Student, teacher, and educational leader perceptions of the quality of implementation of an advanced placement program in a select urban high school: a mixed methods study

Quail T. Arnold
Clark Atlanta University

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ABSTRACT

EDUCATIONAL LEADERSHIP

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                M.ED. MERCER UNIVERSITY, 2007
                ED.S. CLARK ATLANTA UNIVERSITY, 2010

STUDENT, TEACHER, AND EDUCATIONAL LEADER PERCEPTIONS OF THE
QUALITY OF IMPLEMENTATION OF AN ADVANCED PLACEMENT
PROGRAM IN A SELECT URBAN HIGH SCHOOL:
A MIXED METHODS STUDY

Committee Chair: Dr. Barbara Hill

Dissertation dated May 2012

The purpose of this mixed methods study was to investigate the factors that
impact the quality of implementation of the Advanced Placement (AP) Program at a
select urban high school and determine if the implementation methods can be attributed
to the exam success rates. Furthermore, this study analyzed the quality of program
implementation through student and teacher perceptions to investigate a relationship
between factors of implementation and student performance on the AP exams. This
research was conducted at a large metropolitan Atlanta high school, with a large minority
population, located in the suburbs of a large urban school district in the southeastern part
of the United States. The participants in this study were juniors and seniors who were
currently participating in Advanced Placement at their school.
Additionally, teacher and administrative personnel who worked with the Advanced Placement program participated in the study. Data collection was done through the concurrent embedded research design. The data for this study were collected through surveys, interviews, and test scores. The findings/conclusions from this study suggest that student classification (junior or senior), perception of the value of AP classes and the overall program, teaching methods, the number of AP classes taken in one year, teacher training, and the lack of a clear policy may influence the success rates of students on AP examinations. Practical implications and recommendations for educational leaders are offered.
STUDENT, TEACHER, AND EDUCATIONAL LEADER PERCEPTIONS OF THE QUALITY OF IMPLEMENTATION OF AN ADVANCED PLACEMENT PROGRAM IN A SELECT URBAN HIGH SCHOOL:
A MIXED METHODS STUDY

A DISSERTATION
SUBMITTED TO THE FACULTY OF CLARK ATLANTA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF EDUCATION

BY

QUAIL T. ARNOLD

DEPARTMENT OF EDUCATIONAL LEADERSHIP

ATLANTA, GEORGIA

MAY 2012
ACKNOWLEDGMENTS

And let us not be weary in well doing, for in due season we shall reap,
if we faint not.

This dissertation is dedicated to my great-grandmother, Mrs. Minnie Bell “Muh” Ammons, who always told me that we’d have a doctor in our family.

Ms. Willie your Arnold thanks for being the best mother in the world. You inspire me to be better, and for that I thank you. I would also like to thank my extended family for all of your love, support, and prayers. I love you.

Dr. Hill, what can I say? Thank you for believing in me when I didn’t believe in myself. I promise I’ll make you proud. To the rest of my committee: Dr. Groves, Dr. Norman, and Dr. Turner, thank you for your help throughout this journey. Mrs. Cooke, thank you for being the calm in the midst of it all. You are awesome.

To “The Crew:” My sisters! God couldn’t have blessed me with a better circle of friends. Your love and laughs helped me when I felt like crying. I love you all to no end!

My CAU Family: We made it! I love you all more than you could ever know or imagine. All the late nights, long days, and hard work finally paid off.

My mentees: Each of you is special to me and I hope that I have inspired you as much as you have inspired me. Know that the world is yours for the taking!

Lastly, if you spoke a kind word to me or said a little prayer for me on this journey, I am grateful for you. Your thoughtful deeds are forever etched in my heart.
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CHAPTER I
INTRODUCTION

Background of Advanced Placement

The Advanced Placement (AP) curriculum is a mechanism that has been instituted in schools to help prepare students for college. According to Sadler, Sonnert, Tai, and Klopfenstein (2010), "Advanced Placement fills a void left by the traditional reluctance to regulate education by the U. S. federal government" (p. 17). Birthed out of a concern for high school students transitioning to college, the program was designed in the 1950s and later adopted and directed by the College Board to help bridge the gap and prepare American students for postsecondary schooling. This program was initially designed for those elite, academically advanced high school seniors who were looking for a challenge; however, "since the turn of the century, university and public policies have extended the use and application of the AP well beyond its original intent" (Sadler et al., 2010, p. 167). This change is evidenced by the fact that the program has expanded to high school freshmen and sophomores as well as juniors and seniors.

One of the initial benefits to this program was that students who received a certain score on the exam could opt to use the score as credit for a class in college. Now, in addition to using a passing exam score for college credit, many students will receive an extra quality point in their grade point average (GPA) if they are enrolled for this class and sit for the exam, despite their performance in the class or on the exam. Although this
program stems from humble beginnings, it has evolved into a highly respected program that has helped build a bridge between secondary and postsecondary schools as well as provide students with educational exposure they may not have been able to access otherwise.

Since the inception of public education, United States citizens have sought to improve how their children are educated in this country. Likewise, policymakers and legislators have continued to develop various education reforms in hopes of preparing students for postsecondary success. Many of the reforms are geared towards aiding and preparing students who come from economically disadvantaged or impoverished backgrounds. There are federal programs such as GEAR UP and TRIO, which provide economically disadvantaged students with access to college because “the college transition rate for underrepresented [minority] students represents a leakage in the educational pipeline” (Contreras, 2011, p. 505). Additionally, reforms such as No Child Left Behind, an extension of the Elementary and Secondary Education Act of 1965, outlined plans for American students to compete globally, but minimally focused on what vehicle would drive students to become global competitors. In an effort to focus on academics and provide consistency in American education, the federal government deemed Advanced Placement as the vehicle that would drive student academic success in secondary education.

In the fall of 2009, approximately 3.5 million students entered college for the first time (National Center for Education Statistics, n.d.). Out of these first-time college freshmen, approximately one-third of them had taken at least one Advanced Placement
course and/ or exam before leaving high school in hopes of being prepared for postsecondary success. Schools throughout the country utilize national, state, and local programs to help students prepare for academic college readiness, but Advanced Placement is the most prevalent among those programs and continues to grow and expand nationally. Because of its faith in Advanced Placement, the federal government has designated grants, such as the Advanced Placement Incentive Program Grant (APIP) used by Gwinnett County Public Schools, and other incentives for schools that provide students and teachers with exposure to Advanced Placement courses, curricula, and training (U. S. Department of Education, 2010). Despite the federal government’s efforts, McPherson and Schapiro (2006) note, “once students enter college, about half of them learn that they are not prepared for college level courses” (p. 144) despite having taken courses that were designed to prepare them for this academic endeavor.

According to the National Center for Education Statistics, there are more students entering college taking remedial classes now than there were 10 years ago (National Center for Education Statistics, n.d.), yet the amounts of students who are exposed to academic college readiness programs, such as Advanced Placement, has increased exponentially (College Board, n.d.). The paradoxes in academic college readiness exposure and preparation are alarming and thereby causing, “many forces to create a pressing need for state policies to improve college readiness and success” (McPherson & Schapiro, 2009, 145). In response to this situation, State Superintendent John Barge has created the career and college readiness index for Georgia schools which includes students taking Advanced Placement courses and passing the Advanced Placement
examination for these courses as a means of demonstrating their potential academic readiness (Atlanta Journal Constitution, 2011). While only providing federal funds and support for the Advanced Placement program, the government leaves the program implementation to the states and local education agencies.

Unlike other school reforms such as America’s Choice or High Schools That Work, which are scripted programs, Advanced Placement is a series of courses that has been designed by an organization (College Board) to emulate college courses and possibly provide high school students with college credit depending on their end-of-course exam performance. Aside from attending similar training sessions regarding Advanced Placement content areas, for those educators working in the trenches, there is no defined path for Advanced Placement program implementation. This statement is verified by the absence of an Advanced Placement policy in Georgia, as well as the varying implementation methods of schools across metropolitan Atlanta school districts. However, the nationwide commonalities of the program are teacher training, individual course standards, and the culminating exam.

In an effort to promote “educational equity and college readiness among minorities, the College Board [expanded] the AP program in schools serving those students” (Sadler et al., 2010, pp. 219-220). Consequently, there has been an exponential growth in the number of minority students exposed to Advanced Placement in the last decade; however, low-income and minority students still have lower AP exam passage rates than their majority peers (Sadler et al., 2010, p. 222). This fact shows that while there are more minority and low-income students taking Advanced Placement courses,
their outcome is not indicative of what College Board deems successful: a passing score on the exam. It is significant to discuss exam passage rates because students who pass the exams may save money on college tuition and are thought to be ready for college-level work. The lack of success on the exams calls to question the implementation procedures of AP programs in schools serving minority students.

**Statement of the Problem in Context**

Initially, the Advanced Placement program was created for white, middle class elite students who were looking for opportunities to grow academically, but over the last 20 years there has been a surge in minority student participation in Advanced Placement (Schneider, 2009, p. 822). This sudden sense of urgency for minority participation can be attributed to the belief that “African-American students will continue to be substantially underrepresented among the most qualified college applicants for the foreseeable future” (McPherson & Schapiro, 2006, p. 35). While the Advanced Placement program has been successful in providing more minority students with the opportunity to take the courses, the correlation between minority student scores on the Advanced Placement exams and their AP course grades provide cause for concern from many researchers. The College Board touts that the program’s purpose is served if students are exposed to the curricula; conversely, the students must pass a test to demonstrate their proficiency in the AP subject.

Whereas the College Board has reported great gains with low-income and minority student access to the curricula, the average exam score for African-American students, particularly those in Georgia, is significantly lower than other subgroups that
have participated in the program and have taken the exams. According to the *2010AP Report to the Nation* that was distributed by the College Board, there were 6,359 African-American students in Advanced Placement programs in the state of Georgia, but only 1,657 (or 26%) of those students made a passing score of 3 or higher on the AP exams.

The Table 1 provides comparative data of AP exam performance in several metropolitan Atlanta school districts for the 2009-2010 school year. These numbers demonstrate the low AP exam passage rates of students in school districts that serve a student population with over 75% minority students. Furthermore, this data suggests that students in most of these school districts took at least two exams, yet the performance on the exams remained low. Although there may be several reasons for the low performance, this research seeks to analyze factors that influence Advanced Placement program implementation and establish a relationship between factors of quality program implementation and success rates on AP exams.

