were able to gain access to the site

with use of ID #s to ensure confidentiality. Documents were completed and sent to linked site indicating number of participants completing data gathering tool.

Upon completion and approval through the Institutional Review Board (IRB) process, the researcher was given permission to sort and analyze data provided from the survey. The survey for high school educators was self-administered. One hundred and seventy one (171) participants were asked to take the self-administered survey by the schools' administration. Qualitative and quantitative data was collected through survey completion.

This mixed methodology for collecting data is known as cross-sectional design. This method is a popular research design in education (Creswell, 2005). Data can be collected at a certain point in time from a sample of the population representative of an entire population in a relatively short period of time.

The researcher kept this information on the E-Pirate drive supplied by East Carolina University. The password to any of the collected information was known only by the researcher. Back up data for this study was placed on another source and filed in a location designated by the researcher. The data for this study was not stored on public or school affiliated media or technology devices.

Study Limitations

Thoughtful and careful consideration was given to the created constructs and research for the design of this study. In lieu of this effort, there are limitations to the ability to generalize study results to other schools. First, this study included two suburban schools and the sample size was limited to these educators responding to the survey and open-ended questions and statements.

Second, though there is diversity in all of the high schools included in this study, it may

not be representative of the diversity found in other high schools throughout the United States. Third, there are limitations in comparing between the two high schools in the Chapel Hill Carrboro City School district. The communities served by each school and the student body must be considered. Incoming proficiency levels of students at each school will differ and impact students who are pursuing the most rigorous coursework.

Finally, another limitation is researcher bias. The researcher worked closely with individuals in the CHCCS district during this study. While writing and conducting the study, the researcher was an assistant principal and facilitated district equity groups. A focus of the equity groups was to examine pedagogical practices providing students with greater opportunities for success. The researcher embarked upon this course of study with the hopes of gathering information benefitting all students with a focus on African American students' representation in Advanced Placement® coursework.

Summary

The purpose of this study was to uncover educators' attitudes and perceptions about college-level coursework and the possible impact on the participation of African American students in AP coursework. The researcher examined responses collected from the survey to indicate a school environment as inviting or disinviting. This chapter outlined the methodology used in this research study, including the details of the survey utilized for collection of both qualitative and quantitative items, recruitment of participants, procedures for maintaining data security, and analysis of data.

Six constructs were used from a review of literature assessing practices being used in schools throughout the United States leading to African American students' ability to access and succeed in Advanced Placement® coursework. This study involved district educators

(teachers, psychologists, counselors, administrators, and other certified staff) from two high schools completing a survey asking for attitudes and perceptions about college-level coursework. The researcher employed the methods of convenience sampling to analyze and explore the relationship between the responses of educators and the inviting school setting.

To complete this study, the results from the information presented in Chapter 3 are analyzed and presented in Chapter 4. The summary, conclusions, and recommendations of this study are discussed and provided in Chapter 5.

CHAPTER 4: DATA ANALYSIS AND RESULTS

"For apart from inquiry, apart from the praxis, individuals cannot be truly human. Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other."

~Paulo Freire, Brazilian educator and philosopher

This chapter presents the findings from the research study designed to examine the attitudes and perceptions of high school educators (AP teachers, guidance counselors, teachers, administrators, and other certified staff) in one school district in North Carolina about college-level coursework. This study was designed to determine if the attitudes and perceptions discovered impacted the access of African American students to Advanced Placement® coursework. The study used Invitational Education Theory as a framework for exploring African American students' lack of participation in Honors/AP coursework.

Guiding this research were three major questions with an additional inquiry exploring the impact of an inviting school environment. Literature reviewed revealed the importance of an inviting school environment in order for all students to achieve and maintain academic success. Research conducted on an inviting school environment, aligning with the tenets of Invitational Education Theory have been done on all levels; elementary, middle, and the high school setting. While the concern for an inviting learning environment is consistent throughout the United States with research spanning in various states throughout the country (Equal Opportunity Schools 2013), this research is significant in that it focuses specifically on high schools in Chapel Hill Carrboro City Schools with implications for policy revision at the school and district level.

Data included quantitative and qualitative measures and was collected from a survey designed by Equal Opportunity Schools. Study participants were directed to the site

http://www.qualtric.com for survey access. Staff gained access to study with the use of their ID numbers in order to ensure confidentiality. The survey provided participants with personal, attitudinal, behavioral, closed-ended questions and statements with Likert scale multiple choices provided for selection of answers. Also included were open-ended statements and questions for deeper probing about Advanced Placement® coursework presently being offered in their perspective schools. The researcher was allowed to partner with Equal Opportunity Schools and use the collected data to gather information for this study.

This chapter details the procedures utilized in this study for data collection and analysis. The study addressed the following research questions:

1. What are the attitudes and perceptions held by high school educators concerning college-level coursework?
2. Based on the tenets of Invitational Education Theory, what uncovered attitudes and perceptions of high school educators about college-level coursework align with inviting

   practices and which ones align with disinviting practices in the educational setting?
3. What is the relationship, if any, between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African American students in Advanced Placement® courses?

Other inquiry of this study:

1. Is there a difference larger than 3% in the uncovered attitudes and perceptions about college-level coursework between educators at the two high schools based on years in the profession?

Description of Study Participants

The participants in this study (n=171) were educators from the Chapel Hill Carrboro City

School district in North Carolina. The study included two schools with 52 course offerings from the Advanced Placement® program. Carrboro High and East Chapel Hill High were selected as the study schools as they met the study criteria outlined in Chapter 3.

Population Criteria:

- The school has student populations of White, African-American, Latino, and Asian.
- The school has fifteen or more course offerings following the Advanced Placement® framework.
- The school's Advanced Placement® enrollment is more than 50% from its White student population.
- The school has low enrollment from its African American student population participating in AP coursework.

One district high school was utilized as the control school. Chapel Hill High was selected as the control school. The portfolio of schools that applied and were accepted, based on the study criteria to join the Equal Opportunity Schools (EOS) project, were divided into a series of groups of similar schools, or "blocks", and then randomly assign to "treatment" or "control" from within those blocks. The researcher was allowed to partner with Equal Opportunity Schools (EOS) and use this matching method to collect data for this study.

The study participants consisted of 171 educators from two high schools in the Chapel Hill Carrboro City School district during the 2013-2014 school year. Carrboro High participant responses have been coded as school 1 with 65 members (some items received only 57 participant responses). East Chapel Hill High participant responses have been coded as school 2 with 106 members (some items received only 98 participant responses). Table 9 provides the descriptive statistics for the study participants. The quantitative analysis included data from 171

Table 9

Descriptive Statistics for Educator Participants

Educator Membership	AP Teachers	Others (Non-AP Teachers)	Total
School 1 n = 65			
Carrboro High	12	53	65
Years of Total Experience	Less than year 16/65 (25%)	1-3 years 13/65 (20%)	4 or more years 36/65 (55%)
School 2 n = 106			
East Chapel Hill High	23	83	106
Years of Total Experience	Less than year 13/106 (12%)	1-3 years 28/106 (26%)	4 or more years 65/106 (61%)
Membership Totals	AP Teachers	Other (Non-AP Tchr.)	Total
Educators (Both Schools)	35/171 (20%)	136/171 (80%)	171 participants
Years of Experience (Both Schools)	Less than year / 1-3 years	4 or more years	Total 171 participants
	29/171 (17%) / 41/171 (24%)	101/171 (59%)	

Note. High school offerings may exceed number of AP teachers on staff, so a teacher could be the instructor for one or more courses.

educators who participated in the Equal Opportunity Schools (EOS*)* survey. Educators' responses revealed attitudes and perceptions about college-level coursework. The independent variable divide the participants' responses into two groups. Attitudes and perceptions about college-level coursework were identified as inviting or disinviting based on the defined, four-level functions of Invitational Education Theory. Prior to the identifying of functions, survey items were aligned with the six cultural components of Invitational Education Theory; empowerment, encouragement, enjoyment, enlistment, equity, and expectations. Appendix D provides items from survey aligning with the six cultural components helping to distinguish internal causes preventing an inviting environment for all students.

Description of AP Demographic Statistics

A total of two high schools were chosen by Equal Opportunity Schools (EOS) from the Chapel Hill Carrboro City School District to participate in the national study concerning attitudes and perceptions influencing student participation in Advanced Placement® coursework. The district has two other high schools; one being chosen to serve as a control group and another excluded because it serves as an alternative high school with no AP coursework being offered in its programming. EOS did not collect data from the control group. The researcher partnered with EOS and collected data from the selected high schools for this study.

The overall student enrollment for the two high schools during the 2010-2011 school year was 2,248 with an AP participation of 912. Overall student enrollment for the two schools during the 2011-2012 school year was 2,310 with an AP participation of 951. Both schools had representation from the stated student ethnic groups needed in order to meet the criteria for participation. In addition to ethnic group criteria, the schools' course offering had to include Advanced Placement® coursework. The AP course offerings between both schools in 2010-

2011 were 46. AP course offering between the two schools in 2011-2012 were 48. The mean number of AP courses offered for the two years was 47. The breakdown for total enrollment of ethnic groups, AP participation of those groups, and course offerings for both schools during the above stated years are displayed in Tables 10 and 11. As reported by the College Board Report in 2012, the least represented student group in AP coursework is African Americans. This national finding is reflected in the collected data from the Chapel Hill Carrboro City School District .

Analysis of Data

Chapter 4 is divided into five sections, with analysis of educators' responses (n=171, items with less are noted as such). The first four sections begin with an introduction and a specific research question from this study about AP coursework. Followed by the introduction and research question in the first section are ten analyzed items from the Equal Opportunity Schools Staff Survey about educators' attitudes and perceptions of AP coursework. Multiple choice answers, participants responding, and percent of count this represents of total responses for that particular item are provided for all survey items presented in this section. In addition to the quantitative data collected from survey items, some items had a qualitative component. Emerging themes from the qualitative data are presented with those survey items. Method used to determine percent for analyzed items:

School 1: sum of participant responses ÷ total number of participant responses × 100
(?) (65 or 57)
= percent/count
(?)

School 2: sum of participant responses ÷ total number of participant responses × 100
(?) (106 or 98)
= percent/count
(?)

Table 10

Descriptive Statistics of AP Demographics 2010-2011

School	Total Student Enrollment	AP Student Enrollment	AP Courses
Carboro High			
2010-2011 Totals	838	283	19
Whites	**532**	**223**	**223/283 (78.7%) W**
African American	**96**	**9**	**9/283 (3.2%) AA**
Hispanic	111	18	18/283 (6.4%) H
Asian	79	12	12/283 (4.3%) A
East Chapel Hill High			
2010-2011 Totals	1,410	629	27
Whites	**792**	**394**	**394/629 (62.6%) W**
African American	**197**	**30**	**30/629 (4.8%) AA**
Hispanic	119	34	34/629 (5.4%) H
Asian	251	130	130/629 (20.7%) A

Note. Other subgroups appeared in student categories but did not have a statistical significance for this study.

Table 11

Descriptive Statistics of AP Demographics 2011-2012

School	Total Student Enrollment	AP Student Enrollment	AP Courses
Carboro High			
2011-2012 Totals	872	300	20
Whites	**480**	**245**	**245/300 (81.7%) W**
African American	**76**	**7**	**7/300 (2%) AA**
Hispanic	143	13	13/300 (4.3%) H
Asian	79	13	13/300 (4.3%) A
East Chapel Hill High			
2011-2012 Totals	1,438	651	28
Whites	**734**	**379**	**379/651 (58%) W**
African American	**160**	**23**	**23/651 (3.5%) AA**
Hispanic	150	40	40/651 (6%) H
Asian	252	168	168/651 (25.8%) A

Note. Other subgroups appeared in student categories but did not have a statistical significance for this study.

Based on the defined four-level functions of Invitational Education as researched by such invitational theorists as Dr. John Schmidt (2007), the second section addresses the next research question. Data collected from the survey on attitudes and perceptions will be categorized as inviting or disinviting. This is assessed to determine the type of environment being established for student learning. The six cultural E's of Invitational Education Theory - empowerment, encouragement, enjoyment, enlistment, equity, and expectations are being assessed as well in the four levels of functioning (see Appendix D for survey items aligning with Invitational Education Theory). Following the introduction and research question in section three will be comparison of inviting practices analyzed in survey data and the participation of African American students in Advanced Placement® coursework. The fourth section's introduction will list the last inquiry of the study and the comparison of the collected data from the two school findings concerning educators' attitudes and perceptions. The fifth and final section concludes with qualitative data presented from educators' (n = 171) responses exploring three stated themes from the survey providing more in depth information about AP coursework. Summary of findings are written in narratives for each theme. When necessary, specific quotations from participants are included to present clarity of emerging themes.

The presentation of findings is organized with the following codes: Carrboro High (1) n= 65 and East Chapel Hill High (2) n=106. Additional coding identified participants by years in education as (1) less than one year, (2) for one to three years, and (3) for four or more years, and attitudes and practices as inviting (Inv.) and disinviting (D-Inv.)

Introduction - Section I: Attitudes and Perceptions of Educators

One hundred seventy-one educators from Carrboro High and East Chapel Hill High in the

Chapel Hill Carrboro City School District were asked to take a nineteen item constructed instrument containing personal, attitudinal, behavioral, closed-ended questions and statements about college-level coursework. It was designed to collect qualitative and quantitative data with a Likert scale providing multiple choice answers.

Analysis of Research Question #1: 1. *What are the attitudes and perceptions held by high school educators concerning college-level coursework?*

Survey Item #9 - Who should staff members encourage to take AP classes?

The participants' choices were: (a) all students; (b) only those students who we think will succeed in AP; (c) any student who has college aspirations; and (d) we should not actively recruit students for AP; it is a decision best decided by students and their parents.

Collected data from school 1 and school 2 indicated similar patterns. The largest number of responses from study participants went to the choice of, (c) any student who has college aspirations. The smallest number of responses went to the choice of, (d) we should not actively recruit students for AP; it is a decision best decided by students and their parents. In addition to the quantitative data provided, educators (n=171) were asked to provide qualitative responses in the form of "other." Summary of responses emerging: (1) students with potential; (2) students with strong work ethic; (3) elimination of AP classes; (4) students with curiosity, interest, and motivation to subject; and (5) students with a solid "B." Table 12 shows a summary of educators' (n=171) attitudes and perceptions of students who should take AP classes.

Survey Item Eight - To the best of your knowledge, how important are the following reasons why students might not take an AP class? Use not at all important, very unimportant, somewhat unimportant or somewhat important, very important, extremely important to rate each answer. The participants' choices were: (a) they don't know much about AP classes; (b) they

Table 12

Summary of Attitudes and Perceptions Concerning Students Taking AP Classes

Answers	Responses
School 1 (n=65)	
Answers	
All Students	18/65 (28%)
Only students we think can succeed in AP	10/65 (15%)
Only students interested in AP	11/65 (17%)
Any student with college aspirations	27/65 (42%)
Should not recruit; parents and students decision only	3/65 (5%)
School 2 (n=106)	
All Students	29/106 (27%)
Only students we think can succeed in AP	17/106 (16%)
Only students interested in AP	17/106 (16%)
Any student with college aspirations	39/106 (37%)
Should not recruit; parents and students decision only	13/106 (12%)

Note. Participants were asked to check all they felt applied.

think AP classes are probably too much work; (c) they don't think that they will be successful/get a good grade; (d) they don't have many friends who are planning to take AP classes; (e) they don't think they are eligible to take an AP class; (f) they don't decide not to take an AP class; they are just given a schedule without one; and (g) they have competing priorities in their schedule, e.g. sports, band, CTE, can't take AP classes.

Collected data from school 1 and school 2 noted different responses. Sixty-four or 98% of school 1 participants chose, (b) they think AP classes are too much work as somewhat important to extremely important as the answer. However, 103 or 97% of school 2 study participants chose the answer of (c) they don't think they will be successful/get a good grade as somewhat important to extremely important as the answer. The answer receiving the most response from both schools (school 1, 33/65 (51%) and school 2, 69/106 (65%)) of not at all important to somewhat unimportant was that of (f) they don't decide not to take an AP class; they are just given a schedule without one. In addition to the quantitative data provided, educators (n=171) were asked to provide qualitative responses in the form of "other." Summary of responses emerging: (1) mental health concerns; (2) AP is only for students going to 4- year college; (3) lack of reading skills; (4) classes are not of interest; and (5) students have not been prepared academically. Table 13 shows a summary of educators' (n=171) attitudes and perceptions on students not taking AP classes.

Survey Item Four - Please estimate the percentage of students at Carrboro High /East Chapel Hill.

Table 13

Summary of Attitudes and Perceptions on Students Not Taking AP Classes

	Responses	
Statements	Somewhat important to Extremely important	Not at all important to Somewhat unimportant
School 1 (n=65)		
They don't know much about AP classes	51/65 (79%)	14/65 (22%)
They think AP classes are probably too much work	64/65 (98%)	1/65 (2%)
They don't think that they will be successful/get a good grade	63/65 (96%)	2/65 (4%)
They don't have many friends who are planning to take AP classes	61/65 (93%)	4/65 (7%)
They don't think they are eligible to take an AP class	47/65 (72%)	18/65 (28%)
They don't decide not to take an AP class; they are just given a schedule without one	32/65 (50%)	33/65 (51%)
Competing priorities in their schedule, e.g. sports, band, CTE, can't take AP classes	49/65 (76%)	16/65 (24%)
School 2 (n=106)		
They don't know much about AP classes	59/106 (55%)	47/106 (45%)
They think AP classes are probably too much work	99/106 (93%)	7/106 (7%)
They don't think that they will be successful/get a good grade	103/106 (97%)	3/106 (3%)
They don't have many friends who are planning to take AP classes	92/106 (87%)	14/106 (13%)

Table 13 (continued)

Statements	Responses: Somewhat important to Extremely important	Responses: Not at all important to Somewhat unimportant
They don't think they are eligible to take an AP class	71/106 (68%)	35/106 (32%)
They don't decide not to take an AP class; they are just given a schedule without one	37/106 (35%)	69/106 (65%)
Competing priorities in their schedule, e.g. sports, band, CTE, can't take AP classes	78/106 (73%)	28/106 (27%)

Note. Percent rounded to whole numbers

High who:

The participants' choices were: (a) would benefit from taking an AP class before graduating; (b) would pass an AP class if given the opportunity; (c) feel encouraged to take an AP class; and (d) feel welcome in AP.

Data from school 1 and school 2 indicated a large number of participants gave estimates of 51%-100% for each item. Table 14 shows a summary of educators' (n=171) attitudes and perceptions on students and AP classes.

Survey Item Three - Please indicate how strongly you believe each item below predicts student success in AP classes. Use not a predictor, good predictor, or very good predictor to rate your answer.

The participants' choices were: (a) GPA; (b) test scores; (c) prerequisites; (d) student motivation; (e) quality of teaching; and (f) student interest.

Collected data revealed participants' answers from both schools were similar. School 1 and school 2 had the most responses to (d) student motivation being good to very good predictor for student success in AP classes. In addition to the quantitative data provided, educators (n=171) were asked to provide qualitative responses in the form of "other." Summary of responses emerging: (1) eye color; (2) level of parents' education; (3) classroom grading policies; (4) work ethic and time management; (5) age/maturity; (6) reading ability; (7) preparedness and exposure to class content; and (8) peer pressure . Table 15 shows a summary of educators' (n=171) attitudes and perceptions predicting student success in AP classes.

Survey Item Five - Please indicate the extent to which you agree that the following actions would ensure that more students succeed in AP classes at Carrboro High/East Chapel Hill

Table 14

Summary of Attitudes and Perceptions on Students and AP Classes

	Responses	
Statements	estimated 0%-50%	estimated 51%-100%
School 1 (n=65)		
Would benefit from taking an AP class before graduating	15/65 (23%)	50/65 (77%)
Would pass an AP class if given the opportunity	12/65 (18%)	53/65 (82%)
Feel encouraged to take an AP class	14/65 (21%)	51/65 (78%)
Feel welcome in AP	18/65 (27%)	47/65 (72%)
School 2 (n=106)		
Would benefit from taking an AP class before graduating	14/106 (13%)	92/106 (87%)
Would pass an AP class if given the opportunity	10/106 (9%)	96/106 (90%)
Feel encouraged to take an AP class	15/106 (14%)	91/106 (85%)
Feel welcome in AP	18/106 (17%)	88/106 (83%)

Note. Study participants were asked to estimate for this survey item.

Table 15

Summary of Attitudes and Perceptions Predicting Student Success in AP Classes

	Responses	
Items	not a predictor	good to very good predictor
School 1 (n=65)		
GPA	11/65 (17%)	54/65 (83%)
Test scores	6/65 (9%)	59/65 (90%)
Prerequisites	6/65 (9%)	59/65 (90%)
Student motivation	0%	65/65 (100%)
Quality of teaching	2/65 (3%)	63/65 (97%)
Student interest	4/65 (6%)	61/65 (93%)
School 2 (n=106)		
GPA	18/106 (17%)	88/106 (83%)
Test scores	12/106 (11%)	94/106 (89%)
Prerequisites	5/106 (5%)	101/106 (96%)
Student motivation	4/106 (4%)	102/106 (96%)
Quality of teaching	9/106 (8%)	97/106 (91%)
Student interest	5/106 (5%)	101/106 (95%)

Note. Percentages rounded up to whole number.

High. Use strongly disagree to somewhat disagree or strongly agree to somewhat agree to rate your answers.

The participants' choices were: (a) there is not much more that could be done; (b) increase the academic intensity of curriculum in elementary and middle school; (c) increase the academic intensity in the first few years of high school; (d) inform students earlier about AP options; (e) encourage more students to enroll in AP classes; (f) auto-enroll more students for AP classes; (g) provide professional development to help the staff prepare more students for success in AP; (h) no more professional development needed; teachers and staff can prepare more students to succeed in AP; and (i) require all students to take at least one AP class before they graduate

Collected data revealed similar patterns from both sites. Study participants had the largest response of somewhat agree to strongly agree to the action of (d) inform students earlier about AP options. Similarly, school 1 and school 2 had the largest responses of strongly disagree to somewhat disagree to the action of (f) auto-enroll more students for AP classes. In addition to the quantitative data provided, educators (n=171) were asked to provide qualitative responses in the form of "other." Summary of themes emerging: (1) make classes easier; (2) reading & writing improvement in middle school; (3) best teachers for courses; and (4) AP summer prep course. Table 16 provides a summary of educators' (n=171) attitudes and perceptions concerning more students succeeding in AP classes.