Table 1

*2009–2010 Advanced Placement Performance in the State of Georgia*

<table>
<thead>
<tr>
<th>School District and Minority Population</th>
<th>Number of Students Taking the Test</th>
<th>Number of Exams Taken</th>
<th>Number of Students with a &gt;3 score</th>
<th>Passage Rate by Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Georgia (54%)</td>
<td>63,923</td>
<td>104,505</td>
<td>52,679</td>
<td>50.4</td>
</tr>
<tr>
<td>District 1 (89%)</td>
<td>1,004</td>
<td>1,451</td>
<td>269</td>
<td>18.5</td>
</tr>
<tr>
<td>District 2 (93%)</td>
<td>997</td>
<td>1,518</td>
<td>163</td>
<td>10.7</td>
</tr>
</tbody>
</table>

(continued)
Table 1 (continued)

<table>
<thead>
<tr>
<th>School District and Minority Population</th>
<th>Total Population</th>
<th>Number of Students Taking the Test</th>
<th>Number of Exams Taken</th>
<th>Number of Students with a ≥3 exam Score</th>
<th>Passage Rate by Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 3 (48%)</td>
<td>106,574</td>
<td>7,054</td>
<td>13,416</td>
<td>8,259</td>
<td>61.6</td>
</tr>
<tr>
<td>District 4 (89%)</td>
<td>96,678</td>
<td>4,774</td>
<td>7,132</td>
<td>2,367</td>
<td>33.2</td>
</tr>
<tr>
<td>District 5 (66%)</td>
<td>88,446</td>
<td>6,074</td>
<td>11,291</td>
<td>8,203</td>
<td>72.7</td>
</tr>
<tr>
<td>District 6 (66%)</td>
<td>158,438</td>
<td>10,481</td>
<td>19,605</td>
<td>11,313</td>
<td>57.7</td>
</tr>
</tbody>
</table>

More specifically, this study sought to analyze an Advanced Placement implementation program of a particular high school (School A) located in District 4 (see Table 2). Although the research site has the largest Advanced Placement participation in the district, it also has one of the lowest exam passage rates within the district. The juxtaposition between program participation and exam success at the research site prompted this case study, which was designed to address an issue that affects high schools across the nation: a lack of minority student success on Advanced Placement exams. The following questions were used to conduct this research: What factors impact the quality of implementation of Advanced Placement programs and how does this impact Advanced Placement exam success? Furthermore, this study was designed to examine the correlation between the factors that influence the quality of implementation of Advanced Placement programs (independent variable) and the academic success rate of (dependent variable) of AP program participants at the research site.
Table 2

*District 4 Advanced Placement Participation and Pass Rates for 2010-2011*

<table>
<thead>
<tr>
<th>District</th>
<th>Number of Exams Taken</th>
<th>%&gt;3</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td>8,194</td>
<td>31.8%</td>
</tr>
<tr>
<td>State</td>
<td>121,487</td>
<td>54.7%</td>
</tr>
<tr>
<td>School A</td>
<td>1,128</td>
<td>7.3%</td>
</tr>
<tr>
<td>School B</td>
<td>1,077</td>
<td>49.8%</td>
</tr>
<tr>
<td>School C</td>
<td>982</td>
<td>70.1%</td>
</tr>
<tr>
<td>School D</td>
<td>888</td>
<td>50.8%</td>
</tr>
<tr>
<td>School E* (School has an IB Program)</td>
<td>540</td>
<td>16.3%</td>
</tr>
<tr>
<td>School F</td>
<td>450</td>
<td>36.2%</td>
</tr>
<tr>
<td>School G* (School has an IB Program)</td>
<td>423</td>
<td>50.8%</td>
</tr>
<tr>
<td>School H</td>
<td>369</td>
<td>17.6%</td>
</tr>
<tr>
<td>School I</td>
<td>320</td>
<td>5.0%</td>
</tr>
<tr>
<td>School J</td>
<td>260</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Because of the nature of this problem, it is necessary to examine the significance this study will have upon educational leaders. With Advanced Placement becoming the advanced academic program of choice for schools and school districts across the nation, it is important for educational leaders to understand the factors that contribute to the quality of this instructional program and how these factors contribute to student success on the AP exams. By understanding the factors that contribute to program quality, educational leaders can make sound decisions regarding program implementation in their buildings. These decisions include, but are not limited to: teacher selection, student
supervision and advisement, and overall organizational structure of the Advanced Placement program in the schools. Furthermore, this research is important to educational leaders because it will provide insight into current challenges with Advanced Placement programs and help them implement a program that will increase student success on AP exams. Additionally, because educational leaders serve as the instructional leaders of the program, this research will help them to become better informed about best practices that will help students flourish in the AP program.

**Purpose of the Study**

The purpose of the study was to investigate the factors that impact the quality of implementation of the Advanced Placement program at a select urban high school and determine if the implementation methods attributed to the exam success rates. Because the College Board suggests that the mere exposure to the Advanced Placement curricula is beneficial to students, it was important to analyze the student-perceived quality of implementation of the program and determine if the quality of implementation was a factor in poor student success rates on the exams. The researcher hoped to ascertain information that would help the state of Georgia along with schools and districts that implement Advanced Placement programs evaluate the quality of their programs.

Although Advanced Placement has been around for many years, there is little research that analyzes the impact of program implementation on end-of-course exam success. In addition, the College Board has an open door policy as it relates to enrolling in Advanced Placement courses, but there are certain schools and school systems that have prerequisites for these classes while others do not; so this research was used to
determine if their needs to be certain requirements and prerequisites for enrolling in these courses.

Research Questions

The researcher used both quantitative and qualitative instruments to collect data for this study. Along with using student test data, the researcher conducted surveys and interviews to gather data from those persons who work with AP programs. These questions were designed to help guide the research and provide answers that would potentially impact the quality of AP program implementation and student success rates on the AP exams.

RQ1: Is there a significant relationship between student demographics and student success rates on AP end-of-course grades and examinations?

RQ2: Is there a significant relationship between students' perception of the value of Advanced Placement classes and success rates in AP classes and on AP examinations?

RQ3: Is there a significant relationship between student prior academic preparation and success rates on AP exams?

RQ4: Is there a relationship between teaching methods, teacher training, and teacher preparation and student success rates in AP class and on AP examinations?

RQ5: Is there a relationship between the organizational structure of the Advanced Placement program and the student success rates on AP exams?
RQ6: Is there a relationship between the district and local school organizational leadership and the quality of implementation of Advanced Placement programs?

RQ7: Is there a relationship between the educational organization’s interactions with Advanced Placement program constituents and success rates on AP exams?

Significance of the Study

With 48 states, including Georgia, moving towards implementing Common Core Standards and utilizing college and career ready indexes to evaluate schools, high schools will have to change the way they implement Advanced Placement programs in their schools. The intent of this study was to examine the factors that influence the quality of implementation of an Advanced Placement program in a metropolitan Atlanta high school that has a large number of program participants. This study specifically examined factors that influenced the quality of implementation of Advanced Placement classes and sought to investigate the relationship between implementation factors and AP exam success. Furthermore, this study has implications for college faculty and administration as well as P-12 administrators and teachers. The findings from this study may be used to provide interventions or suggestions for potential curricula/program reform and ways to help high school teachers prepare students for college readiness. In addition, the research will provide the College Board with some insight into how well their program and its objectives are helping students become prepared for college rigor. As a result of this information, the College Board may be prompted to make certain changes to their
Advanced Placement program implementation model or do more training with teachers in an effort to assure that the students who are enrolled in the program enter college with a certain level of readiness.

**Summary**

Over the course of time, education reform has been a constant. Since its inception, the federal government has constantly looked for ways to improve the academic deficit that exists in America’s classrooms. One curricula reform that has taken over the nation is Advanced Placement. Many school leaders and politicians believe that this reform is the answer to many of the woes in today’s classrooms prompting them to make Advanced Placement courses a mandatory staple in their school systems (Sadler et al., 2010, p. 95). Initially, Advanced Placement was only for those majority students who were upper middle class and elite. However in recent years, the College Board has sought to expand Advanced Placement participation to minority students who are often underrepresented in high achieving programs. In spite of the large increase of low-income and minority students in Advanced Placement, many of these students are not successful on the exams. Due to concerns regarding the benefit and significance of the program, it was important to examine the factors surrounding the implementation and management of the program and how those factors contributed to student success on the culminating course exams. This research provided recommendations to aid in building the bridge and making the connection between high school and college with academic preparation programs such as Advanced Placement.
CHAPTER II
REVIEW OF THE LITERATURE

Overview

Becoming academically prepared for college coursework is a difficult challenge for high school students (McPherson & Schapiro, 2006). As a result of this challenge, states are beginning to implement various techniques to improve college readiness, and though there are various mechanisms that can achieve a college readiness goal, many states as well as the United States Department of Education believe in Advanced Placement (AP) as the primary tool for improving academic college readiness. This fact is evidenced by the federal government's designation of $37,000,000 worth of funds for grants and Advanced Placement initiatives (U. S. Department of Education, 2010).

This literature review examined studies related to elements of advanced academic programs, the progression of advanced academic programs, minority student participation in advanced academic programs, academic preparedness, and Advanced Placement as the vehicle that helps students achieve success in the classes as well as on the culminating course exams. For the purpose of this research, Advanced Placement will be defined as a rigorous academic program that provides students with the opportunity to experience college-level work and potentially earn college credit through faculty advisement, teacher interaction, peer collaboration, and expansion of content-related knowledge. This review of literature was organized in the following manner: introduction, the evolution of
Advanced Placement as an instructional technique for advanced students, similarities and differences in academic college readiness programs, successes of Advanced Placement for minority students, challenges of Advanced Placement for minority students, and conclusion.

Introduction

As a result of the significant number of schools not meeting Adequate Yearly Progress (AYP) in Georgia, State Superintendent John Barge noted that the state of Georgia is looking to propose a ‘college and career ready performance index’ to track student success (Atlanta Journal Constitution [AJC], 2011). He noted that some of the measurement factors would be the percentage of students earning advance course credit as well as the percentage of students going to college or technical school (AJC, 2011). Georgia’s education initiative demonstrates the significance of advanced academic programs in determining student success. Though “many forces are converging to create a pressing need for college readiness improvement policies,” academic college readiness is a national goal with no clear definition or blueprint for success (McPherson & Schapiro, 2006, p. 1,144).

The federal government continues to devise plans and programs that they believe will help students transition to college; however, these programs do not focus on the academic college readiness aspect of college success; they primarily address student access to college and student completion rates. Some of the more popular federal programs, such as GEAR UP and TRIO are designed primarily for disadvantaged and low-income students who may not ever have a chance of obtaining a college education.
(U. S. Department of Education, n.d.), but there are very few designed for the academically advanced student. Consequently, many states around the country have outlined their own plans and goals to prepare their students for academic college readiness. The Georgia Department of Education notes that it is dedicated to the goals of improving student achievement on high stakes college entrance exams and to providing students more opportunities for rigorous coursework through Advanced Placement courses (Georgia Department of Education, 2010). The state boasts improvements to student access and performance on the annual Advanced Placement exams and uses this data as a determining factor of student success for college readiness. Although, Georgia touts Advanced Placement as its primary vehicle for student achievement, there are other programs and curricula designs that have helped students obtain academic college readiness.

Another program that is gaining popularity as a tool for academic college readiness is the International Baccalaureate program. This program has been around just as long as Advanced Placement, yet they have different methods of implementation and execution. In addition to International Baccalaureate and Advanced Placement, many school systems offer Honors and Accelerated classes so that students will have an opportunity to engage in courses and programs that will help them to achieve academic college readiness.
Evolution of Advanced Placement as an Instructional Technique for Advanced Students

Advanced Placement has evolved into a powerhouse since its beginnings and is now seen as a “must-have” in education, but in order to understand Advanced Placement, it is important to examine its origins. The program has been in existence since the early 1900s, but initially served as a program specifically designed and administered by colleges to track their best and brightest incoming freshmen students. Similar to today, the program’s objective was to “help ensure a smooth transition between high school and college” (Sadler, Sonnert, Tai, & Klopfenstein, 2010, p. 41). The program began at what is now Columbia University and was initially designed for gifted upper-middle class, wealthy students who needed an academic challenge (Schneider, 2009). As college professors continued to offer their advice regarding AP curricula, the College Board sought to take the program and place it into high schools.

Advanced Placement was implemented in a few schools initially, but expanded to many high schools across the country with the launch of Sputnik. Though the program’s expansion was inspired by an outside influence, a notable aspect of the AP expansion was to remove the stigma that the program was only for “gifted” students. By removing this stigma, the program would become more accessible to all students. However, it is important to note, there is limited research that states whether AP became the de facto advanced academic program of choice because of its success or a lack of competition. Though the research is limited, one thing is clear, AP has made a name for itself in education and continues to gain the support of state and local governments through
various incentive programs and grants, and with that type of support, AP appears to be moving full steam ahead.

**Similarities and Differences in Academic College Readiness Programs**

As previously stated, Advanced Placement (AP) is the most known academic college readiness program used in the United States; however, it is not the only program that is used to help prepare students for postsecondary success. There are other programs such as International Baccalaureate and Honors/Accelerated classes that schools and districts use to help bridge the gap between high school and college. This section of the literature review examines the similarities and differences between these programs in regards to: teacher preparation, program design, program implementation, student motivation, and determinants of success. However, before examining the similarities and differences in these programs, it is important to provide a brief overview of these programs and how they came into existence.

Advanced Placement “was conceived shortly after the Second World War as a way of engaging and challenging the highest-achieving students at the best U.S. high schools” (Schneider, 2009, p. 813). This program was a way to track those students who had the highest academic ability levels and were ready to handle an advanced level of academic preparation. Initially, several college professors designed the program, but later collaborated with College Board to make changes to the curricula and expand the program to more urban, public schools. The rationale behind the expansion was that all students would benefit from the Advanced Placement curricula. In 50 years, the students
who have been exposed to Advanced Placement nearly quadruple the number of those students who were initially exposed to the program.

Although Advanced Placement is the primary academic college readiness program recognized in the United States, there is another program that has been used to prepare high school students for postsecondary success: International Baccalaureate (IB). The International Baccalaureate (IB) program is a global program that has gained notoriety because of its appeal to those who desire international curricula for education (Schneider, 2001). The ideas for an international education program stem back to the days of the Cold War, but many researchers note the birth of the International Baccalaureate as 1967 in Europe (Bunnell, 2008). The IB Program, as it is commonly referred to, may start in the upper elementary grades and continue through the secondary grades. Its goal is to standardize education programs and practices across international school settings (Kyburg, Hertberg-Davis, & Callahan, 2007). This program has expanded its horizons to over 38 countries worldwide and continues to be implemented in countries around the world. Yet, this program differs from other honors programs because it is offered in elementary and middle levels as well as high school (Kyburg et al., 2007). In addition, the global emphasis for our future work force also makes this program a standout. The American economy has been greatly impacted by the global world market; and the need to transform the way we educate America’s students must be our number one priority (Pink, 2006). IB programs are designed to educate students to look beyond the walls of their current schools and see themselves as market ready for the world.
Advanced Placement and International Baccalaureate are two programs that have a clearly defined curriculum and were designed to help students transition to college. Many school districts around the nation also offer Honors and Accelerated classes for their students. These classes move at a faster pace than the general classes, and in some school districts, students receive a .5 quality point towards their grade point average for taking Honors classes. Though many school districts offer Honors and/or Accelerated classes, there is little research detailing the origin of this academic practice or if it is beneficial to students.

**Teacher Preparation**

Teacher preparation is important to examine when discussing the similarities and differences of these honors programs. It is common knowledge that *No Child Left Behind* mandates that teachers must be highly qualified in order to service students, but teachers who service students in honors programs often have more stringent requirements. Advanced Placement recommends that teachers go through professional development prior to teaching the course (College Board, n.d.). College Board, the company that oversees AP, offers various trainings that are designed to help teachers understand AP and how to deliver the concepts and content to the students. Additionally, the College Board notes that AP teachers can design their courses in any manner, but must submit a course syllabus in order to get the official College Board recognition for the course (College Board, n.d.). Accordingly, the College Board offers training throughout the school year as well as summer institutes for teachers who teach AP classes. When asked if the training was necessary, current AP teachers stated that they
would not teach an AP course without the training because the course is different from anything that they had ever taught (AP teachers, personal communication, June 2011).

Whereas AP recommends that teachers go through training, IB requires teachers to attend training in order to teach the classes. The International Baccalaureate program also requires that its teachers continue to go through annual professional development trainings to stay current with research and best practices for IB students. Unlike AP, IB teachers must become certified before they can teach any IB course. This is significant information for schools that are trying to establish an IB program because before a school becomes officially sanctioned, the IB officials must certify all participating teachers. AP and IB training both require schools and/or teachers to pay for all trainings. Additionally, senior teachers or professors may conduct the trainings for both programs.

Because “honors courses are not standardized, teacher training for Honors/Accelerated classes is not as costly or as formal as it is for AP and IB” (Sadler et al., 2010, p. 52). Often times, school districts create their own specific guidelines for teaching Honors/Accelerated classes. For instance, one metropolitan Atlanta school district, requires its teachers to take the first two courses of the Gifted Certification sequence as a prerequisite for teaching High Achievers classes at the middle school level, but there is no set requirement for teaching Accelerated classes at the high school level. Furthermore, there is no state mandate that requires teachers who teach Honors or Accelerated courses to receive special training.
**Program/Curricula Design**

As mentioned earlier, Advanced Placement is a program designed by college professors in the 1950s and later trademarked by the College Board to provide academically talented students with an opportunity to take advanced classes and potentially receive college credit. Advanced Placement is not designed like typical academic programs where there is a series of specified courses; instead, the program offers "over 30 courses across multiple subject areas" (College Board, n.d.). Additionally, college faculty and highly qualified high school AP teachers design the program and the classes. Another factor of program and curricula design is student admissions. The College Board notes that enrolling in AP is "as easy as notifying an AP teacher or AP Coordinator of your interest and determining what other type of preparation you may need for the course" (College Board, n.d.). This statement signifies that the College Board has an open enrollment policy for its courses. This policy is justified because College Board officials believe that all students should have the opportunity to take advanced courses. Additionally, all AP classes have a culminating exam that is a part of the course. Students have the option of not taking the exam, but in most cases not taking the exam will result in a student not earning the additional quality point towards their high school grade point average and/or using the course for college credit.

Similar to AP, the International Baccalaureate program is also a program that advertises itself as a factor in college success. The Diploma Programme, the section of the IB curricula designed to meet the needs of high school students, is gaining popularity
and notoriety among high schools across the United States. A teacher in a small local
district noted that his respective high school was moving to the IB Diploma Programme
because “the school system appreciates IB’s approach to assessment and the emphasis on
depth over breadth” (AP teacher, personal communication, August 31, 2011). Unlike
AP, the IB Diploma Programme requires students to take a series of courses over two
years in six subject groups, complete assignments focused around the three core program
requirements, and pass a written examination. Figure 1 shows the curricula framework of
the IB Diploma Programme.

Figure 1: International Baccalaureate Instructional Framework
Unlike AP, there is an entry requirement for participation in IB programs. For students seeking participation in IB they must apply as early as the last semester of their eighth grade year, even though they will not be admitted to the program for several years. Early application is required so that counselors can continue to monitor the progress of applicants prior to their actual entry into the program. Program coordinators believe this type of guidance is necessary for student success in the IB program. Furthermore, there has been an increase in urban school district participation in IB; one of the larger metropolitan Atlanta school districts offers IB programs in three of its high schools, and each school site notes that the students must have a 3.2 grade point average and have taken the highest level of prerequisite courses required for entry into the program. Additionally, the school websites note that whereas AP success rates are primarily determined by a student’s performance on the culminating exam, IB success is determined by the student’s coursework as well as their performance on the culminating exam.

Similar to AP programs, Honors/Accelerated classes do not have an entrance requirement nor does it have a specific curricula design. These classes often will cover the same content as the general level course, but move at an accelerated, or faster, pace. However, these classes may or may not earn students quality points toward their grade point averages. Like the previous mentioned programs, the class sizes in Honors/Accelerated classes tend to be smaller and allow students the opportunity to delve deeper into the content.
**Student Motivation**

A variable that emerged from the review of literature was the variable of student motivation in advanced academic programs. Although the data suggests that most students who participate in advanced academic programs have intrinsic motivation and instinctively strive for advancement, it is evident that the dedication of IB students opposed to AP students is significant (Sadler et al., 2010). The submission of an application for the International Baccalaureate program two years before acceptance shows the student’s commitment to the program. By demonstrating this type of academic allegiance, IB students set themselves a part from students who mostly enroll in advanced academic classes for short-term benefits such as high school class rank and grade point average. Although this study is not designed to compare AP and IB students, this minor comparison is necessary to show how student motivation may determine student performance in advanced academic programs.

**Program Implementation**

Each of these advanced academic programs is implemented differently in different schools. College Board, the company who oversees AP, notes, “It takes at least five years to build a successful AP program” (College Board, n.d.). Once a school has met all of the College Board criteria, the school can begin to implement the program. AP implementation varies by schools. There are some schools that require students to make certain grades in prerequisite courses or have teacher recommendations before taking the classes, whereas other schools have an open enrollment policy and allow any student to enroll in the classes. The class offerings in the school comprise the school’s AP
Program, and the school’s assistant principal of instruction or the school’s AP coordinator oversees the program.

According to the International Baccalaureate website, schools seeking to offer IB in their schools must go through a two year application process before they can host the program. The process costs the school money through the application fees, teacher training, and curricula development. Once a school receives the full accreditation from the organization, the school can then begin offering the courses. Although students cannot take actual IB classes until the 11th grade year, they must apply for the program in the 9th grade so that school counselors can determine if students have the necessary course work required for the program. Like AP, IB has a program coordinator at the building level that oversees the school’s progress of the program.

Unlike AP & IB, Honors/Accelerated classes do not have a formal coordinator to oversee the program; however, the school counselors monitor the students’ grades. Through counselor recommendation, students may be removed from Honors/Accelerated courses and placed in the general level courses.

**Determinants of Success**

Just as each program has different teacher preparation components, curricula design, and program implementation, each program has different determinants of success. Advanced Placement has varying levels of success according to the *AP Report to the Nation* (College Board, 2011). The report highlights those states and districts whose students received a three or better on the AP exam. Additionally, it highlights districts that have increased the number of minority and/or economically disadvantaged students
who participate in the program. Additionally, a factor of success in AP is the ability of students to use some classes for college credit. Among colleges and universities, the standard determinant for success is a score of “3” or higher on the Advanced Placement exam. However, there are many colleges who now only accept a score of “4” or even “5” on the exam for course credit. Colleges also factor AP classes into student admission, so students who have participated in the classes, have a greater opportunity for college admission and possibly college success.

Like AP, the International Baccalaureate is factored into college admissions. This program is different because it offers a specific type of high school diploma for students who complete the program successfully. The International Baccalaureate Organization (IBO) recognizes the rigor and intensity of the program and believes that students who are able to complete the program and earn the diploma represent success. Furthermore, the IBO claims that students who participate in IB programs increase the likelihood of going to top tier colleges and possibly studying abroad. The program’s focus on international curricula is what makes the aforementioned opportunities possible. Because IB is a fairly new program in the United States compared to AP, there is limited data to suggest how students fare in college as a result of program participation. However, the IBO notes that the rise in schools and districts offering IB programs to students is a huge success and will prove to be beneficial to education worldwide. Unlike both AP and IB, Honors/Accelerated programs do not have measures of success that reach outside of the school district, but there are certain colleges who will factor Honors/Accelerated courses
into college admissions. Table 3 outlines the similarities and differences in Advanced Academic Programs.