Survey Item Six - Please answer the following questions about AP with the answers of yes, no, or unsure:

The participants' choices were: (a) does taking AP classes boost students' chances of getting into college; (b) do AP classes prepare students to do better once they are in college; (c)

Table 16

Summary of Attitudes and Perceptions on Actions Ensuring More Success in AP Classes

Statements	Responses	
	Strongly Disagree to Somewhat Disagree	Somewhat agree to Strongly agree
School 1 (n=65)		
There is not much more that can be done	49/65 (75%)	16/65 (25%)
Increase the academic intensity of curriculum in elementary and middle school	23/65 (35%)	42/65 (65%)
Increase the academic intensity in the first few years of high school	24/65 (37%)	41/65 (63%)
Inform students earlier about AP options	12/65 (19%)	53/65 (81%)
Encourage more students to enroll in AP classes	20/65 (30%)	45/65 (70%)
Auto-enroll more students for AP classes	52/65 (80%)	13/65 (20%)
Provide professional development to help the staff prepare more students for success in AP	15/65 (23%)	50/65 (76%)
No more professional development is needed; teachers and staff can prepare more students to succeed in AP	46/65 (71%)	19/65 (29%)
Require all students to take at least one AP class before they graduate	50/65 (77%)	15/65 (23%)
School 2 (n=106)		
There is not much more that can be done	69/106 (64%)	37/106 (35%)
Increase the academic intensity of curriculum in elementary and middle school	38/106 (36%)	68/106 (64%)

Table 16 (continued)

Statements	Responses: Strongly Disagree to Somewhat Disagree	Responses: Somewhat agree to Strongly agree
Increase the academic intensity in the first few years of high school	52/106 (49%)	54/106 (51%)
Inform students earlier about AP options	32/106 (30%)	74/106 (70%)
Encourage more students to enroll in AP classes	44/106 (41%)	62/106 (58%)
Auto-enroll more students for AP classes	98/106 (92%)	8/106 (8%)
Provide professional development to help the staff prepare more students for success in AP	42/106 (39%)	64/106 (61%)
No more professional development is needed; teachers and staff can prepare more students to succeed in AP	67/106 (63%)	39/106 (37%)
Require all students to take at least one AP class before they graduate	85/106 (80%)	21/106 (21%)

do AP classes help students earn college credit; and d) are AP classes designed specifically for students who are planning to go to top four-year colleges?

Data collected revealed the majority of educators were in favor of AP coursework and the impact it has on college entrance and preparation. To answer the above questions participants selected "yes," "no," or "unsure." Eighty percent or more of the educators at both school 1 and school 2 believed AP coursework helps students to earn college credit. Table 17 has a summary of educators' (n = 171) attitudes and perceptions on AP and college.

Survey Item #11 - Why do you think Carrboro's or East's AP program is not as diverse as the whole school? Use major reason, minor reason, or not a major reason to rate your answers. Because the student groups that are underrepresented in AP:

The participants' choices were: (a) come to us less prepared than other students; (b) have less information about AP; (c) are less likely to be encouraged by staff to participate in AP; (d) have tougher home lives; and (e) are sometimes overlooked because they do not appear to be "traditional" AP students.

Data collected from school 1 and school 2 revealed differences in noted responses. The answers of (a) come to us less prepared than other students and (b) have less information about AP, were chosen as major reasons for lack of diversity and underrepresented student groups at school 1. School 2 had the most responses to, (d) have tougher home lives with it being selected as a minor reason. In addition to the quantitative data provided, educators (n=155) were asked to provide qualitative responses in the form of "other." Summary of themes emerging: (1) friends aren't taking the classes; (2) parents have different expectations; (3) no family support or understanding; (4) do not want to be the only minority student in the course; (5) college classes are for college; want to have fun now; (6) do not feel they will be as

Table 17

Summary of Attitudes and Perceptions on AP and College

	Responses		
Questions	Yes	No	Unsure
School 1 (n=65)			
Does taking AP classes boost students' chances of getting into college?	43/65 (66%)	7/65 (11%)	15/65 (23%)
Do AP classes prepare students to do better once they are in college?	40/65 (62%)	10/65 (15%)	15/65 (23%)
Do AP classes help students earn college credit?	55/65 (84%)	3/65 (5%)	7/65 (11%)
Are AP classes designed specifically for students who are planning to go to top four-year college?	31/65 (48%)	25/65 (38%)	9/65 (14%)
School 2 (n=106)			
Does taking AP classes boost students' chances of getting into college?	76/106 (72%)	17/106 (16%)	13/106 (12%)
Do AP classes prepare students to do better once they are in college?	66/106 (62%)	18/106 (17%)	22/106 (21%)
Do AP classes help students earn college credit?	85/106 (80%)	14/106 (13%)	7/106 (7%)
Are AP classes designed specifically for students who are planning to go to top four-year college?	61/106 (58%)	38/106 (36%)	7/106 (7%)

successful as the traditional AP student; (7) do not have anxious White and Asian parents and friends telling them they will not get into college without them; and (8) AP classes seem like a "club" that students of color might not feel like they belong to. Table 18 provides a summary of educators' (n=155) attitudes and perceptions about diversity and underrepresented groups in AP.

Survey Item Seven - Please state your level of agreement with the following statements using the ratings of strongly disagree to somewhat disagree or somewhat agree to strongly agree: The participants' choices were: (a) you can always greatly change how intelligent you are; (b) you can learn new things, but you can't really change your basic intelligence; (c) no matter how much intelligence you have, you can always change it quite a bit; and (d) you have a certain amount of intelligence and you really can't do very much to change it.

Data collection revealed similar patterns in responses from school 1 and school 2. A summary on educators' (n = 171) attitudes and perceptions about intelligence has been provided in Table 19.

Survey Item Ten - Describe the diversity of the AP program at Carrboro or East. The participants' choices were: (a) there are substantially fewer low-income students and students of color in AP than in the school as a whole; (b) there are slightly fewer low-income students and students of color in AP than in the school as a whole; (c) the AP program is as diverse as the school population; (d) there are slightly more low-income students and students of color in AP than in the school as a whole; and (e) there are substantially more low-income students and students of color in the AP than in the school as a whole.

Collected data from the two schools revealed similar patterns in the responses concerning the diversity of the AP program. Data displayed the schools' diversity is not reflected in the schools' AP program. Both school 1 and school 2 had 69% or more of study participants

Table 18

Summary of Attitudes and Perceptions about Diversity and Underrepresented Groups in AP

	Responses		
Statements	Major reason	Minor reason	Not a reason
School 1 (n=57)			
Come to us less prepared than other students	26/57 (46%)	20/57 (35%)	11/57 (19%)
Have less information about AP	26/57 (46%)	23/57 (40%)	8/57 (14%)
Are less likely to be encouraged by staff to participate in AP	11/57 (19%)	27/57 (47%)	19/57 (33%)
Have tougher home lives	20/57 (35%)	23/57 (40%)	14/57 (25%)
Are sometimes overlooked because they do not appear to be "traditional" AP students	23/57 (40%)	20/57 (35%)	14/57 (25%)
School 2 (n=98)			
Come to us less prepared than other students	45/98 (46%)	39/98 (40%)	14/98 (14%)
Have less information about AP	23/98 (23%)	51/98 (52%)	24/98 (24%)
Are less likely to be encouraged by staff to participate in AP	28/98 (29%)	38/98 (39%)	32/98 (33%)
Have tougher home lives	25/98 (26%)	53/98 (54%)	20/98 (20%)
Are sometimes overlooked because they do not appear to be "traditional" AP students	32/98 (33%)	38/98 (39%)	28/98 (29%)

Note. Percentages in most cases have been rounded up.

Table 19

Summary of Attitudes and Perceptions about Intelligence

Statements	Responses	
	Strongly Disagree to Somewhat Disagree	Somewhat agree to Strongly agree
School 1 (n=65)		
You can always greatly change how intelligent you are.	13/65 (20%)	52/65 (80%)
You can learn new things, but you can't really change your basic intelligence.	55/65 (85%)	10/65 (15%)
No matter how much intelligence you have, you can always change it quite a bit.	7/65 (12%)	58/65 (88%)
You have a certain amount of intelligence and you really can't do very much to change it.	63/65 (96%)	2/65 (4%)
School 2 (n=106)		
You can always greatly change how intelligent you are.	37/106 (35%)	69/106 (65%)
You can learn new things, but you can't really change your basic intelligence.	80/106 (76%)	26/106 (24%)
No matter how much intelligence you have, you can always change it quite a bit.	27/106 (25%)	79/106 (74%)
You have a certain amount of intelligence and you really can't do very much to change it.	90/106 (84%)	16/106 (16%)

choose statement – (a) there are substantially fewer low-income students and students of color in AP than in the school as a whole. Table 20 provides a summary of educators' (n = 171) attitudes and perceptions on school's AP program and diversity.

Survey Item #12 - How big of a problem do you think the relative lack of diversity in Carrboro's or East's AP program is?

The participants' choices were: (a) it's a big problem that we need to address; (b) it's a big problem, but there are more pressing priorities for us to address; and (c) it's only a minor problem or not a problem at all.

Data collected revealed differences in responses. Previously created tables (see Tables 10 and 11) displayed under-representation of African Americans in their AP programs. School 1 had 51% of study participants select statement – (b) It's a big problem, but there are more pressing priorities for us to address. School 2 study participants had the most responses to – (a) it's a big problem that we need to address. While this had the most responses, only 46% of school 2 participants selected this answer. Table 21 provides a summary of educators' (n = 155) responses concerning attitudes and perceptions on lack of diversity in AP program.

Introduction - Section II: Inviting and Disinviting Practices

Ten survey items were aligned with the six cultural components (see Appendix D) of Invitational Education - empowerment, encouragement, enjoyment, enlistment, equity, and expectations. Some of the survey items were placed in more than one category. In addition, the invitational approach identifies four continuous levels of functioning (see Table 1) examining across a spectrum of behaviors that are helpful and harmful, purposeful and accidental. These actions are labeled as intentional or unintentional behaviors. The four functions are: intentionally disinviting, unintentionally disinviting, unintentionally inviting, and intentionally

Table 20

Summary of Attitudes and Perceptions on School's AP Program and Diversity

Statements	Responses
School 1 (n=65)	
There are substantially fewer low-income students and students of color in AP than in the school as a whole.	45/65 (69%)
There are slightly fewer low-income students and students of color in AP than in the school as a whole.	13/65 (20%)
The AP program is as diverse as the school population.	4/65 (6%)
There are slightly more low-income students and students of color in AP than in the school as a whole.	2/65 (3%)
There are substantially more low-income students and students of color in the AP than in the school as a whole.	1/65 (2%)
School 2 (n=106)	
There are substantially fewer low-income students and students of color in AP than in the school as a whole.	78/106 (74%)
There are slightly fewer low-income students and students of color in AP than in the school as a whole.	20/106 (18%)
The AP program is as diverse as the school population.	7/106 (7%)
There are slightly more low-income students and students of color in AP than in the school as a whole.	1/106 (1%)
There are substantially more low-income students and students of color in the AP than in the school as a whole.	0/106 (0%)

Note. Percentages rounded up to whole number.

Table 21

Summary of Attitudes and Perceptions on Lack of Diversity in School's AP Program

Statements	Responses
School 1 (n=57)	
It's a big problem that we need to address.	17/57 (30%)
It's a big problem, but there are more pressing priorities for us to address.	29/57 (51%)
It's only a minor problem or not a problem at all.	11/57 (19%)
School 2 (n= 98)	
It's a big problem that we need to address.	45/98 (46%)
It's a big problem, but there are more pressing priorities for us to address.	39/98 (40%)
It's only a minor problem or not a problem at all.	14/98 (14%)

inviting. In section two, based on described beliefs and practices of Invitational Education, the researcher determined if the discovered educators' (n = 171) attitudes and perceptions were that of inviting or disinviting. A brief explanation for designated category will be given based on practices and definitions of Invitational Education. Analyzing educators' (n = 171) responses, Appendix G provides a summary of "inviting or disinviting" attitudes and perceptions.

Analysis of Research Question #2: 2. *Based on the tenets of Invitational Education Theory, what uncovered attitudes and perceptions of high school educators about college-level coursework align with inviting practices and which ones align with disinviting practices in the educational setting?*

Introduction - Section III: Attitudes and Perceptions and African American Students Participation in Advanced Placement® Coursework

In section three, the researcher provides clarification about the discovered attitudes and perceptions educators have about college-level coursework and how these attitudes and perceptions may impact the enrollment of African American students in AP coursework. Upon analyzing the data (see Tables 10 and 11) this student group has the lowest participation in the Advanced Placement® program in the Chapel Hill Carrboro City School district. Further examination of attitudes and perceptions lead to labeling of inviting or disinviting practices. These practices have been examined to assess the environment African American students are "invited" to develop in on a daily basis. If practices identify as disinviting, professionals can learn language and actions of invitational functioning, embracing approaches and philosophies compatible with all student groups (Schmidt, 2004).