Table 3

*Comparison of AP, IB, and Honors/Accelerated Programs*

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Entrance Requirements</th>
<th>Teacher Preparation</th>
<th>Program Design</th>
<th>Determinants of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Placement</td>
<td>No program</td>
<td>Recommended training; continual staff development; without teacher certification, course is invalid</td>
<td>Program designed by course; specific content knowledge; no pacing guides; site-based implementation</td>
<td>Passing score on AP exam</td>
</tr>
<tr>
<td>International Baccalaureate</td>
<td>3.2 GPA</td>
<td>Required training; Continual staff development</td>
<td>Program designed sequentially; students cannot begin taking classes until their junior year; pacing guide used for teachers; must consult with regional IB offices</td>
<td>Diploma Programme Completion</td>
</tr>
</tbody>
</table>

(continued)
Table 3 (continued)

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>Program Entrance Requirements</th>
<th>Teacher Preparation</th>
<th>Program Design</th>
<th>Determinants of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors/Accelerated Programs</td>
<td>No Program</td>
<td>Varies by school</td>
<td>Content same as state designed success</td>
<td>No specific success</td>
</tr>
<tr>
<td></td>
<td>Admissions Requirements</td>
<td>district</td>
<td>courses; classes indicated move at an accelerated pace</td>
<td></td>
</tr>
</tbody>
</table>

**Successes of Advanced Placement Program for Minority Students**

Advanced Placement “programs have been touted as indicators of equity and excellence because students who take these courses and pass the exams are among some of the most academically advanced students in the nation” (Hallett & Venegas, 2011, p. 469). Historically, only the nation’s best, brightest, and wealthiest were enrolled in AP courses; today that is not the case. Advanced Placement has increased its accessibility to students from all backgrounds and ethnicities. This expansion in accessibility to AP has allowed many students the opportunity to increase their intellectual scope and broaden their academic horizons. When discussing the successes of the AP program, it is important to observe the increase in minority participation, the increase in student access to college, the increase in student self-confidence, and the overall growth of the program in schools around the country. These factors have helped *Advanced Placement* be recognized as a leader in changing secondary education.
There has been tremendous growth and success in Advanced Placement since its humble beginnings in the 1950s. The program has expanded to majority of the continental United States as well as countries abroad. Additionally, the program has seen a growth in the number of minority students it services. An integral part of the College Board philosophy is its “equity and equality” policy. As a result of this policy and the belief in the program, “the National Governors Association for Best Practices collaborated with the College Board and created the ‘Expansion Project’” (Cooper, 2011, p. 36). The “Expansion Project” is a program designed to help expand the Advanced Placement program into areas where the program is not as prominent or successful. The “Expansion Project” proved to be successful for its 51 pilot schools because of its increase in passage rates on AP exams as well as the increase of minority participation in the program. In addition to the “Expansion Project,” the “Texas AP Initiative Program” proved to demonstrate the success of AP expansion (Jackson, 2007, pp. 591-596).

Although the basis of this program was to pay students and teachers for earning a three or higher on the AP exams, Jackson discovered that the incentives were just a catalyst for improving minority participation and improving the culture of the program. The increase in minority participation is a program success because in their “Annual Report to the Nation,” the College Board claims “participation in high-quality curricula, measured by an external assessment, such as the AP exam, significantly boosts the likelihood of traditionally underserved students’ future success in college (College Board, 2011, p. 3). If this statement is true, then schools should continue to look for ways and opportunities
to expand their AP programs to students who may not traditionally participate in the program.

Another benefit of Advanced Placement is a greater access to college for students. With colleges and universities accepting AP exam credit for coursework, more students are able to enter college ahead of their peers "and more likely to earn a college degree within five years of beginning college" (College Board, 2011, p. 3). According to national reports, such as a "Nation at Risk" and "Rising Above the Gathering Storm," United States students are completing college at significantly lower rates than their global peers, so by offering an opportunity for college credit, *AP* has increased the students' chances for postsecondary success. The College Board awards scores from 1 – 5 on all AP exams. Table 4 provides an interpretation of AP exam scores and what these scores mean in terms of college course recommendations for colleges and students.

**Table 4**

*AP Exam Score Equivalency*

<table>
<thead>
<tr>
<th>AP Exam Score</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No recommendation</td>
</tr>
<tr>
<td>2</td>
<td>Possible qualified</td>
</tr>
<tr>
<td>3</td>
<td>Qualified</td>
</tr>
<tr>
<td>4</td>
<td>Well qualified</td>
</tr>
<tr>
<td>5</td>
<td>Extremely well qualified</td>
</tr>
</tbody>
</table>
In addition to allowing students to exempt some entry-level college courses, AP programs also allow students the opportunity to participate in joint or dual enrollment programs. Generally, students who participate in AP programs complete their required high school course of study earlier than their non-AP peers, and as result, these students seize the opportunity to begin their academic studies before they officially complete high school. Although joint enrollment is a byproduct of AP, it is still significant to observe that typically, students who participate in AP programs have the opportunity to begin their college careers earlier than their peers be it through AP exam course credit or joint enrollment.

By providing students with the opportunity to experience college at earlier rates, AP has also helped to boost the self-confidence of minority students. Many students have the belief that “AP is too hard and requires too much work,” but once students experience success in the program, they develop self-confidence and generally perform better as a student. Researcher David Hale (2007) witnessed this fact firsthand through a study he conducted at Suncoast High School in Riviera Beach, Florida. This study consisted of him taking the lowest quartile of students, who happened to be African-American, and teaching those students concepts used in the Advanced Placement Language and Literature course. Through his efforts, the students were able to pass the Florida Comprehensive Achievement Test (FCAT), a test similar in nature to the Georgia High School Graduation Test, and go on to pursue postsecondary education. In addition to Hale’s success story, the Waco Independent School District (WISD) saw success with minority students in AP. This school district used money from the Advanced Placement
Initiative Grant to enroll eighth graders who were native Spanish speakers into AP Spanish Language and Composition classes. Students enrolled in the course took the AP exam and 79% of them earned a score of 3, 4, or 5 (Kettler, Shiu, & Johner, 2006). Kettler et al. reported that the students’ self-confidence and positive connection with school increased as a result of enrollment in the AP program.

Advanced Placement expansion has become massive in the last decade. This statement is evidenced through the College Board’s dedication to “[increasing] the equity in educational success for minority and underserved students” (College Board, 2011, p. 8). As a result, the number of schools participating in the program has increased significantly. Proponents of AP expansion believe that exposing underprivileged and underrepresented students to advanced curricula will help bridge the education gaps between minorities and their white peers. Furthermore, the federal government has provided funding for school districts around the nation to increase AP participation for all students. Studies such as those completed at Suncoast High School and the WISD, demonstrate that students, despite outside circumstances, can be successful in Advanced Placement programs when provided with quality teachers and necessary resources, and with success stories like these AP has no intention of slowing down the expansion of their programs (Sadler et al., 2010).

Challenges of Advanced Placement Program for Minority Students

Advanced Placement participation has increased in urban schools around the nation; however, there are still some challenges with the program. If these challenges are to be corrected, it is important to identify them and examine their causes considering AP
is the program that United States leaders have proposed to save the American education system (Sadler et al., 2010). When discussing the challenges of the AP program, researchers particularly emphasize the poor exam pass rates among minority students, poor pre-AP student preparation, lack of AP program quality, and an overall declining credibility for the program. If left untreated, these challenges will result in the demise of the program.

As the literature suggests, there are many positive attributes to increased minority AP participation; conversely, many of these students do no fare well on the end of course exams. According to the AP Report to the Nation (College Board, 2011), only 1,657 African-American students scored a passing grade on the exam despite 6,359 African-American students being enrolled in AP courses in the state of Georgia. The challenge of low passage rates has grown as the program has expanded to include many low-performing and urban schools. As a rebuttal to this statistic, many AP proponents argue that the mere exposure to the program will benefit minority and economically disadvantaged students; however, Sadler et al. (2010) argue that increasing student access to AP classes is not enough to determine success. According to a study conducted in Texas, students who took AP classes, but could not pass the exam, did not fare any better in college than students who never participated in an AP program (Sadler et al., 2010). This study calls to question the act of expanding AP programs solely on the premise of "equality and equity" (Hallett & Venegas, 2011, p. 468). Furthermore, the expansion of AP exposes a larger problem besides students not performing well on exams; it solidifies
the fact that an inconsistency in college preparatory curricula is impeding students’
growth and academic progress.

It is no secret that low-income and minority students come to school ill-prepared, but this fact cannot be the sole reason for expanding AP programs in urban schools. Sadler et al. (2010) propose that the long term goal of using the AP program to enable a wide array of minority and disadvantaged students to succeed in college-level courses while still in high school requires an emphasis on early academic preparation. The aforementioned observation highlights the fact that many schools are not preparing students for academic college readiness despite pushing students to enroll in Advanced Placement courses. In essence, AP and the College Board are overlooking the larger issue and consequently doing a disservice to students. Additionally, William Casement (2003) suggests that the expansion of the program along with the data provided by the College Board gives a false sense of hope and security in the program. He notes that more often than not students who are enrolled in the courses do not take the culminating exam and, therefore, are not accounted for in AP data that is reported to the nation. Moreover, if there are students who opt not to take the AP exam, does that suggest that these students only took the course for a high school grade point average boost or that these students were enrolled in an AP program that did not prepare them to be successful on the exam?

In addition to the aforementioned challenges, a lack of program consistency and parallelism within the program presents a problem for the success of AP. Because Advanced Placement does not have a specific program design, AP teachers are at liberty
to design their courses however they choose. Some AP teachers believe this to be one of
the many advantages to the program; however, this can also be a detriment. The lack of
commonality between various AP programs means “often students are not receiving the
adequate preparation for the rigors of college-level coursework,” which is the purported
goal of Advanced Placement (Whiting & Ford, 2009, p. 23). Though teachers are
allowed to design their own course, all students despite geographic location,
socioeconomic status, or level of preparation must take the same culminating end of
course exam. Considering all students must take the same exam, many raise the question
of having set curricula that all AP teachers must teach. Consequently, as a result of the
common tests given at the end of the year, the concept of “teaching to the test” has
become more prevalent in AP classes and often causes colleges and universities to
question the program’s validity and integrity (AP teacher, personal communication, June
2011). Additionally, researcher Felicia Dixon notes the lack of differentiation in AP
classes and the potential problem it poses for students who participate in the program.
She suggests, “classes where everyone does the same assignment often only reach one-
fourth of the students” (Dixon, 2006, p. 52). If this statement is true, then the dismal
results of minority students on AP exams are not only the result of a lack of prior
preparation and program commonality, but a failure to meet the academic needs of
students in these programs.

Due to the said circumstances, many institutions, both secondary and
postsecondary, are losing faith in Advanced Placement. Those persons who now
question the credibility of the program believe that program expansion to students who
are not ready will be the biggest downfall of the program. When interviewed, a current AP teacher noted, "it is difficult to truly provide the quality of an AP program with the way the expansion is going" (AP teacher, personal communication, July 2011). Consequently, AP students are entering into postsecondary education with a false sense of maturity as a student. A local area college professor sees the effects of the expansion in her classroom at her school. She recognizes that students may have taken some advanced coursework in their high school careers, but that knowledge "does not transfer into their collegiate work" (College Professor, personal communication, June 2011. This false sense of maturity and knowledge has caused many postsecondary institutions to either discontinue the practice of accepting AP exam credit or only accept a score of five for course credit. Lastly, if AP is to remain a viable program, policymakers must determine a way to restore the faith to the program and make it advantageous for all students.

Summary

As more minority students begin to choose college as a postsecondary option, there is a need to devise programs that will bridge the gap between high school and postsecondary success. Due to the need for academically challenging curricula, professors and other educators collaborated in the 1950s to devise the honors programs used today in high schools around the world. Schools will continue to use Honors and/or Accelerated classes on the local and district levels to service those students who may not be ready to take a college level course. In addition to Honors and/or Accelerated classes, schools also offer Advanced Placement and International Baccalaureate programs as a
means of bridging a gap between high school and college. Although International
Baccalaureate is gaining popularity with educators and administrators across the nation,
Advanced Placement continues to be the dominating force in the academic college
readiness program market. Initially the program was geared towards upper middle class,
academically talented, white high school seniors, but has expanded to include students as
young as middle school.

There are some who believe that the expansion of Advanced Placement is great
for the academic growth and success of minority students. Not only does the expansion
broaden students' academic and intellectual horizons, a satisfactory score on the exam
may even save money on college tuition. This program perk has attracted the federal
government and many state governments to include AP participation as a part of their
high school course offerings. There have been studies conducted in Texas as well as
other states that show the benefits of traditionally underserved and/or underrepresented
students participating in Advanced Placement classes. The success rate of the previously
mentioned Suncoast High School study shows how AP can produce the acquired results
when instituted properly (Hale, 2007). Including the aforementioned studies, two school
administrators believe that the mere exposure of students to an AP curricula benefits
students, even if the benefits may not manifest themselves immediately through exam
results (School Administrators, personal communication, June 2011). This belief is what
will help sustain AP programs when doubters begin to seek out alternatives.

On the contrary, the expansion of the AP program has been met with some
opposition. There are many who believe that program expansion will ultimately lead to
its demise. These naysayers, or detractors, believe that by having an open door policy, AP teachers will now have to dilute the content and rigor of the courses to meet the needs of all students. Additionally, detractors believe that with the increase of student participation has come the inflation of AP exam scores. They feel this is problematic because it gives AP students a false sense of their abilities and often creates problems for the students when they arrive to college (Casement, 2003). Furthermore, Sadler et al. (2010) and Casement believe that AP and the College Board provide data that are misleading to the masses. Due to this misleading data, AP has seen a substantial increase in participation and consequently has also seen an increase in annual revenue. The negativity and skepticism regarding AP coursework, classes, and exams has caused some schools, particularly private, to get rid of the program altogether. Much like their P-12 counterparts, some elite postsecondary schools have begun to stop the practice of offering college credit for AP exam scores because of a loss of faith and credibility in the program.

As the State of Georgia, along with the others who will participate in the Common Core Standards, proposes to implement a “career and college readiness” index for high school students in order to graduate, it is important that schools have all the necessary courses, personnel, and resources to prepare students for the next level of learning. Over the past five decades, there has been a tremendous increase in AP participation among minority students, but participation alone may not be enough. Although participation rates are high, exam scores continue to be low. These low scores emphatically suggest that AP in its current state in many urban schools is not working for
students. Urban schools must establish a method to address students’ needs developmentally without compromising the integrity of the program if the students are to have a chance at postsecondary success.
CHAPTER III
THEORETICAL FRAMEWORK

This research study was proposed to examine the correlation between the factors that impact the quality of implementation of a high school advanced academic readiness program (Advanced Placement) and the exam passage rates for program participants. The study investigates the factors that contribute to the quality of implementation according to the following variables: student variables, teacher variables, instructional and programmatic variables, and leadership variables. The researcher believes that these variables contribute to the quality of an advanced academic readiness program and directly affect the passage rates of program participants. Student variables consist of both intrinsic and extrinsic characteristics of students. These characteristics include student demographics, student attitudes and dispositions about learning, student academic preparation, student motivation, and student academic performance. Additionally, teacher variables are used to establish a relationship between the independent and dependent variables. These variables consist of teacher training and preparation, teacher attitudes and dispositions, and culturally responsive teaching. Also, programmatic variables are examined to establish the relationship between the quality of implementation of the Advanced Placement program and the AP exam passage rates. These variables include the organizational structure of the academic program and the curricula design of the academic program. Lastly, leadership variables are used to establish the relationship
between the dependent and independent variables in this research. The researcher believes that the specific duties and responsibilities of educational leaders are significant to the quality of implementation of the advanced academic program, which ultimately impacts the level of success on the AP exams. The aforementioned variables are studied through the critical race theory, control theory of motivation, culturally responsive pedagogy, and the role theory. Figure 2 demonstrates the presumed relationship between the variables.

**Definition of Terms**

**Advanced Placement** is a rigorous high school academic program that provides students with the opportunity to experience college-level work and potentially earn college credit through faculty advisement, teacher interaction, peer collaboration, and expansion of students' depth of content-related knowledge.

**Advanced academic program** is defined as a program created for high school students as a need to engage students who are motivated to pursue academic content on higher levels, be it an accelerated or collegiate level.

**Student variables** are defined as the factors that attribute to a student being academically prepared for college.

**Teacher variables** are variables that contribute to a teacher delivering specific content and making that content relative to the students they service.

**Instructional variables** are the factors related to teaching and pedagogy that impact the level of academic preparedness and academic success of students.
Independent Variables

Student Variables
- Student demographics
- Student academic preparation
- Student motivation
- Student perception of the value of AP program

Teacher Variables
- Teacher training and preparation
- Culturally responsive pedagogy
- Teaching methods

Instructional/Programmatic Variables
- Organizational structure of the academic program
- Curricula design of the academic program

Leadership Variables
- Organizational leadership style
- Interactions with AP constituents

Dependent Variables

Quality of Implementation of Advanced Placement Programs
Primary Dependent Variable

Increased success Rate in Advanced Placement classes and on Advanced Placement exams
Secondary Dependent Variable

Figure 2. Presumed Relationship among Variables
Programmatic variables are elements of an advanced academic program that establish the foundation for the program's implementation.

Definition of Dependent and Independent Variables

Dependent Variables

Advanced Placement exam success is defined as a student scoring what College Board deems successful on the exam: a 3 or higher.

Quality of implementation is defined as the student perceived effectiveness of the Advanced Placement program in their respective high schools. Factors such as advisement, tutorials, content delivery, practice sessions, and exam passage rates are included in the quality of implementation of the program.

Independent Variables

Student demographics is defined as the age, race/ethnicity, gender, grade-level, and socioeconomic status of students in advanced academic programs. (Teacher Survey Questions 11, 25; Student Survey Questions 1, 2, 3, 4; Interview Question 1)

Student perceptions about value of Advanced Placement is defined as the beliefs a student has regarding what they learn in the program, how they learn the content, and why learning is important. (Teacher Survey Questions 10, 25; Student Survey Questions 18, 20, 25; Interview Questions 6, 13)

Student academic preparation is defined as the level of requisite knowledge and preparation a student has received prior to enrolling in advanced academic classes in high school. (Teacher Survey Questions 17, 23; Student Survey Questions 5, 14, 21, 27, 28; Interview Question 2)
Student motivation is defined as the intrinsic or extrinsic stimuli that cause students to accomplish goals and/or important tasks. (Teacher Survey Questions 23, 25; Student Survey Questions 5, 6, 11; Interview Question 13)

Teacher training and preparation is defined as the academic training and professional development of teachers who teach in advanced academic programs. (Teacher Survey Questions 1, 2, 3, 5, 28, 29, 32; Student Survey Question 22, 23; Interview Question 14)

Teacher attitudes and dispositions is defined as the belief a teacher has about what they teach, who they teach, and how they teach. (Teacher Survey Questions 4, 6, 22; Student Survey Question 9; Interview Questions 3, 15)

Culturally responsive awareness simultaneously develops, along with academic achievement, social consciousness and critique, cultural affirmation, competence, and exchange; community building and personal connections; individual self-worth and abilities; and an ethic of caring (Gay, 2000). (Teacher Survey Questions 8, 11; Student Survey Questions 8, 24; Interview Question 10); (Teacher Survey Questions 12, 15; Student Survey Questions 10, 13, 23, 25)

Organizational structure is defined as the underlying framework for how the academic college readiness program should be executed. The organizational structure includes school personnel and officials who are responsible for various aspects of the program such as advising students, coordinating tests, and implementing the program. (Teacher Survey Questions 7, 9, 13, 15, 18, 19, 20, 21, 24, 26, 30, 31, 35, 36; Student Survey Questions 12, 15, 16, 17; Interview Questions 5, 8, 9, 11, 12)
Organizational leadership style is defined as the method employed by the building leader to gather data, disseminate information, and maintain accountability for all actions in the building. (Teacher Survey Questions 27, 34, 37; Student Survey Questions 26; Interview Questions 3, 4, 7)

Interactions with AP program constituents is defined as the teacher-perceived and student-perceived leader actions and communication with all AP participants. (Teacher Survey Questions 26, 27, 34, 37; Student Survey Questions 12, 15, 26; Interview Questions 5, 7)

Relationship among Variables

It was proposed that the AP exam success rate of program participants will be influenced by the quality of implementation of the advanced academic program, and that the various student, teacher, instructional/programmatic, and leadership variables contribute directly to the quality of implementation of the program. The symbiotic relationship between these factors will act as a force that either contributes to or detracts from the level of academic college readiness of advanced academic program participants. Though these variables exist in most academic programs, they are particularly essential to understanding the cyclical process of educating minority students due to the cultural barriers presented in mainstream curricula. The necessity of these variables in academic preparation is evidenced by Geneva Gay’s development of “culturally responsive pedagogy” as a theory of making education accessible to minority students (Gay, 2000, p. 44). She asserts that culturally responsive pedagogy is anchored on four foundational pillars of practice—teacher attitudes and expectations, cultural communication in the
classroom, culturally diverse content in the classroom, and culturally congruent instructional strategies (Gay, 2000). Through this assertion, she validates the connection between these variables as a requisite to improving education for minority students.

More often than not, minority students are exposed to curricula that do not encompass their beliefs, values, or life experiences. Consequently, minority students become disengaged from the educational process. A study conducted by Christopher Knaus (2009) demonstrates how a lack of relation to the mainstream curricula results in student disengagement and a lack of success in schools. This study, along with many others that are similar in nature, demonstrates the effects of curricula that are neither culturally diverse nor culturally congruent to students’ needs. In an effort to connect the variables in this research, the researcher examined these variables through cultural theory. The student variables in conjunction with the other variables labeled in this study led to the exploration of the effects of culture—student, teacher, instructional, and leader—on minority student success in advanced academic programs such as Advanced Placement.

When examining student culture, student demographics cannot be ignored. As defined in this study, student demographics refer to the age, race/ethnicity, gender, grade and socioeconomic status of the students in the academic program. Each component of demographics contributes to the other student variables such as: students’ attitudes about learning, motivation to learn, academic preparation, and academic performance. Through professional observation, the researcher has witnessed the firsthand effects of student demographics on other variables of student learning. Often times, when students have a
low socioeconomic status or feel invalidated because of their racial ethnicity, their level of motivation is low which directly impacts their academic preparation and performance.

However, this scenario may not always be true of the minority student who participates in advanced academic programs. As evidenced by the Booker T. Washington High School students who are participating in joint enrollment at Clark Atlanta University, there are some students whose exposure to culturally responsive pedagogy transcends proposed demographic limitations and uses William Glasser’s (1990) Theory of Control Motivation to achieve academic advancement. This theory hypothesizes “a person’s behavior is not influenced by environmental factors, but by what they want at a given time” (Glasser, 1990, p. 20). And though the Theory of Motivation does not explicitly identify culture as a caveat to motivation, many minority students who utilize this theory often use their cultural awareness as a catalyst to influence their behavior and enhance their academic preparation. Additionally, it is proposed by Gay that if they develop a cultural relationship to education, minority students are more likely to increase their academic performance. Therefore, these student variables are a byproduct of the quality of implementation of an advanced academic program and consequently affect the increased level of AP exam success rates.

Another important variable of this study is the teacher variables and their relationship to the quality of implementation of an advanced academic program as well as an increased level of academic preparation. Schools today utilize various instructional variables to aid in the education of students, but for the purpose of this research,
instructional variables will be limited to teacher influences such as teacher training and preparation, teacher attitudes and dispositions, and culturally responsive teaching.