Analysis of Research Question #3: 3. *What is the relationship, if any, between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African American students in Advanced Placement® courses?*

The Equal Opportunity Schools Staff Survey did not address the specific enrollment of African Americans in the district's AP program. The survey utilized the terms, "students of color," "underrepresented student groups," and "lack of diversity." However, based on the four levels of functioning in Invitational Education Theory, data collected from Equal Opportunity Schools Staff Survey on educators' (n = 171) attitudes and responses indicate African American students are not being invited to an environment embracing diversity or students from diverse cultural backgrounds (Schmidt, 2004). Using this framing, the ten survey items (only nine could be assessed for function) analyzed fell into all four functioning levels with both main categories – inviting and disinviting. While all four levels appeared when analyzing collected data, "unintentionally" and "disinviting" appeared consistently. Where there were items recorded by the researcher as inviting, 50% of these were labeled unintentionally. Of those items recorded as disinviting, 80% were labeled unintentionally. The emerging theme developing was that of unintentionally disinviting. This finding from the data aligns closely with studies completed using Invitational Education Theory to assess learning environments. Unintentionally disinviting is the frequently leveled function measured in most schools (Purkey, 1991; Schmidt, 2004). Appendix H displays representation of educator responses as they relate to an inviting or disinviting learning environment.

Introduction - Section IV: Educators' Attitudes and Perceptions and Years of Service

One hundred seventy-one educators from Carrboro High and East Chapel Hill High in the Chapel Hill Carrboro City School District were asked to take a nineteen item constructed instrument containing personal, attitudinal, behavioral, closed-ended questions and statements with multiple choices provided and open-ended statements and questions for deeper probing about Advanced Placement® coursework. It was designed to collect qualitative and quantitative data.

Analysis of other inquiry of this study #1: 1. *Is there a difference larger than 3% in the uncovered attitudes and perceptions about college-level coursework between educators at the two high schools based on years in the profession?*

The Pearson Chi-Square Test

The independent variable divided the participants into three groups. Educators who have been in the profession less than a year were labeled (1), educators who have been in the profession from one to three years were labeled (2) and educators who have been in education four or more years were labeled (3) (see Appendix C). The Pearson chi-square test was used to examine the relationship between two or more categorical variables. The Pearson chi-square test is one of the most common ways to measure relationships between groups (Boslaugh, 2013). The Pearson chi-square test is the appropriate nonparametric test to determine if educators' attitudes and perceptions about college-level coursework differ based on their years of experience in the field of education. The formula for the Pearson chi-square test is:

$$X^2 = \sum \frac{(obs - \exp)^2}{\exp}$$

A p-value is given to help determine the significance of the results. The p-value is a number between 0 and 1 (Creswell, 2005). A small p-value (typically ≤ 0.05) indicates strong evidence of a relationship. A large p-value (typically ≥ 0.05) indicates weak evidence of a relationship. The results from the statistical test yielded a *p-value of 0.1025*. This indicates there is not a significant difference between the two groups of educators based on years of experience in the field of education. Looking at percentages only two EOS survey items represented difference in findings. Collected data revealed the majority of study participants from school 1 and school 2 chose different answers for items:

- #8 – To the best of your knowledge, how important are the following reasons why students might not take an AP class?

  School 1 had 64/65 (98%) select answer: "They think AP classes are too much work" as compared to school 2 with 99/106 (93%) responses.

  School 2 had 103/106 (97%) select answer: "They don't think they will be successful/get a good grade" as compared to school 1 with 63/65 (96%) responses.

- #12 – How big of a problem do you think the relative lack of diversity in Carrboro's or East's AP program is?

  School 1 had 29/57 (51%) select answer: "It's a big problem, but there are more pressing priorities for us to address" as compared to school 2 with 39/98 (40%).

  School 2 had 45/98 (46%) select answer: It's a big problem that we need to address" as compared to school 1 with 17/57 (30%).

Introduction – Section V: Theme Analysis

To seek and understand educators' (n=171) attitudes and perceptions on how and why students participate in Advanced Placement® coursework, study participants were asked to write

and discuss aspects and components of the existing AP program. In order to identify the responses for each theme, the researcher read through all educator responses. While reading through the responses the researcher looked for emerging patterns, attempting to determine potential responses addressing themes for data collection. The researcher then reread each response and coded them into the themes of; weaknesses and strengths, program and practices, ideas and feedback.

Theme 1: Strengths and Weaknesses of School's Advanced Placement® Program. Qualitative data noted similarities in school 1 and school 2 responses for theme one. Collected data indicate study participants believe many students in the Chapel Hill Carrboro City School district are tracked into the AP program based on participation in programs such as LEAP (Learning Enrichment Acceleration Program) and other gifted programming offered at the elementary and middle level.

Further examination of data revealed other findings. Weaknesses of the program outnumbered considered strengths. Strengths cited were strong AP teachers, good selection of AP offerings, community support, strong work ethic of current AP students, and a rigorous AP program. While strengths were noted, educators (n = 171) expressed various concerns about the program including that of pressure in the district for students to take college-level courses and the lack of diversity. Summary of weaknesses emerging from collected data included:

- Students selected due to White race and expectations in AP
- Segregated classes (White and Asian only) Blacks and Hispanics in regular level classes

- African American students need support system in order to be successful in AP program
- Students taking too many courses and suffer from anxiety and other health problems
- Very few African American teachers
- Low expectation of African American students; not encouraged to enroll in AP program
- Too many in AP program without prerequisites
- Not enough minority students enrolled in AP; majority White, middle/upper class students
- All educators don't know enough about school's AP program
- Need Pre-AP course so students can move into AP curriculum who don't come prepared……this will increase minority enrollment
- Students in AP courses not interested in subject or content
- Community pressure (parents, administrators, teachers) for students to participate in AP program

Theme 2: Programs and practices to place or expand to ensure success for all AP students. Qualitative results support data from the quantitative component of the study as educators (n = 171) discussed various practices and programs to ensure success for all AP students. Study participants from school 1 and school 2 indicate that policies, programs, and processes in place do not provide support for African American students and other minority groups under- represented in AP classes. Research found in the literature review on an inviting environment addresses such findings (Purkey & Aspy, 2003). Invitational Education theorists and practitioners assert policies, practices, and programs are specifically designed to create,

maintain, and invite untapped potential and development in an inviting environment. The premise is that all students are able, reliable, and responsible and should be treated accordingly (Riner, 2003).

While there is an overall perspective from study participants that existing AP programs at each school are in need of expanding practices and programs to ensure success for all students, collected data reveal specific perspectives from school 1 and school 2 responses. First there is a definite lack of diversity in the schools' existing AP program. Second is the belief that African Americans and other underrepresented minority student groups are not equipped to handle the rigor and challenge of AP coursework. Thirdly, parents of African Americans and other under-represented minority student groups do not encourage or expect their students to participate in AP coursework. Some of the emerging themes for programs and practices substantiate this second and third perspective. Table 22 provides a summary of programs and practices believed to ensure success for all AP students.

Theme 3: Additional ideas or feedback concerning school's AP program. As mentioned, the qualitative section on the survey was to provide opportunity for more in depth analysis concerning each school's AP program. Additional ideas and feedback received a large response from educators (n = 171). Because the survey was used at both locations, responses encompassed several aspects inclusive at both school 1 and school 2 as noted in earlier data discussion. While there is a concern for the lack of diversity in the AP program, recorded responses from study participants stated a "fear the AP program will be "watered down" just to include participation of minority students." An emerging theme from the collected data to prevent this action would be to target minority students educators believe to have AP potential.

This data aligned with unintentionally disinviting, one of the four levels of

Table 22

Summary of Programs and Practices to Ensure Success for All AP Students

	Responses
Practices	• Help underrepresented students develop writing, reading, study, and organizational skills. • Teachers need to encourage underrepresented students with potential to enroll in AP classes. • Have all students take pre-requisites and strategies courses before taking AP courses. • Limit number of AP courses students can take during the school year. • Teachers or counselors should have more input for recommendations into AP courses. • Prepare underrepresented students in middle school for the rigor and challenge of AP coursework. • Encourage minority students who have potential to enroll in AP courses. • Encourage minority students to take the course together to provide support for one another. • Provide ESL support for those students who are interested in AP but intimidated by pace.
Programs	• Develop summer program involving parents and students with guest speakers to emphasize importance of AP program. • Develop help sessions during and outside of school day to help struggling students. • Develop a way to involve the AVID (Advancement Via Individual Determination). • program in the AP selection process to get underrepresented and minority students. • Develop parent training course during the school year for minority parents to understand the importance of AP coursework.

Table 22 (continued)

Responses
• Develop smaller class sizes with highly, qualified teachers and have these teachers tutor struggling students during the day. • Develop professional development for teachers on how to look for traits in students of color who are qualified for AP courses.

functioning as discussed in the literature review on Invitational Education (Purkey, 1990; Schmidt, 2004). According to Purkey and Schmidt hurtful and harmful messages happen although people do not intend them. Actions are based on misconceptions of cultural differences and stereotypic views of diverse characteristics. Although the harm that results from such behavior might be unintended, the damage done to individuals is nonetheless hurtful, counter-productive, and irreparable (Schmidt, 2004). In addition to ideas to support the targeting of minority students, study participants stated a plethora of ideas and feedback about the schools' AP program and course of action to be taken. Representation of exact quotes have been written to present emerging themes collected.

- "Need to be clear on target of minority students. Do grade, GPA analysis of minority students to get the best for AP program…….don't just put these students in AP."
- "Courses needed to prepare minority students for AP classes beginning of high school career. Maybe a "Head Start' program in the summer, and "Project Lead The Way" (PLTW). This is an AP course designed to recruit females and under-represented student groups."
- "Need guest speakers, monthly assemblies, and character development programs for minority students…so they can handle the AP program."
- "Set up class for minority parents so they understand the benefits, rigor, and difficulty of AP coursework."
- "Professional Development needed so teachers can prepare minority students, and English Language Learners (ELL) properly for rigorous curriculum and providing strategies based on needs of students."

- "Provide after school tutoring for minority students."
- "District wide needs to address AP tracking…..begins in elementary school and the underrepresented students are made to feel very early can't do AP coursework."
- "Have more diversity seen in the AP staff…mostly White staff…staff of color under scrutiny."
- "Eliminate AP courses and teach high academic across all levels….this will benefit all students."
- "AP classes are segregated….need diversity in the program….. community as a whole has a problem with definition of who should be in AP courses based on perceived ability, SES (social economic status), behavior, peer group, club mentality."
- "Vague questions on survey, flaws in design….what students are you really asking about?"
- "Hypocrisy from the district by analyzing AP program and not looking at real problems of the Achievement Gap….putting students in AP won't solve the problem."
- "Too many AP classes offered with little concern for students who are not in college track."
- "Appreciate the dialogue this has generated about the student population represented in our AP courses."
- "Being in a regular class in Chapel Hill means dumb…White kids and their parents don't want to be with minority students."

Chapter 4 Summary

The data analysis in this chapter was designed to answer the following major question: *What are the attitudes and perceptions held by high school educators concerning college-level coursework having impact on the participation of African American students in AP coursework?* In order to answer the above question, the research utilized the following hypothesis.

Hypothesis

The hypothesis for this study:

Uncovered educators' attitudes and perceptions about college-level coursework will prove to align with disinviting practices thus having a negative impact on the enrollment of African American students in Advanced Placement® coursework.

The null hypothesis for this study:

Uncovered educators' attitudes and perceptions about college-level coursework will prove to align with inviting practices thus not having a negative impact on the enrollment of African American students in Advanced Placement® coursework.

Independent Variables: Educators' years in education and educators' attitudes and perceptions on college-level coursework

Dependent Variables: African American students' enrollment in AP coursework, Invitational Education Theory level of functioning

The following is a summary of each research question and the final conclusion for each question and inquiry as discussed in this chapter.