As novice teachers begin their careers, they are often disconnected from the realities that their students face daily. It is further proposed that teachers have a cultural disconnect because their demographics, particularly their socioeconomic status, differs significantly from that of their students. Consequently, differing socioeconomic statuses leads to different ideologies about cultural relations that may unintentionally manifest themselves in the classroom. Contrary to popular belief, "an individual’s culture and ethnicity does influence attitudes towards the 'cultural other' and basic human interactions" despite teachers wanting to believe that colorblindness can exist in today’s classrooms (Irvine, 2003, p. xvi). Nonetheless, research does not suggest that teachers should assimilate themselves to the culture of their students, but researchers Gay (2000) and Irvine (2003) allege that teachers should be culturally aware and responsive. Being culturally aware and responsive simply put means acknowledging the cultural norms and needs of minority students and responding to those needs in a manner that validates, transforms, cultivates, empowers, and emancipates students academically (Gay, 2000). Some may argue that culturally responsive teaching will provide students with slanted realities about the larger world in which they live, but through culturally responsive teaching, teachers will begin to shift their personal attitudes and disposition about teaching minority students and create constructivist-learning environments where students will be able to make meanings of information for themselves. Through this approach, teachers will begin to contribute to the quality of an advanced academic
program because they will help students delve into what Webb calls “extended thinking,” which is the highest level according to his depth of knowledge, and by exposing advanced academic program participants to this highest level of thinking, teachers will help increase student academic preparation and achievement. Furthermore, both Gay (2000) and Irvine (2003) confirm that culturally responsive teaching contributes to the impact of minority students in advanced academic programs.

In addition to culturally responsive teaching, teacher attitudes and dispositions and teacher training and preparation are variables that contribute to the quality of implementation of an advanced academic program. Irvine notes how “far too many pre-service and in-service teachers proclaim a color-blind approach to teaching, hesitant to see [students] as cultural beings” and that this “sincere fiction” will continue to result in what Gloria Ladson-Billings (cited in Irvine, 2003) calls “educational debt” (p. xv). This feign of ignorance directly impacts the quality of an advanced academic program for minority students because it hinders cultural relation to the curricula and as a result limits academic growth. Both Irvine (2003) and Gay (2000) note that this ignorance is normally prevalent in novice and preservice teachers, which demonstrates that teacher preparation programs are not providing teachers with the necessary tools for teaching minority students. This is important because most novice teachers begin their career in urban settings. Furthermore, their lack of preparation paired with problematic perceptions leads to poor performing pupils, which undeniably impacts the level of academic preparation of students.
It is significant to also note that though the lack of cultural awareness is often seen with novice teachers, it is seen with veteran teachers as well. Veteran teachers have been in the profession for a minimum of seven years and often teach in advanced academic programs. Teachers who teach in advanced academic programs receive additional training beyond their initial baccalaureate degrees and certification programs. The researcher has participated in training for preparation of teaching gifted students as well as Advanced Placement classes, both of which are considered advanced academic programs. As a result of gifted education training, the researcher learned differentiation techniques/strategies that help extend learning for gifted students. Likewise with Advanced Placement training, the teacher learned specific strategies and techniques that would best prepare the students for Advanced Placement exams, yet there was no cultural context for learning present in either of these trainings. Neither of these trainings addressed the cultural needs of students and how culture directly impacts student learning. Consequently, a nonemphasis on cultural connection and congruency in advanced academic programs such as Advanced Placement can be attributed to the low exam performance of minority students on these tests. Therefore, it is plausible to suggest that without cultural communication, connection, and congruency in advanced academic programs, the level of AP exam passage rates will not improve for minority students.

Instructional and programmatic variables such as curricula design and organizational structure are significant when examining the relationship between the factors that impact the quality of implementation of an advanced academic program and
the level of exam success. This variable is examined through both the critical race theory and culturally responsive pedagogy.

Although there is no concrete definition of the critical race theory because it can be described through a hybrid of disciplines, Ladson-Billings (cited in Irvine, 2003) provides a definition that is relative to education. She states that the critical race theory is when “mainstream curriculum silences multiple voices and perspectives, primary legitimizing dominant, White, upper-class, male-voicings as the standard knowledge students need to know” (Ladson-Billings & Tate, 1999, p. 50). Often times, when curricula is designed, it is designed with the thought that these are things that students need to know, but what remains a mystery is who determines what needs to be known and why these people believe that all students need to know the same things. This type of dominating ideology is what causes cultural disconnect between students and consequently impedes their academic performance. Additionally, because this curriculum is given to teachers as what is supposed to be taught, they often teach the curricula with no real regards for the students they teach and how the curricula may ultimately eliminate student connection from learning.

Just as the curricula design impacts the quality of implementation of the program and affects student performance, so does the organizational structure. Organizational structure refers to the way an academic program is planned and executed in a school. This variable is important to the quality of implementation of academic programs because in addition to determining what is taught, it deals with the essentials of running the program, such as what students participate in the program, how the program is designed
to benefit the students, and what teachers serve as instructors for the program. As a part of her theory of culturally responsive pedagogy, Gay (2000) notes the importance of educational leaders and those who serve in organizational leadership positions. She further emphasizes that because educational leaders often manage the organization of the learning environment, it is their responsibility to establish culturally relevant academic programs for students to enhance their educational experiences and promote academic preparation.

While examining this research through the context of culturally responsive pedagogy, another theory emerged from the literature: the role theory. This theory is significant to this research because it notes “people in organizations have definite, prescribed roles that must be performed” (Owens, 2004, p. 125). As customary with all organizations, every member of the organization contributes significantly to the quality of the overall program and the same is true for the Advanced Placement program in schools. There are several people who have distinctive roles in the quality of implementation of the Advanced Placement program; if these people fail to fulfill their roles, the program and the students suffer. The researcher has identified several school personnel who contribute to the quality of an AP program. They include: the principal, the assistant principal of instruction (API), the AP coordinator, the school counselor, the content department chairperson, and the classroom teacher; each of these roles provides a unique contribution to the AP program and helps to ensure its quality and success for students.

Though the role theory applies to all AP program personnel, this theory is analyzed with specific reference to the principal because he/she serves as the primary
instructional leader for the school. In addition to the principal’s role as the instructional leader, there are variables that contribute to the success of the principal in this role as the instructional leader of the AP program. They are: the organizational leadership style and the interactions with other program constituents (teachers, students, API, AP coordinator). These variables are significant because each contributes to the principal’s performance of her/his role in the Advanced Placement program. Because the role theory proposes that “behavior in a role . . . is influenced to some extent by dynamic interplay with other people,” it is necessary to examine the leadership style and interactions of the instructional leader as a factor in the quality of implementation of the AP program (Owens, 2004, p. 125).

As noted earlier, all of the aforementioned variables contribute to the quality of implementation of the advanced academic program, which subsequently leads to an increased passage rate on AP exams. The theoretical foundations presented provide a framework that helps the researcher examine the factors that impact the quality of program implementation and establish relationships between the quality of AP program implementation and the AP exam success rate of program participants. Specifically, when the implementers of an Advanced Placement program recognize and acknowledge the important roles of program constituents, the factors that motivate students, and the necessity of culturally relevant curricula, minority students will develop a connection to learning that will help them construct meaning for themselves and increase their success rates on Advanced Placement exams. Figure 3 displays the relationships between the variables and the theories.
Figure 3. Relationship between Variables with Support of Theoretical Framework
Summary

This study was designed to examine the correlation between the quality of implementation of an advanced academic program and the level of AP exam passage rates. It is proposed that the following variables contribute to the quality of the program: student variables, teacher variables, instructional/programmatic variables, and leadership variables. Student variables include: student demographics, student attitudes/disposition, student motivation, student academic preparation and student performance. Teacher variables include: teacher training and preparation, teacher attitudes and dispositions, and culturally responsive teaching. The instructional/programmatic variables include: curricula design and organizational structure of the academic programs. Lastly, the leadership variables include: organizational leadership style and interactions with AP program constituents. These variables were examined through cultural theories to establish the relationship amongst minority students, culture, and the Advanced Placement program. Furthermore, these variables, when connected through the culturally awareness pedagogy theory and the critical race theory, demonstrate how the quality of implementation of an AP program can potentially increase and increase student passage rates on AP exams.
CHAPTER IV
RESEARCH METHODOLOGY

The purpose of this chapter is to demonstrate procedures and methods that were used to determine the relationship between the dependent variables: quality of Advanced Program implementation and an increased level of AP exam success for students who participate in Advanced Placement, and the independent variables: student variables, teacher variables, and instructional/programmatic variables, and leadership variables, which the researcher believes all variables contribute to the quality of implementation of the advanced academic program.

Research and Design

The triangulation method of research design and data collection, as coined by John Creswell (2009) was used as the foundation of this study. Creswell proposes that using triangulation provides credibility to the study because it uses quantitative, qualitative, and “unobtrusive measures such as test scores and attendance records” to conduct research in order to provide depth to the study and ensure reliability of the data (Glanz, 2006, p. xv). Consequently, this study employed surveys, interviews, and test scores as a means of solidifying the research and validating the study. In addition to administering surveys and conducting interviews, test scores were analyzed to help provide more support and validity for the research. The researcher administered a survey to teachers and students who participated in the Advanced Placement program. These
surveys were distributed with the goal of answering each research question present in the
study and examining the results to determine the relationship between variables.

With the help of the faculty at Clark Atlanta University, the researcher developed
research and interview questions that provided data for this study. Because this study
utilized a mixed methods approach, the researcher used the “concurrent embedded
design” as the research method (Creswell, 2009, p. 214). This method uses one type of
research (quantitative) as the dominant research design and supports the theories and
findings through a secondary (qualitative) method of research. This design method was
beneficial to the study because it showed a relationship between the variables and further
strengthened the validity of the research. Figure 4 provides a visual representation of the
research method.

Figure 4. Research Design (Mixed Methods Procedures)
Description of the Setting

The school used in the study is located in a high school located in the southeastern region of the United States in a large metropolitan Atlanta school district. The school district, the third largest in the state, has 21 high schools, which range from performing arts schools to alternative and low-performing schools. Additionally, each school in the district offers at minimum 13 Advanced Placement courses per school; likewise, the research site offers 13 AP courses. There are approximately 450 students in the AP program at the school, but approximately 250 of these students served as the sampling population for this research because the research was limited to juniors/and or seniors in Advanced Placement. Also, there were approximately 15 AP teachers who were used for this study. Many of the schools in the participating district have a predominantly minority student population, and they mirror a variety of socioeconomic backgrounds, but for the purpose of this study, all students participated in Advanced Placement at some point in their academic careers. Other demographics for the school are listed below.

- The school has a population of approximately 1550 students
- Ninety-eight percent of the students are African American
- One percent Caucasian
- Two percent are identified as multi-racial
- Forty-nine percent of the students free or reduced lunch.
- Five percent of all students are identified as Students with Disabilities (SWD)
- Three students are English Language Learners.
Sampling Procedures

Purposeful and convenient sampling was used for this research. These types of samplings select informational related cases for extensive analysis. Also, these types of samplings are used when there is a distinct criterion being used for participant selection. The distinct criterion associated with this research is student and teacher participation in Advanced Placement programs. This sampling is convenient because the researcher has immediate/ convenient access to the participants because of employment. In addition to selecting Advanced Placement students and teachers, the researcher conducted interviews with school personnel who serve in various leadership roles and help to establish boundaries and criteria for AP program implementation. The following administrative roles were interviewed: high school counselors, subject department chair, a high school Advanced Placement coordinator, and an assistant principal of instruction. These interviewees were purposefully selected due to their specific functions with Advanced Placement program development and implementation.

Working with Human Subjects

Participants were asked to volunteer and given a consent form as outlined by the respective Institutional Review Boards (IRB) for Clark Atlanta University and the participating school district. The consent forms included any risks as well as time needed to complete the surveys and interviews. All subject information was kept anonymous and confidential respectively.
Instrumentation

The researcher defined the research problem and questions for the study. With the help of the faculty at Clark Atlanta University, the researcher designed the survey instrument to be used in this study. The survey consisted of both 2-point questions and 5-point Likert scale questions in order to collect data that will establish a relationship between the independent and dependent variables. A survey design was most beneficial to this research because it explained the opinions and beliefs of the select participants and helped to further establish a relationship between the independent and dependent variables. Furthermore, a survey was the most economical and efficient method of receiving information in a timely manner. Additionally, the researcher selected to use electronic surveys because students and teachers viewed this method as a convenient and easier tool for communication. Table 5 lists the instrument items that correspond to the variables measured.

In addition to using surveys, the researcher conducted a qualitative study using interviews. The researcher established an interview protocol for conducting and transcribing the interviews. All interviews were conducted individually to protect the validity of the research. The interviews were recorded and transcribed. After transcribing the interviews, the researcher sent a copy of the transcript to the participants to ensure accuracy and validity of the commentary.
Table 5

*Instrument Items that Correspond to the Variables Measured*

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<th>Instrument Items that Correspond To the Variable</th>
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<td>Student attitudes and dispositions about Learning</td>
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</table>
Participant Selection

The researcher used purposeful selection to conduct this research. The students used in this study were selected from an urban school district in a large metropolitan district in the southeastern United States. All participants were high school juniors or seniors participating in the Advanced Placement program at their school. Although there may be freshmen and sophomores enrolled in Advanced Placement courses, the researcher used older students who had more high school experience and had taken more than one Advanced Placement course. Additionally, teachers who work with Advanced Placement programs were surveyed. Though this research primarily examined the quality of implementation through student perception, it was important to also include teacher perception into the study because of the significant contribution that teachers add to Advanced Placement programs through content delivery and program implementation. Furthermore, the researcher, an employee at the research site, used a convenience sampling due to the immediate access to the students and teachers who participated in the survey.

In addition to the student and teacher participants, various school leaders were interviewed as a part of this study. The researcher chose to interview school leadership personnel who play integral roles in establishing and implementing Advanced Placement programs in high schools. Following is a description of each leadership role as it relates to the AP program.
**High School Counselor**

The high school counselor position was chosen for this research because of the close relationship between the counselor and all constituents of the AP program. Because counselors serve as advisors to AP students and leaders in the implementation of the building-level AP program, they were able to provide depth to the research through their interview responses.

**Department Chairperson**

Likewise, subject department chairpersons have been selected for this study because of their role and connection to all AP program participants through content delivery and program implementation. Department chairpersons decide who will teach AP classes as well as help to establish the rules and procedures that govern the AP program in their buildings; their unique role in the AP program helped the researcher provide depth to the research through their interview responses.

**Assistant Principal of Instruction (API)**

The assistant principal of instruction (API) was purposefully chosen for this interview because of her/his role in the overall building instruction and student development, and though the API is responsible for all instruction, he/she is also responsible for the content delivery and implementation of the AP program. The researcher believes that the duties and responsibilities of the API benefited the research and provided depth to the study.
**Advanced Placement (AP) Coordinator**

Like the API, the AP coordinator plays a significant role in the implementation of the Advanced Placement program. The program coordinator is solely responsible for disseminating information to teachers regarding AP policies and procedures, reviewing AP course syllabi, ordering and administering AP exams, and tracking data related to AP student performance within the building. The intense nature of this position provides the coordinator with a different insight into the AP program. This insight allows the AP coordinator to examine strengths and weaknesses of the program as well as examine the progression of the students over a period of time. The researcher believes that the expertise of the AP coordinator helped to further establish relationships between the dependent and independent variables of the research.

In accordance with research rules and procedures, the researcher established an interview protocol for all participants.

**Data Collection Procedures**

The researcher obtained permission to administer the surveys from the Institutional Review Boards (IRB) at Clark Atlanta University and the participating school district. Then, permission was sought from the school principal prior to distributing surveys to students and teachers. Due to the large number of students enrolled in AP English classes at the site, all permission letters were distributed to this group. To ensure the validity of the research, the researcher administered the permission letters through one department at the school opposed to using several departments and possibly duplicating student responses. All permission letters were collected by the
researcher and placed in a sealed envelope. Once the permission letters were secured and the students participating in the study were identified, the researcher provided the students with information regarding how to access the student surveys electronically. When the surveys were completed and submitted electronically, the researcher secured the results until such time the data was analyzed.

The survey instrument for teachers was available electronically for participant convenience. The researcher provided all teachers with information for accessing the survey electronically. Once all surveys were completed and submitted electronically, all results were maintained in a safe environment until such time the researcher was ready to disaggregate the data.

In addition to conducting surveys, the researcher conducted qualitative interviews. A comfortable environment free of external bias and influences was provided to conduct interviews and assist the interviewees to be more at ease. All interviews were conducted independently as to protect the validity and reliability of the research. Additionally, all interviewees were provided with the interview protocol to acknowledge their consent to having the interview recorded. As the interview was recorded, the researcher took notes and compared the notes to the interview.

There were approximately 450 total students enrolled in the Advanced Placement program at the research site, and the sampling size consisted of approximately 275 students. Of the sampling size, 129 students participated in the study. Additionally, 15 teachers who work with Advanced Placement were surveyed.
Unobtrusive Data Collection

The researcher collected and analyzed test data and school system reports published by the participating school and the participating school district. Data from the Governor's Office of Student Achievement (GOSA), as well as the College Board were used to set the framework and significance of this study. According to Glanz (2006), this data is unobtrusive because it does not require the researcher to interact directly with the research participants. Although this data does not require direct interaction, it is necessary for the research because it provides testing and demographic results that will help establish a relationship between the dependent and independent variables in this study.

Statistical Applications

Quantitative

The researcher used the Statistical Package for Social Sciences (SPSS) to analyze and interpret the data. A statistical variance of .05 was used to establish a relationship between the independent and dependent variables. All survey questions corresponded to an existing independent variable as outlined in chapter three of this research. The researcher used the Pearson Correlation Coefficient to show the relationships between the independent variables and the dependent variables.

Qualitative

After transcribing the interviews, each interview was analyzed to establish themes that may have emerged through the responses provided by the interviewees. Because the researcher used an embedded approach, there were codes/independent variables already
established and consequently, the researcher organized the data collected from the
interviews into the pre-established codes/variables. Once the researcher establishes the
codes, the researcher further established a relationship between the independent and
dependent variables in the research. The interview questions were coded and used to
identify emerging themes that may be present. These emergent themes were those that
might not have been identified in the quantitative surveys.

**Summary**

In an effort to conduct research that establishes a relationship between factors that
influence the quality of implementation of Advanced Placement programs and AP exam
passage rates, a mixed methods study was used to implement the research. Prior to
conducting the research, the permission was secured from the IRBs at Clark Atlanta
University and the participating school district. After receiving permission to conduct the
study, the researcher proceeded to gather permission from the building principal and
parents of student participants. After permission from all agencies had been received,
students and teachers were surveyed, and interviews were conducted with a select group
of administrative constituents related to AP programs. Data analysis began when all
results were collected to establish a relationship between variables using SPSS. The
researcher coded the interviews to show depth to the data found through the surveys.
CHAPTER V

DATA ANALYSIS AND FINDINGS

Data Analysis

The purpose of this chapter is to provide an overview of the findings collected through the quantitative and qualitative data analyses. A concurrent embedded design was used to collect the data and establish a relationship between the dependent and independent variables. The researcher utilized this mixed methods approach to provide depth and understanding to this study. Data were collected through surveys, interviews, and student test scores provided by the participating school and the participating school district. All of these data sources were used to help provide answers to the research questions and establish a relationship between the variables. Surveys were administered to the students and teachers through Google documents. Student surveys were analyzed quantitatively and teacher surveys were transcribed, coded, and analyzed qualitatively due to the small sample population of teachers. Additionally, five counseling and administrative personnel were interviewed and this information was analyzed through coding and narrative discussions. All survey and interview participants will remain anonymous and will not be associated with the participating site or the school district.

Findings

This case study was designed to establish a relationship between the quality of implementation of the Advanced Placement program at the participating school and the
school's AP examination success rate. Student, teacher, and leadership personnel perspectives evaluated the quality of implementation of the program. Due to the research design method, both quantitative and qualitative data were used to answer the research questions.

Based on the data presented in Table 6, there were more female respondents than male respondents. Likewise, there are more female Advanced Placement students than male Advanced Placement students.

Table 6

*Percentage of Respondents by Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male – 1</td>
<td>36</td>
<td>27.9</td>
<td>27.9</td>
<td>27.9</td>
</tr>
<tr>
<td>Female – 2</td>
<td>93</td>
<td>72.1</td>
<td>72.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As presented in the Table 7, there were more junior students who responded to the survey than senior students. Although the percentage gap is not this wide, this is indicative of the composition of the student population of the Advanced Placement program.
Table 7

Percentage of Respondents by Grade Level

<table>
<thead>
<tr>
<th>Student Status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior – 1</td>
<td>108</td>
<td>83.7</td>
<td>83.7</td>
<td>83.7</td>
</tr>
<tr>
<td>Senior – 2</td>
<td>21</td>
<td>16.3</td>
<td>16.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The data provided in Table 8 show that 58.9% of the survey respondents do not receive free or reduced lunch. This data is representative of the overall student population because although the school is not a Title I school, a large percentage of its students receive free or reduced lunch.

Table 8

Percentage of Respondents by Socioeconomic Status (SES)

<table>
<thead>
<tr>
<th>Socioeconomic Status (SES)</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Free/Reduced Lunch - 1</td>
<td>76</td>
<td>58.9</td>
<td>58.9</td>
<td>58.9</td>
</tr>
<tr>
<td>Lunch – 2</td>
<td>53</td>
<td>41.1</td>
<td>41.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The data in Table 9 reflect the percentage of respondents by ethnicity. As demonstrated in the data above, the school has a predominantly African-American population.
Table 9

Percentage of Respondents by Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American – 1</td>
<td>120</td>
<td>93.0</td>
<td>93.0</td>
<td>93.0</td>
</tr>
<tr>
<td>White – 2</td>
<td>1</td>
<td>0.8</td>
<td>0.8</td>
<td>93.8</td>
</tr>
<tr>
<td>Hispanic – 3</td>
<td>2</td>
<td>1.6</td>
<td>1.6</td>
<td>95.3</td>
</tr>
<tr>
<td>Asian – 4</td>
<td>1</td>
<td>0.8</td>
<td>0.8</td>
<td>96.1</td>
</tr>
<tr>
<td>Other – 5</td>
<td>5</td>
<td>3.9</td>
<td>3.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

**Correlational Analysis Results**

The primary goal of a correlational study is to determine if there is a significant relationship between independent variables and dependent variables. Using a Pearson correlation, the researcher measured the degrees of association between variables. The correlation coefficients, which fall between -1 and +1, express the degree of linear relationship between the row and column variables of matrices presented. In this study, a value at or below 0.05 deems the relationship between variables significant. The results of the data analysis are structured in respect to the order of the research questions.

RQ1: Is there a significant relationship between student demographics and student success rates on AP end-of-course grades and examinations?