1. What are the attitudes and perceptions held by high school educators concerning college-level coursework? Findings from the research did not correlate with the elements of an inviting school environment. Data analysis revealed attitudes and

perceptions of high school educators regarding college-level coursework is that it should be reserved for those students who have college aspirations or who are planning to attend a top, four-year college. In connection with this attitude and perception is the belief that student groups underrepresented in the AP program are so due to their lack of ability to handle the rigor and challenge of a college-level curriculum. These student groups come to them less prepared than the students who participate regularly in AP coursework. These revealed attitudes and perceptions support the existing research concerning academic expectations of African Americans (Callahan, 2005; Chubbuck, Staiger, 2004; Taliaferro & Decuir-Gunby, 2008). Collected data from the Chapel Hill Carrboro City Schools indicate African Americans to be the most underrepresented student group in the district's AP program. Reviewed literature indicates that teachers have lower expectations of African American students and other minority groups. (Callahan, 2005; Chubbuck, Staiger, 2004; Taliaferro & Decuir-Gunby, 2008).

2. Based on the defined tenets of Invitational Education Theory, what uncovered attitudes and perceptions of high school educators about college-level coursework align with inviting practices and which ones align with disinviting practices in the educational setting? to distinguish between inviting and disinviting practices. The results, based on the four levels of functioning defined in the research by invitation theorists were: 44% of uncovered educators' attitudes and perceptions aligned with practices identified as inviting with 50% of those practices labeled as unintentionally. In contrast, 56% of uncovered educators' attitudes and perceptions aligned with practices identified as disinviting with 80% of those practices labeled as

unintentionally. The major function for identified educators' attitudes and perceptions was unintentionally disinviting.

3. What is the relationship, if any, between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African American students in Advanced Placement® courses? A one-tailed t test was not needed. The Equal Opportunity Schools Staff Survey did not differentiate between African American students and other minority student groups' participation in Advanced Placement® coursework. The tool used by participants explored attitudes and perceptions around themes pertaining to "students of color," "underrepresented student groups," and "lack of diversity." While not being able to clearly differentiate between African American students and other minority groups, discovered attitudes and perceptions of high school educators about college-level coursework align closely with an unintentionally disinviting environment. This may impact the participation of African American students in AP coursework. Forty-four percent of uncovered educators' attitudes and perceptions aligned with practices identified as inviting with 50% of those practices labeled as unintentionally. In contrast, 56% of uncovered educators' attitudes and perceptions aligned with practices identified as disinviting with 80% of those practices labeled as unintentionally. The major function for identified educators' attitudes and perceptions was unintentionally disinviting.

Other inquiry of this study:

1. Is there a difference larger than 3% in the uncovered attitudes and perceptions about college-level coursework between educators at the two high schools based on years in the profession? A Pearson chi-square test was conducted to compare overall

responses from school 1 and school 2. The analysis revealed no significant difference between the two study sites in collected responses based on educators' years of experience in the field of education.

CHAPTER 5: DISSCUSSION AND RECOMMENDATIONS

"The academy is not paradise. But learning is a place where paradise can be created. The classroom, with all its limitations, remains a location of possibility. In that field of possibility we have the opportunity to labor for freedom, to demand of ourselves and our comrades, an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom."

~bell hooks - American author, educator, and feminist

Summary of the Study

The purpose of this study was to uncover attitudes and perceptions educators have about college-level coursework and the impact this has for African American students' participation in Advanced Placement® coursework. In addition, the researcher is also contributing to existing literature in this educational area. The study was a mixed method design utilizing both quantitative and qualitative data collection. The data acquired was obtained from the Chapel Hill-Carrboro City School District in North Carolina utilizing the Equal Opportunity School (EOS) Staff Survey. Data analyzed was for n=171 (were less-noted as such) educators from two of the three high schools in the district during the 2013-2014 school year. This chapter consists of a summary of the purpose and structure of the study, and is followed by the major findings related to Invitational Educational Theory. Findings from this research are discussed in relation to the definition, function, and characteristics of an inviting school and the impact this has on African American students' enrollment in AP coursework. Finally discussed is Invitational Education Theory's possible influence on teacher and leadership attitudes and perceptions targeting the school environment and its impact on African American students' participation in AP coursework.

Findings and Discussion

This research project was designed to uncover attitudes and perceptions high school

educators have about college-level coursework and how these attitudes and perceptions have an impact on the enrollment of African American students in Advanced Placement® coursework. The research utilized the following questions throughout the research and data analysis:

1. What are the attitudes and perceptions held by high school educators concerning college-level coursework?
2. Based on the tenets of Invitational Education Theory, what uncovered attitudes and perceptions of high school educators about college-level coursework align with inviting practices and which ones align with disinviting practices in the educational setting?
3. What is the relationship, if any between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African American students in Advanced Placement® courses?

Other inquiry of this study:

1. Is there a difference larger than 3% in the uncovered attitudes and perceptions about college-level coursework between educators at the two high schools based on their years in the profession?

High School Educators' Attitudes, Perceptions about College-Level Coursework

The first research question in the study sought to reveal attitudes and perceptions educators in the high school setting have about college-level coursework. The analysis of the quantitative data revealed several findings. First, educators would like for all students to know about AP options early on in their high school careers. Having the information early can help parents and students decide the path most likely to be taken once high school is completed. Once all have had an opportunity to investigate AP options and make choices, educators believe AP

coursework is then reserved for those students who have college aspirations and are planning to attend a top, four-year college. Educators' perceptions revealed that the curriculum is designed to challenge students and prepare them for work on the higher education level. Next, educators' responses indicated students not participating in AP courses come to the schools less prepared than other students. Closely related to this finding is the belief that students who do not participate in AP work find it to be too rigorous and feel they can't be successful, therefore limiting their participation in AP coursework. However, when asked about the population of students passing an AP course if given the opportunity, educators estimated 51%-100% would pass.

Another finding was that educators believe students benefit from taking AP coursework. This supports the findings in the existing literature. Research reveals students who do not have access to these courses are therefore not afforded the extra GPA points and other college admissions benefits such as college-credit and admissions advantage for taking AP classes (Moore & Slate, 2008; Schneider, 2009; Solorzano & Ornelas, 2002; Southworth & Mickelson, 2007). The final finding made from this data collection concerning attitudes and perceptions about college-level coursework indicates there is a definite lack of diversity in the schools' AP program. Students of lower-income and students of color in AP coursework do not reflect the demographics of the general student population. While this lack is noted and educators perceive it to be a problem, they do not believe it is something in need of addressing. It was also noted educators do not want to employ the practice of auto-enrolling students in AP coursework to increase diversity. Eighty percent of study participants from school 1 and 92% of study participants from school 2 chose strongly disagree to somewhat disagree to this practice.

Attitudes and Perceptions, Inviting and Disinviting Practices of Invitational Education Theory

The second area of focus for this research study was to determine if attitudes and perceptions held by educators in the high school setting were measured as inviting or disinviting. Current literature is consistent with Invitational Education Theory as an appropriate framework to assess the level to which the school environment is inviting (Haigh, 2011; Purkey & Aspy, 2003; Schmidt, 2007). For this area of the study ten (only nine could be assessed for function) quantitative survey items were discussed and assessed in relation to the definition and structure for the four-levels of functioning found in the research of Invitational Education Theory. Of the nine survey items assessed, 44% aligned as inviting with 50% of these practices being unintentionally. In comparison, 56% aligned as disinviting with 80% of these being unintentionally. It was determined the majority of attitudes and perceptions of educators align with the function of unintentionally disinviting. Participants' responses were not inclusive of the entire student population. Emerging themes from the collected data made allowances in AP participation for underrepresented student groups if upon entering high school they were found to be prepared for the rigor and challenge of the coursework as those students already in AP attendance. In addition to this finding, AP coursework should be reserved for those students with college aspirations and planning to attend a top, four year college. These reported responses determined the overall functioning level of unintentionally disinviting.

Educators who function at the level of unintentionally disinviting are usually described as those lacking consistency and stance. They may not intend to be disinviting to certain groups of students but damage is done (Purkey, 1991; Schmidt, 2004). Based on the tenets of Invitational

Education, practices aligning with intentionally inviting seek to create a courteous and supportive educational habitat in which all students will flourish (Haigh, 2011; Schmidt, 2004).

Impact of Educators' Attitudes and Perceptions on African American Students' Participation in Advanced Placement® Coursework

The last major research question for this study was to determine if educators' attitudes and perceptions about college-level coursework had any impact on the participation of African American students in Advanced Placement® courses. For this area of the study, quantitative data was analyzed from the Equal Opportunity Schools Staff Survey. While the survey did not clearly differentiate between African American students and other minority groups, discovered attitudes and perceptions of high school educators about college-level coursework align closely with an unintentionally disinviting environment. The quantitative data analysis concluded 56% of the attitudes and perceptions analyzed were in the functioning category of disinviting with 80% designated as unintentionally. In an unintentionally disinviting environment African Americans would not feel welcomed to participate in AP coursework thus possibly establishing a negative impact on enrollment. Invitational theorists believe hurtful and harmful messages happen in an unintentionally disinviting environment although people do not intend them (Purkey, 1991; Schmidt, 2007). Actions are based on misconceptions of cultural differences and stereotypic views of diverse characteristics (Schmidt, 2004). Educators' responses indicated there is a lack of knowledge to create and sustain an environment inviting all students to optimal development. An invitation to learn does not exist until purposeful actions are employed to help African Americans and all student groups engage in learning activities developing strong academic momentum (Kronenberg & Strahan, 2010; Schmidt, 2004).

In addition to the functioning level, major themes are being examined for consistency with the six cultural components - empowerment, encouragement, enjoyment, enlistment, equity, and expectations from Invitational Education Theory describing the ideal environment. In an intentionally inviting environment, these cultural components are the basis for the planning of processes, programs, and policies (Purkey, 1991; Purkey & Aspy, 2003). Empowerment for African American students would negate marginalization and elevate components of equity and enlistment so access is fair and coupled with active, multiple ways of inviting all to participate (Kronenberg & Strahan, 2010; Schmidt, 2007). Based on the researched principles of Invitational Education, African American students would be encouraged consistently to accept challenges due to the high expectations educators have for them in the environment. Relationships in this environment become enjoyable due to established opportunities celebrating the accomplishments of all involved (Schmidt, 2007). As noted in the literature review, a learning environment operating from an invitational perspective would have the expectation of all students achieving academic excellence. The student's socio-economic background, ethnic heritage, or family history would not be considered as an antecedent to academic performance (Schmidt, 2004, 2007).

Impact of Educator's Years of Experience on Attitudes and Perceptions

Another inquiry of this study was to determine if attitudes and perceptions of high school educators differed between the two schools based on years of experience in the field of education. For this area of the study quantitative demographic data was utilized. Data conclusions revealed majority of study participants from school 1 and school 2 fell into category (3) indicating four or more years in the field of education. Pearson's chi-squared test revealed there was not a significant difference noted between school 1 and school 2 study participants'

responses. Collected responses from both schools revealed more similarities than differences. Two survey items reported difference in responses and have been noted.

Qualitative Data Discussion

Strengths and Weaknesses

As found in this study, the emerging strengths noted in the AP program are a quality curriculum, an abundance of courses, strong work ethic of students, and excellent teaching staff. Students who participate have additional benefits in the form of extra credit points for GPA, college credit, and admission advantage. The study participants' responses determined the program is of value for the school district.

However, one of the significant weaknesses listed by study participants important to this study was that of diversity in the AP program. As noted earlier in the literature review, this lack of diversity finding was consistent with the literature pertaining to African American students' participation in coursework promoting challenge and rigor (Darling-Hammond, 2007; Moore & Slate, 2008; Schneider, 2009; Solorzano & Ornelas, 2002; Southworth & Mickelson, 2007). In this study, students with access to more challenging and rigorous coursework in the AP program are those who have participated in academically gifted programs in the elementary and middle school setting. Educators revealed White students are the dominant student group benefitting from the involvement in the Advanced Placement® program. Recommended changes continue to be offered from the College Board to the nation's schools addressing the noted underrepresentation and participation of African-American students in AP coursework (8th Annual Report to the Nation, 2012).

Programs and Practices

The issue of student preparedness to maintain excellence in the AP program was

significant in addressing success for all students. Quantitative and qualitative educators' responses determined African American students and other underrepresented minority student groups do not have the reading, writing, and organizational skills to handle the rigor and challenge of the demanding curriculum. Due to this belief, to initiate practices such as "auto-enroll" or "AP coursework to all students" in the learning environment would "water down" the AP program and compromise the standard of high expectations. In an attempt to prevent this from happening, programs and practices suggested were those to bridge the gap between White students who currently and consistently participate and African Americans who are under-represented in AP coursework. This was consistent with reported findings from the literature concerning AP participation (Boykin & Noguera, 2011; Solorzano & Ornelas, 2002).

A caution is appropriate when considering African Americans and other under-represented minority groups to be unprepared to handle AP coursework. While concerted efforts have been made in the form of programs and practices to increase access to AP classrooms, hundreds of thousands of prepared students were left out of an AP subject (8th Annual Report to the Nation, 2012). This research from the College Board found African Americans to be the most underrepresented group in AP classrooms. The data collected showed 80%, four out of five African Americans were either left out of an AP subject for which they had potential or attended a school that did not offer the subject.

Additional Ideas and Feedback

According to the responses collected in the qualitative data, it is not enough to increase the number of African American students and other underrepresented minority groups enrolled in AP coursework. A standard of high expectations, rigor, and challenge must be maintained within the AP framework. This was determined as a major finding. Extra help, after school

tutoring, pre-AP courses, AP Summer Camp, and parent classes were listed as possible support for African American students' success in AP. While the ideas and feedback provided by educators focused mostly on lack of students preparation for the rigor and challenge of AP coursework, invitational theorists believe there is a great need for schools to examine barriers in the form of low expectations, tracking programs, and lack of information that unintentionally disinvite them from enrolling in AP classes (College Board, 2012; Darling-Hammond, 2007; Purkey, 1991; Schmidt, 2007). In an intentionally inviting environment success is not solely the responsibility of the student. Schools have committed to having appropriate processes, policies, and programs in place promoting student success (Purkey & Aspy, 2003).

In conclusion, the research from this study seemed to support much of the research from this study's literature review on Invitational Education Theory as it relates to an unintentionally disinviting school environment. African American students and other underrepresented minority groups enrollment in Advanced Placement® coursework is largely contingent upon the school's environment (College Board, 2012; Darling-Hammond, 2007; Moore & Slate, 2008; Purkey, 1991; Schmidt, 2007; Schneider, 2009; Solorzano & Ornelas, 2002; Southworth & Mickelson, 2007). It can be concluded from the quantitative and qualitative data collection that a disparity exists when comparing the participation of African American students and their White counterparts in each schools' Advanced Placement® program. The research answers the major question asked of the study, which was *"What is the relationship, if any between discovered attitudes and perceptions held by high school educators about college-level coursework and the participation of African American students in Advanced Placement® courses?"* The research from this study indicates that the six cultural components of Invitational Education Theory (empowerment, encouragement, enjoyment, enlistment, equity, and expectation) are not the basis

in which policies, programs, and processes have been developed, intentionally inviting all students to participate in the rigor and challenge of AP coursework. The collected data from this study determined African American students and other underrepresented minority groups enroll in Advanced Placement® courses at a rate disproportionately to their presence in the school population. The study indicated educators' responses revealed the lack of diversity in AP coursework, however they do not believe it to be a problem of priority. With AP courses being the gateway for college admissions, college credit, extra GPA points, and many opportunities for college scholarships, the disparity warrants the attention of education leaders.

Implications for Educational Leaders

The completion of this study found the United States commemorating the 60th year anniversary of the Brown vs. Board of Education (1954) decision. This landmark case ended legal segregation in public schools. Although this ruling declared the separate but equal standard unconstitutional to segregate students by color, other practices such as tracking students into either AP coursework or basic skills curriculum continues to segregate classrooms across the United States (Darling-Hammond, 2007; Reeves, 2009; Solorzano & Ornelas, 2002). Thus, the equity issue in education continues to be a challenge for many schools and districts. While there is a tremendous and constant focus on strategies and practices to close the achievement gap, disparities in the Advanced Placement® enrollment gap exists as well (College Board, 2012; Darling-Hammond, 2007; Purkey, 1991; Schmidt, 2007)). The Chapel Hill Carrboro City School district is not exempt from this problem when comparing the percentage of African American students in the school's population with the percentage represented in AP classes (see Tables 10 and 11). There is a great need for educators to realize the impact of the school environment on student achievement and progress. Choices to invite change must be

guided and based on evidence and not opinion (Reeves, 2009). With a thorough understanding of the Invitational Education Theory framework, educators can gauge the school environment and make the needed adjustments to improve teaching and learning that invites all students to maximum academic potential (Kronenberg & Strahan, 2010; Purkey & Aspy, 2003; Schmidt, 2004).

Superintendents

The role of the district Superintendent is to serve as the instructional leader and guide for other educators in the district. While schools struggle to provide quality education for all, it is important for the Superintendent to help district educators distinguish external causes from internal perceptions and attitudes. The instructional leader of the district will need to provide tools and strategies challenging individuals to assess their own assumptions concerning the intellectual ability of African Americans and other minority students. By teaching individuals levels of functioning within the Invitational Education Theory framework, messages can be created to consistently and intentionally invite diverse populations to feel accepted, valued, and worthwhile (Schmidt, 2004). Disparities in AP enrollment will be monitored so that subsequent structures, processes, and practices can be adjusted as needed. If Superintendents understand the importance of the research from this study, structures, practices, and processes can begin to transform the educational system at every necessary level in the district. As schools begin to utilize Invitational Education Theory, Superintendents need to be aware of choices and styles of interaction that relate to an inviting learning environment. This new, inviting environment will create a new belief system. With the embracing of all students in this new system, the Superintendent will make certain elementary and middle schools will adequately prepare all

students for the rigor and challenge of AP coursework. The expectation is to guarantee all students have excellent opportunities for learning.

Principals

One of the two variables having the most profound influence on student achievement is leadership quality **(**Darling-Hammond, 2007; Reeves, 2009; Solorzano & Ornelas, 2002). In an intentionally inviting school setting, it is not sufficient for the student or parent to be solely responsible for the success in AP coursework (Schmidt, 2004). Principals will make sure there is a correct collaboration in place between teachers, students, and parents. Appropriate measures are in place to promote student success. As principals begin to explore the tenets of Invitational Education Theory, this study could serve as a resource for additional information related to an inviting school environment and the impact this has on the participation of African American students in the AP program. Reeves (2009) states that "When student failures decrease, student behavior improves, faculty morale is better, resources allocated to remedial courses and course repetitions are reduced, and resources invested in electives and advanced courses increase" (p. 103). This study could help principals understand the elements described in an intentionally inviting environment and how the six cultural components (empowerment, encouragement, enjoyment, enlistment, equity, and expectations) establish the basis for all practices, structures, and processes implemented.

Teachers

In connection with the principal, the other variable having the most influence on student achievement is that of the teacher (Reeves, 2009). In their book, *Creating the Opportunity To Learn,* Boykin and Noguera (2011), suggest old paradigms of learning be replaced with a new paradigm-one that compels teachers to devise ways to cultivate talent and ability. Teachers'

actions are those of commitment and willingness to change a belief system framed around stereotypical characteristics of student groups. Boykin and Noguera (2011) state, "If we are going to make greater progress in educating all children, then we must ensure that all students have an equal opportunity to learn. If we are to succeed in making sure that all students receive an education that prepares them for the present and the future, then we must enact policies that actively promote educational equity and foster critical and innovative thinking, intrinsic motivation, creativity, and problem solving. A commitment to equity will also force schools to adopt educational practices that allow them to take responsibility for student outcomes, evidence of mastery, and conditions that foster effective teaching and higher levels of learning" (pp. 195-196). This research study reported the tenets and strategies of an inviting environment. Teachers could use the information in the literature review and collected data to better understand the importance of messages and actions that invite African American students to participate in AP coursework. Teachers could use this information to examine the relationship between attitudes and perceptions and their impact on academic expectations concerning African American students.

State Leaders

While this study was conducted in one district in North Carolina and cannot be generalized, there are lessons to be learned from this study. State leaders need to be aware of the disparities in Advanced Placement® enrollment and how this impacts the opportunity gap in local education agencies. Reforming the educational system will require state leaders to embrace strategies employing systemic change in the structural as well as in the ideological and philosophical foundation. State leaders must make sure that K-16 education does not focus on educating a small elite group for higher education. All students need skills and knowledge

including problem solving, critical thinking, and technical skills. State leaders must see the need in the 21st century to provide all of its constituents with a challenging and rigorous education so students can compete on the global level. As state leaders ensure and embrace an inclusive system of education guaranteeing all students with the opportunity to enroll and participate in AP coursework, reforms to the structural foundation can begin.

Parents

Although this study was developed to assist education leaders, specifically those assigned to monitor and manage schools and districts, parents can also benefit from this study. Parents can use the information in this study regarding Invitational Education Theory to better understand an environment inviting all students to their greatest potential. In an attempt to increase the number of African American students and other underrepresented minority groups in Advanced Placement® coursework, parents need to have information to examine the process for recruiting students for such programs (Boykin & Noguera, 2011; Darling-Hammond, 2007; Schmidt, 2004). Parents need to know the benefits for students participating in AP coursework. An aim of Invitational Education is to understand what it takes to create, maintain and enhance communication and collaboration between schools and parents (Purkey, 1991; Purkey & Aspy, 2003; Schmidt, 2007). Parents can use the information from this study to better understand important partnerships benefitting student learning in an inviting environment.

Limitations of the Study

There is an abundance of research focused on the academic abilities and achievements of African American students. As revealed in the literature review from Chapter 2, early research focused mainly on the failure of African American students to perform or achieve at same levels as their White counterparts ((Darling-Hammond, 2007; Ferguson & Mehta, 2004; Mickelson &

Heath, 1999; Petersen & Gross, 2008). However the school environment should foster a climate of high expectations and equal opportunities for all of its students. In recent years, this has become a focus in addition to the achievement gap-the opportunity gap. Twenty-first century research indicates educators and policy makers focus on schools providing quality resources and facilities- not just the lack of academic performance and inferiority of the students (Darling-Hammond, 2007; Ladson-Billings, 2006; Love, 2004; O'Connor, 2006; Taylor, 2006; Wiggan, 2007).

Presently, there is information pertaining to the disparities noted in AP classrooms across the nation, more research is needed to examine the processes in which students are recruited and identified to enroll in such programs. The tenets of Invitational Education Theory provide the structure for providing messages and actions of intentionally inviting environments for all students. While this research can add to the existing literature on Invitational Education Theory, there are several limitations that should be noted and possibly expanded on in future research. The limitations for the study are:

1. This study focuses on African American students in lieu of the fact that other groups could also benefit. Research uncovered the under-representation of Hispanic students in AP coursework.
2. This study was conducted on two high schools in the district of Chapel Hill Carrboro City Schools. Therefore, it should not be generalized to other populations.
3. Other school factors such as culture, school climate, and effectiveness of administrators were not investigated in depth. Both qualitative and quantitative data collection could help determine how these factors help to influence course selection choices of African American students.

4. In order to determine statistical significance yielding more generalizable results, the sample size would have to be increased. This would provide the researcher with the probability of increasing educators from all ethnicities. The study participants used for this study had similar demographics in years of service and ethnicities, yielding similar results in data collected from both schools. The sample n = 171.
5. The researcher made every attempt to obtain quality data. It should be noted that the researcher has a close connection to the district. While writing and conducting this study, the researcher served as an assistant principal at an elementary school in the district. The researcher lead school and district level equity groups with the established belief that disparities existed in various gifted programs in the district. The researcher has a passion for providing learning opportunities in the AP program for African American students and other underrepresented minority student groups.
6. This study did not explore the perceptions African American students and other under represented students have about their lack of participation in AP coursework. Data collected from educators determined a myriad of reasons such as peer pressure, lack of encouragement from parents, other priorities in the form of athletics, and lack of interest. Further research involving student perceptions would provide more insight for removing barriers involving participation in the AP program.
7. The data collection method did not include interviews or focus groups from the chosen school sites. This could have provided additional insight to the underrepresentation of African American students and other underrepresented minority groups in the AP program.

8. Data from parents was not included in this study. Feedback from these stakeholders is necessary in order to improve communication with African American parents and other under represented minority student groups not enrolling in AP coursework . This additional insight from parents can provide schools and systems with the best suggestions for helping them obtain the most current information on AP coursework options.

Recommendations for Future Research

Based on the results of this study, the following are recommendations for future research:

- The Chapel Hill Carrboro City School district should use a longitudinal approach for data collection to compare educator perceptions over time (base year and three years later) and trends toward African American enrollment in AP coursework.
- Conduct studies immediately after the registration process has taken place to better ascertain diversity in AP enrollment. This information will be helpful in obtaining quality of dissemination of information pertaining to AP coursework, course requirements, prerequisites, and expectations relating to readiness and interest.
- While this study adds to the existing research on Invitational Education it is suggested that additional research be conducted with a larger sample. Replication of the study at other high schools would help determine if the findings are similar within the state, region, or nationally.
- An area that was not extensively examined in this study is the impact that socio-economic status could have on the enrollment of African American students in AP coursework. Socio-economic status was not furnished by the district but could provide valuable insight into the research on AP disparities.

- Perform exploratory analysis to determine the underlying structure defining an inviting school environment. This study used educators' responses to determine the level to which the environment is perceived as inviting.
- While students' attitudes and perceptions were not utilized for this study, their responses could benefit this study and future studies of this kind. It may be of value to replicate the study comparing students' perceptions to that of educators for the sole purpose of professional development. The differences in perceptions are likely to be significant and beneficial to explore.

Summary

African American students are less likely to be enrolled in classes with higher-order thinking strategies, rigor, and challenge in their prescribed course of study (Flores, 2007; Isaacs, 2001; Roderick et al., 2009; Southwest & Mickelson, 2007). Recommendations which could eliminate barriers to Advanced Placement® coursework for African American students would positively affect achievement for all students. While this study took place in the central region of the state of North Carolina, the disparities in AP enrollment have been observed throughout classrooms in the United States (8th Annual Report to the Nation, 2012). Therefore, it is a necessity to monitor AP enrollment and success patterns to provide an important measure of our current status in challenging all students with a rigorous curriculum. Due to an involving economy and culture, America continues to embrace the need for higher standards in the workplace and in the college curriculum.

School and district administrators must be committed to dismantling current attitudes, perceptions, structures, patterns, and barriers preventing African American students and other underrepresented students groups from enrolling in AP coursework. Invitational Education

Theory can be used to create characteristics of an inviting environment for all students. Invitational research focuses on the construction of creating and maintaining motivational learning situations and detecting and eliminating disinviting ones. The collective goal of teachers, administrators, and district leaders must be to empower all students with a rigorous, challenging, and relevant curriculum. The opportunity to participate in AP coursework prepares students for challenges in the workplace and at the college level. Until the opportunity gaps are closed for African American and other underrepresented student groups, they will continue to be less prepared for postsecondary options. Responsive and transformative action is needed to meet the challenge of ensuring access to Advanced Placement® coursework for the underserved in our schools. Moving forward with equitable practices will be a benefit to many students.

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APPENDIX A: EQUAL OPPORTUNITY SCHOOLS (EOS) STAFF SURVEY

Chapel Hill-Carrboro City School District (East Chapel Hill /Carrboro High)

1. To begin, please share your thoughts about the strengths and/or weaknesses of the AP program at East Chapel Hill High or Carrboro High. Identify the school.

_____
_____
_____
_____
_____
_____

2. Please estimate the percentage of students at East/Carrboro who:

_____ Find their coursework appropriately challenging
_____ Would like to go to at least a two or four year college
_____ Will graduate from high school prepared to succeed at a two or four year college

3. Please indicate how strongly you believe each item below predicts student success in AP classes.

	Very good predictor	Good Predictor	Not a predictor
GPA	O	O	O
Test Scores	O	O	O
Prerequisites	O	O	O
Student motivation	O	O	O
Quality of teaching	O	O	O
Student interest	O	O	O
Other	O	O	O

4. Please estimate the percentage of students at East/Carrboro who:

_____ Would benefit from taking an AP class before graduating
_____ Would pass an AP class if given the opportunity
_____ Feel encouraged to take an AP class
_____ Feel welcome in AP

5. Please indicate the extent to which you agree that the following actions would ensure that more students succeed in AP classes at East/Carrboro.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
There is not much more that could be done	O	O	O	O	O	O
Increase the academic intensity of curriculum in elementary and middle schools	O	O	O	O	O	O
Increase the academic intensity in the first few years of high school	O	O	O	O	O	O

Inform students earlier about AP options	O	O	O	O	O	O
Encourage more students to enroll in AP classes	O	O	O	O	O	O
Auto-enroll more students for AP classes	O	O	O	O	O	O
Provide professional development to help the staff prepare more students for success in AP	O	O	O	O	O	O
No more professional development is needed	O	O	O	O	O	O
Teachers and staff can prepare more students to succeed in AP	O	O	O	O	O	O
Require all students to take at least on AP class before they graduate	O	O	O	O	O	O
Other	O	O	O	O	O	O

6. Please answer the following questions about AP:

	Yes	**No**	**Unsure**
Does taking AP classes boost students' chances of getting into college?	O	O	O
Do AP classes prepare students to do better once they are in college?	O	O	O
Do AP classes help students earn college credit?	O	O	O
Are AP classes designed specifically for students who are planning to go to top four-year colleges?	O	O	O

7. Please state your level of agreement with the following statements:

	Strongly Disagree	**Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Agree**	**Strongly Agree**
You can always greatly	O	O	O	O	O	O

change how intelligent you are						
You can learn new things, but you can't change your basic intelligence	O	O	O	O	O	O
No matter how much intelligence you have, you can always change it quite a bit	O	O	O	O	O	O
You have a certain amount of intelligence and you really can't do very much to change it	O	O	O	O	O	O

8. To the best of your knowledge, how important are the following reasons why students might not take an AP class?

	Not at all important	Very unimportant	Somewhat unimportant	Somewhat important	Very important	Extremely important
They don't know much about AP classes	O	O	O	O	O	O
They think AP classes are probably too much work	O	O	O	O	O	O
They don't think they will be	O	O	O	O	O	O

successful/get a good grade						
They don't have many friend planning to take AP classes	O	O	O	O	O	O
They don't think they are eligible to take an AP class	O	O	O	O	O	O
They don't decide not to take an AP class; they are just given a schedule without one	O	O	O	O	O	O
They have competing priorities in their schedule, e.g. sports, band, CTE, that prevent them from taking AP classes	O	O	O	O	O	O
Other	O	O	O	O	O	O

9. Who should staff members encourage to take AP classes? (Check all that apply.)

□ All students
□ Only those students who we think will succeed in AP
□ Only those students who have expressed an interest in AP
□ Any student who has college aspirations
□ We should not actively recruit students for AP; it is a decision best decided by students and their parents
□ Other_____

10. Describe the diversity of the AP program at East/Carrboro.

O There are substantially fewer low-income students and students of color in AP than in the school as a whole.
O There are slightly fewer low-income students and students of color in AP than in the school as a whole.
O The AP program is as diverse as the school population.
O There are slightly more low-income students and students of color in AP than in the school as a whole.
O There are substantially more low-income students and students of color in AP than in the school as a whole.

11. Why do you think East/Carrboro's AP program is not as diverse as the whole school? Because the student groups that are under-represented in AP:

	Major Reason	**Minor Reason**	**Not A Reason**

Come to us less prepared than other students	O	O	O
Have less information about AP	O	O	O
Are less likely to be encouraged by staff to participate	O	O	O
Have tougher home lives	O	O	O
Are sometimes overlooked because they do not appear to be "traditional" AP students	O	O	O
Other	O	O	O

12. How big of a problem do you think the relative lack of diversity in East/Carrboro's AP program is?

O It's a big problem that we need to address
O It's a big problem, but there are more pressing priorities for us to address
O It's only a minor problem or not a problem at all

13. Keeping any students you named in mind, what programs or practices would you put in place (or expand) to ensure success for all AP students?

_____
_____
_____
_____

14. How long have you worked at East/Carrboro High?

O This is my first year at East/Carrboro
O 1-3 years
O 4 years or longer

15. Would you be interested in teaching an AP class?

O Yes
O No
O I am not a teacher

16. We welcome any additional ideas and feedback you would like to share.

_____
_____

_____
_____
_____

APPENDIX B: LETTER TO PARTICIPATING EDUCATORS

Equal Opportunity Schools & Chapel Hill Carrboro City School District Staff Survey (educator letter)

Dear Educator,

Within a week or so, you will be receiving a survey as part of a research study. This is a survey designed for the educators in the high school setting of the Chapel Hill Carrboro City Schools. We are administering these staff surveys as part of our partnership with ***Equal Opportunity Schools (EOS)***. EOS is a non-profit organization who works with schools and districts to ensure that AP/IB participation reflects the racial and socio-economic demographics of the school.

The survey was designed by Equal Opportunity Schools to help us:

- Uncover attitudes and perceptions about college-level courses
- Examine causes of equity issues in our school
- Identify students who have the potential to benefit from increased academic challenge
- Gather information about current resources and supports for students and staff as well as suggestions to meet additional needs.

Your feedback is important to us so we will have all the facts. The goal is 100% participation so we can get accurate information about our school. The survey should take about 30 minutes and is primarily multiple choice. Once you submit a response for a question you will not be able to go back and change your answer.

Thank you for your participation. We truly value your experience and opinions!

Respectfully,

Your Administrative Team,
Equal Opportunity Schools, and the Chapel Hill Carrboro City School District

APPENDIX C: TABLE FOR PARTICIPANTS' DEMOGRAPHICS

Respondent	High School	Years in Education	Teacher or Other
1			
2			
3			
4			
5			
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30			
31			

Scale:
School: 1= Carrboro High; 2= East Chapel Hill High
Years in education: 1= less than year; 2= 1-3 years; 3= 4 or more years
Teacher or Other: 1= Teacher; 2= Other

APPENDIX D: TABLE OF QUESTIONS CHOSEN FROM SURVEY TO MEASURE INVITATIONAL EDUCATION THEORY CONSTRUCTS

(Questions can be used with more than one construct)

Empowerment

#9 – Who should staff members encourage to take AP classes?

- All students
- Only those students who we think will succeed in AP
- Any student who has college aspirations
- We should not actively recruit students for AP; it is a decision best decided by students and their parents
- Other

Encouragement

#4 – Please estimate the percentage at East/Carrboro who:

- Would benefit from taking an AP class before graduating
- Would pass an AP class if given the opportunity
- Feel encouraged to take an AP class
- Feel welcome in AP

#9 – See above

Enjoyment

#8 – To the best of your knowledge, how important are the following reasons why students might not take an AP Class?

- They don't know much about AP classes
- They think AP classes are probably too much work
- They don't think that they will be successful/get a good grade
- They don't have many friends who are planning to take AP classes
- They don't think they are eligible to take an AP class
- They don't decide not to take an AP class; they are just given a schedule without one
- They have competing priorities in their schedule, e.g. sports, band, CTE, that prevent them from taking AP classes
- Other

Enlistment

#3 – Please indicate how strongly you believe each item below predicts student success in AP classes.

- GPA
- Test scores
- Prerequisites
- Student motivation
- Quality of teaching
- Student interest
- Other

#11 – Why do you think East's/Carrboro's AP program is not as diverse as the whole school? Because the students groups that are under-represented in AP are:

#12 – How big of a problem do you think the relative lack of diversity in East's/Carrboro's AP program is?

#16 – What programs or practices would you put in place (or expand) to ensure success for all AP students?

Equity

#5 – Please indicate the extent to which you agree that the following actions would ensure that more students succeed in AP classes at East/Carrboro High.

- o There is not much more that could be done
- o Increase the academic intensity of curriculum in elementary and middle schools
- o Increase the academic intensity in the first few years of high school
- o Inform students earlier about AP options
- o Encourage more students to enroll in AP classes
- o Auto-enroll more students for AP classes
- o Provide professional development to help the staff to prepare more students for success in AP
- o No more professional development is needed; teachers and staff can prepare more students to succeed in AP
- o Require all students to take at least on AP class before they graduate
- o Other

#6 – Please answer the following questions about AP:

- o Does taking AP classes boost students' chances of getting into college?
- o Do AP classes prepare students to do better one they are in college?
- o Do AP classes help students earn college credit?
- o Are AP classes designed specifically for students who are planning to go to top four-year colleges?

#10 – Describe the diversity of the AP program at East/Carrboro.

Expectations

#5 – See above

#7 – Please state your level of agreement with the following statements:

- o You can always greatly change how intelligent you are
- o You can learn new things but you can't really change your basic intelligence
- o No matter how much intelligence you have, you can always change it quite a bit
- o You have a certain amount of intelligence and you really can't do very much to change it

APPENDIX E: TABLE FOR INVITING AND DISINVITING PRACTICES

Survey Item	Inviting	Disinviting
# 1		
# 2		
# 3		
# 4		
# 5		
# 6		
# 7		
# 8		
# 9		
# 10		
Total		

Scale:
Inviting: Inv.
Disinviting: D-Inv.

APPENDIX F: INSTITUTIONAL REVIEW BOARD APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834

Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Initial Approval: Expedited

From:	Social/Behavioral IRB
To:	Elaine Campbell
CC:	Kermit Buckner
Date:	5/6/2014
Re:	UMCIRB 14-000418 Equity and Access

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 5/6/2014 to 5/5/2015. The research study is eligible for review under expedited category #7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Elaine Campbell Dissertation With EOS Revisions.docx	Study Protocol or Grant Application
EOS Harvard Staff Survey for East Chapel and Carrboro High Schools.docx	Surveys and Questionnaires
Letter about EOS Staff Survey.docx	Additional Items
Letter about EOS Staff Survey.docx	Consent Forms

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX G: SUMMARY OF INVITING OR DISINVITING EDUCATORS' ATTITUDES AND PERCEPTIONS

Survey item #9 - Attitudes and perceptions concerning students taking AP classes

Selected answer(s): Any student with college aspirations (received the most response)
School 1 (n = 65) 27/65 (42%)
School 2 (n = 106) 39/106 (37%)

Level of Functioning – Disinviting (Unintentionally)
Analyzed responses indicate all students should not have access to AP coursework. The answer "all students" was provided as a choice with 18/65 (28%) of school 1 participants and 29/106 (27%) of school 2 participants choosing this as an answer (see Table 15). Educators establishing a policy that allows only students with college aspirations to enroll in AP coursework is considered disinviting although such may not be the intent (Purkey, 1991).

Survey item #8 - Attitudes and perceptions on students not taking AP classes

Selected answer(s):
School 1: They think AP classes are too much work
School 2: They don't think they will be successful/get a good grade
School 1 (n = 65) 64/65 (98%) chose this to be somewhat important to extremely important
School 2 (n = 106) 103/106 (97%) chose this to be somewhat important to extremely important

Level of Functioning – Disinviting (Unintentionally)
Educator responses (see Table 16) indicate those students not taking AP classes believe the coursework is too rigorous and believe success is not possible. Actions or narratives based on misconceptions of cultural differences and stereotypic views of diverse characteristics are considered disinviting and counter-productive (Schmidt, 2004).

Survey item #4 - Estimate percentage of students at Carrboro High or East Chapel Hill High who: a) would benefit from taking an AP class before graduating, b) would pass an AP class if given the opportunity, c) feel encouraged to take an AP class, d) feel welcome in AP

Selected answer(s): Would pass an AP class if given the opportunity (received most responses)
School 1 (n = 65) 53/65 (82%) estimated 51%-100% of student population
School 2 (n = 106) 96/106 (92%) estimated 51%-100% of student population

Level of Functioning – Inviting (Unintentionally)
The educators' responses indicate belief that a high percentage of students would pass an AP class (see Table 17). An estimation of 100% of students would be considered intentionally inviting. Due to this high estimation, educators would create policies, processes, and programs ensuring the success for all students in an AP class (Purkey, 1991).

Survey item #3 - Please indicate how strongly you believe each item below predicts student success in AP classes: a) GPA, b) test scores, c) prerequisites, d) student motivation, e) quality of teaching, f) student interest

Selected answer(s): Student motivation (received most responses)
School 1 (n = 65) 65/65 (100%) chose good to very good predictor
School 2 (n = 106) 102/106 (96%) chose good to very good predictor

Level of Functioning- Inviting (Unintentionally)
Educators' responses indicate positive results are based on students' actions (see Table 18). While motivation of students provides additional support, educators' created plans of differentiated instruction for students would be considered intentionally inviting (Schmidt, 2004). The quality of teaching would receive the most responses of good to very good predictor for success in AP classes.

Survey item #5 - Please indicate the extent to which you agree that the following actions would ensure that more students succeed in AP classes at Carrboro High/East Chapel Hill High

Selected answer(s): Inform students earlier about AP options (somewhat agree to strongly agree)
Auto-enroll more students for AP classes (strongly disagree to somewhat disagree)

School 1 (n = 65) 53/65 (81%) want to inform students earlier about AP options

School 2 (n = 106) 74/106 (70%) want to inform students earlier about AP options

Level of Functioning - Inviting (Intentionally)
Educators' responses indicate more students succeeding in AP classes if information is given in a timely manner (see Table 19). The action is considered to be intentionally inviting because it is implicit and intends to add to the success of students (Purkey, 1991).

Survey item #6 - Please answer the following questions about AP: a) Does taking AP classes boost students' chances of getting into college?, b) Do AP classes prepare students to do better once they are in college?, c) Do AP classes help student earn college credit?, d) Are AP classes designed specifically for students who are planning to go to top four-year colleges?

Selected answer(s): School 1 (n = 65) 48% and higher chose "yes" to all four questions
School 2 (n = 106) 61% and higher chose "yes" to all four questions

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Level of Functioning - Disinviting (Unintentionally)
Responses indicate AP coursework is a benefit to students (see table 20). However, based on educators' response to last question (school 1: 31/65 (48%) and school 2: 61/106 (58%) it is only for a specific group of students which is considered by invitation theorists and researchers as disinviting. Invitational Education emphasizes target-driven systems inadvertently operate from premise of exclusivity with actions unintentional. Negative messages are transmitted due to lack of confidence for all students participating in the learning process (Haigh , 2011).

Survey item #11 – Why do you think Carrboro's or East's AP program is not as diverse as the whole school? Because the student groups that are underrepresented in AP: a) come to us less prepared than other students, b) have less information about AP, c) are less likely to be encouraged by staff to participate in AP, d) have tougher home lives, e) are sometimes overlooked because they do not appear to be "traditional" AP students.

Selected answer(s):

School 1 (n = 57) Major reasons – 26/57 (46%) selected both, "come to us less prepared than other students" and "have less information about AP"

School 2 (n= 98) Major reason – 45/98 (46%) selected, "Come to us less prepared than other students"

Level of Functioning – Disinviting (Unintentionally)

Educators' responses (see Table 21) indicate underrepresented student groups lack the preparation needed to participate in AP coursework. While the message appears to be beneficial in that it provides information assisting with a problem, culturally diverse student and parent groups may perceive the message as inappropriate, uncaring, and untrustworthy (Schmidt, 2004).

Survey item #7 – Please state your level of agreement with the following statements: a) You can always greatly change how intelligent you are, b) You can learn new things, but you can't really change your basic intelligence, c) No matter how much intelligence you have, you can always change it quite a bit, d) You have a certain amount of intelligence and you really can't do very much to change it.

Selected answer (s): "You have a certain amount of intelligence and you really can't do very much to change it. (statement receiving highest response)

School 1 (n = 65) 63/65 (96%) strongly disagree to somewhat disagree
School 2 (n = 106) 90/106 (84%) strongly disagree to somewhat disagree

Level of Functioning – Inviting (Intentionally)

The responses of educators indicate positive attitudes about the ability to change intelligence levels. Invitational theorists believe this message encourages optimal human development. Due to this belief, educators will intentionally maintain a broad base knowledge of skills and strategies to construct and maintain a motivational, learning environment. Students from diverse backgrounds are able to develop healthy self-views and beneficial world views (Schmidt, 2004).

Survey item #10 – Describe the diversity of the AP program at Carrboro or East.

Selected answer(s): There are substantially fewer low-income students and students of color in AP than in the school as a whole.
School 1 (n = 65) 45/65 (69%)

School 2 (n = 106) 78/106 (74%)

Level of Functioning - No Level

Educators acknowledge lack of diversity but nothing to measure inviting or disinviting aspect.

Survey item #12 – How big of a problem do you think the relative lack of diversity in Carrboro's or East's AP program is?

Selected answer (s):
School 1 (n = 57) 29/57 (51%) selected, "It's a big problem, but there are more pressing priorities for us to address."
School 2 (n = 98) 45/98 (46%) selected, "It's a big problem that we need to address."

Level of Functioning – Disinviting (Intentionally)

Educators' responses (see Table 24) from both schools indicate an acknowledgement of the lack of diversity in its AP program. However, the problem is not a priority for either school. Due to this lack of priority, invitational theorists believe actions, processes, policies, and programs will not be intentional. Professionals in this environment do not feel summoned to help all students develop to their best potential intellectually or emotionally (Purkey, 1991).

APPENDIX H: EDUCATORS' RESPONSES TO INVITING OR DISINVITING ENVIRONMENT- FOUR LEVELS OF FUNCTIONING

Survey items receiving label of Inviting:

#4 - Inviting (Unintentionally)
Educators estimated a large percentage of students would pass an AP class if given the opportunity.

#3 - Inviting (Unintentionally)
Educators believe students can be successful in AP coursework if they have the motivation to do so.

#5 - Inviting (Intentionally)
If students are given information about AP coursework in an efficient and timely manner this can help with more students succeeding with this coursework.

#7 - Inviting (Intentionally)
Educators felt positive views about the ability to change intelligence levels.

Total: Inviting = 4/9 (44%) with 2/4 (50%) Unintentionally

Survey items receiving label of Disinviting:

#9 - Disinviting (Unintentionally)
All students should not have access to AP coursework.

#8 - Disinviting (Unintentionally)
Educators indicate those students not taking AP classes believe the work is too hard or they are not capable of receiving a passing grade.

#6 - Disinviting (Unintentionally)
Educators believe AP coursework is beneficial to students. However, responses indicate only a specific group of students should enroll in AP coursework.

#11 - Disinviting (Unintentionally)
Educators believe students underrepresented in AP classes are not there due to lack of preparation for the rigor and challenge of such courses.

#12 - Disinviting (Intentionally)
Educators acknowledge the lack of diversity in the AP program but do not believe it is a priority.

Total: Disinviting = 5/9 (56%) with 4/5 (80%) Unintentionally

Note. Survey item #10 did not have a measuring aspect based on the four-functioning levels.