Data published by the College Board shows that although minorities are gaining access to Advanced Placement, there are still deficits in minority student success. There
has not been a definite rationale that explains low minority student performance, but the Critical Race Theory suggests that mainstream curricula silences multiple voices and perspectives in learning (Ladson-Billings & Tate, 1999). Consequently, this case study sought to establish a relationship between demographics and AP exam performance because student demographics are often associated with student academic performance. As noted in the literature review, the same holds true with the Advanced Placement program.

A Pearson Coefficient Correlation was used to determine a relationship between student demographics and Advanced Placement exam and Advanced Placement class performance. Student demographics for the purpose of this research include: class status, gender, ethnicity, and socioeconomic status. These demographics were cross-referenced with the overall Advanced Placement exam performance as well as Advanced Placement class performance. Table 10 suggests that there is a significant correlation between student status, being a junior or senior, and the AP Environmental Science and AP Calculus final class grades. Additionally, there is a weak correlation between the ethnicity of the student and the AP World History final grade. However, there are no other significant relationships present between student demographics and the other dependent variables.
Table 10

*Pearson Correlation between Student Demographics and AP Class/Exam Performance*

<table>
<thead>
<tr>
<th></th>
<th>AP World</th>
<th>AP</th>
<th>AP US</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exams</td>
<td>AP Env.</td>
<td>History</td>
<td>Language</td>
<td>History</td>
</tr>
<tr>
<td>Passed</td>
<td>Grade</td>
<td>Grade</td>
<td>Grade</td>
<td>Grade</td>
</tr>
<tr>
<td>Student Status</td>
<td>Pearson Correlation</td>
<td>-.068</td>
<td>.305**</td>
<td>-.167</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.442</td>
<td>.000</td>
<td>.059</td>
<td>.904</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>Socioeconomic Status (SES)</td>
<td>Pearson Correlation</td>
<td>-.107</td>
<td>.112</td>
<td>.061</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.225</td>
<td>.204</td>
<td>.492</td>
<td>.247</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Pearson Correlation</td>
<td>.045</td>
<td>-.065</td>
<td>.171</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.613</td>
<td>.466</td>
<td>.053</td>
<td>.350</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>Gender</td>
<td>Pearson Correlation</td>
<td>.107</td>
<td>.106</td>
<td>.021</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.227</td>
<td>.231</td>
<td>.812</td>
<td>.661</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>

Furthermore, a *t*-test was done to explain Advanced Placement course and exam success rate and specific demographics. The *t*-test assesses a statistical difference.
between two groups. The researcher completed a t-test comparing socioeconomic status to Advanced Placement class and exam performance (Table 11).

Table 11

*T-test Comparing SES to Advanced Placement Class and Exam Performance*

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>SES</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Exams Passed</td>
<td>1</td>
<td>76</td>
<td>1.26</td>
<td>.789</td>
<td>.091</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>53</td>
<td>1.11</td>
<td>.506</td>
<td>.070</td>
</tr>
<tr>
<td>AP Env Final Grade</td>
<td>1</td>
<td>76</td>
<td>2.24</td>
<td>1.242</td>
<td>.142</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>53</td>
<td>2.53</td>
<td>1.324</td>
<td>.182</td>
</tr>
<tr>
<td>AP World History Final</td>
<td>1</td>
<td>76</td>
<td>2.84</td>
<td>1.201</td>
<td>.138</td>
</tr>
<tr>
<td>Grade</td>
<td>2</td>
<td>53</td>
<td>2.98</td>
<td>1.009</td>
<td>.139</td>
</tr>
<tr>
<td>AP Language Final Grade</td>
<td>1</td>
<td>76</td>
<td>3.09</td>
<td>.867</td>
<td>.099</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>53</td>
<td>3.26</td>
<td>.763</td>
<td>.105</td>
</tr>
<tr>
<td>AP US History Final</td>
<td>1</td>
<td>76</td>
<td>2.28</td>
<td>1.040</td>
<td>.119</td>
</tr>
<tr>
<td>Grade</td>
<td>2</td>
<td>53</td>
<td>2.55</td>
<td>1.066</td>
<td>.146</td>
</tr>
<tr>
<td>AP Calculus Final Grade</td>
<td>1</td>
<td>76</td>
<td>1.14</td>
<td>.559</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>53</td>
<td>1.28</td>
<td>.769</td>
<td>.106</td>
</tr>
</tbody>
</table>

The table demonstrates that students who do not receive free or reduced lunch pass more College Board administered exams; contrarily, the students who do receive free or reduced lunch have better Advanced Placement course final grades. Table 12 further seeks to establish a statistical significance between the two student demographic groups.
Table 12

*T-Test between Socioeconomic Status and Advanced Placement Class and Exam Performance*

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td>AP Exams Passed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>6.438</td>
<td>.012</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>1.313</td>
<td>126.223</td>
</tr>
<tr>
<td>AP Env. Final Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>.992</td>
<td>.321</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>-1.261</td>
<td>107.362</td>
</tr>
<tr>
<td>AP World History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>6.150</td>
<td>.014</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>-.711</td>
<td>122.529</td>
</tr>
</tbody>
</table>

(continued)
### Table 12 (continued)

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td><strong>AP Language Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>.407</td>
<td>.515</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>-1.191</td>
<td>120.186</td>
</tr>
<tr>
<td><strong>AP U.S. History Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>.049</td>
<td>.824</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>-1.433</td>
<td>110.270</td>
</tr>
<tr>
<td><strong>AP Calculus Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>5.564</td>
<td>.020</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>-1.119</td>
<td>88.962</td>
</tr>
</tbody>
</table>
The data in Table 12 suggest that there is no statistical significance between the two groups. Although students who did not receive free or reduced lunch performed better on the Advanced Placement exams, a statistical relationship was not established and therefore it cannot be suggested that socioeconomic status is a factor in Advanced Placement exam passage rates. Likewise, there was no statistical significance between the two groups in their Advanced Placement class performance. It has been statistically noted that the students who do receive free and reduced lunch perform better in the classes, but a significant relationship cannot be further established between socioeconomic status and Advanced Placement exam performance.

Whereas the students were asked to provide their ethnicity, grade level, gender and socioeconomic status, the teachers were asked about their perceptions regarding student cultural experiences, which include student demographics, and classroom performance. The teachers were given the following statement and had to select the extent to which they agreed. The statement said, "A student's cultural experiences factor into how they perform in the classroom." Their responses are presented in the Figure 5. The figure shows that overall 93% of the surveyed teachers believe a student's cultural experience factors into their academic performance. Although 60% of the teachers did not definitively agree with the statement, they acknowledged the idea that although a student’s culture may not completely impact their academic performance, culture does contribute to a student’s learning.
RQ2: Is there a significant relationship between student perception of the value of the Advanced Placement classes and success rates in AP classes and on AP exams?

The student survey asked several questions regarding student perception of the value of the Advanced Placement program. Additionally, the researcher used this independent variable and cross-referenced it with Advanced Placement class and examination performance. Table 13 demonstrates that there is a significant relationship between the student perception of the value of Advanced Placement program and the Advanced Placement exams passed. However, there is no significant relationship between the student perception of the value of Advanced Placement program and the Advanced Placement class performance.
Table 13

**Correlation between Student Perception of AP Value and AP Class/Exam Performance**

<table>
<thead>
<tr>
<th></th>
<th>AP World</th>
<th>AP</th>
<th>AP US</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>Final</td>
<td>Final</td>
<td>Final</td>
<td>Final</td>
</tr>
<tr>
<td>Passed</td>
<td>Grade</td>
<td>Grade</td>
<td>Grade</td>
<td>Grade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value of AP</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.327**</td>
<td>.000</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>-.107</td>
<td>.227</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>.044</td>
<td>.624</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>.021</td>
<td>.814</td>
<td>129</td>
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<tr>
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<td>.093</td>
<td>.297</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>-.076</td>
<td>.391</td>
<td>129</td>
</tr>
</tbody>
</table>

A further correlational analysis was done to examine specific student survey items to their respective Advanced Placement classes and overall Advanced Placement exam performance. The survey items that were measured, asked students about their overall perceptions of the value of Advanced Placement. Table 14 shows that there is a significant relationship between the overall Advanced Placement exam performance and survey items: 20, 21, and 25. Additionally, there is a significant relationship between Advanced Placement U.S. History class performance and item 20 on the student survey.
Table 14

Correlation between AP Classes and Exam AP Performance and Survey Items

<table>
<thead>
<tr>
<th></th>
<th>#18</th>
<th>#19</th>
<th>#20</th>
<th>#21</th>
<th>#25</th>
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<tbody>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Pearson Correlation</td>
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<td>.125</td>
<td>-.090</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.657</td>
<td>.864</td>
<td>.576</td>
<td>.159</td>
<td>.309</td>
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<td>N</td>
<td>105</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td><strong>AP U. S. History Final Grade</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.176</td>
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<td>.206*</td>
<td>.032</td>
<td>-.005</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.073</td>
<td>.394</td>
<td>.019</td>
<td>.718</td>
<td>.957</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
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<td><strong>AP Language Final Grade</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pearson Correlation</td>
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<td>.047</td>
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<td>-.079</td>
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<td>Sig. (2-tailed)</td>
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<td>.599</td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.060</td>
<td>-.037</td>
<td>.017</td>
<td>.134</td>
<td>-.142</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>.679</td>
<td>.845</td>
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<td>.109</td>
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<td>129</td>
<td>129</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.017</td>
<td>-.005</td>
<td>-.046</td>
<td>.100</td>
<td>-.161</td>
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<td>Sig. (2-tailed)</td>
<td>.864</td>
<td>.953</td>
<td>.607</td>
<td>.258</td>
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</table>

(continued)
Table 14 (continued)

<table>
<thead>
<tr>
<th></th>
<th>#18</th>
<th>#19</th>
<th>#20</th>
<th>#21</th>
<th>#25</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Exams Passed</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.088</td>
<td>-.002</td>
<td>-.416**</td>
<td>.503**</td>
<td>-.376**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.373</td>
<td>.980</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
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<td>105</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>

Student survey item 20 provided students with a statement, and they had to identify how strongly they agreed or disagreed with the statement. The statement was, “Even if I don’t pass the exam, I believe I will benefit from taking Advanced Placement courses.” The data demonstrate that there is a correlation of .000 present, which shows that there is a significant relationship between the student perception of Advanced Placement participation and the Advanced Placement exam success rate. Additionally, there is a correlation of .019 present in Advanced Placement U.S. History and item 20. This correlation signifies that there is a statistically significant relationship between the student perception of Advanced Placement value and the Advanced Placement U.S. History course.

Student survey item 21 asked students how many Advanced Placement classes they had taken. The data in Table 14 show that there is a correlation of .000 thereby establishing a significant relationship between the number of Advanced Placement classes taken and the overall Advanced Placement examination passage rate.

Student survey item 25 asked students if they believed that their Advanced Placement courses helped them in other classes. The data show that there is a correlation
of .000, which denotes that there is a significant relationship between the student perception of the benefits of Advanced Placement courses and the Advanced Placement examination passage rates.

The premise of this research question is based on the Theory of Motivation, which states that a person is not influenced by environmental factors, but by what they want at a given time. Although this research question focuses on the student perception of the value of Advanced Placement, the teachers also responded to a statement regarding their perception of student value and motivation in Advanced Placement courses. The statement is as follows: “My students are more concerned with their grades than with learning the actual course content.” As displayed in Figure 6, the teachers believe that the students are more concerned about their grades and receiving a “quality point” towards their high school grade point average than learning the Advanced Placement course content. Figure 6 displays that the teachers believe that students are more motivated by their high school grade point averages than learning the course content. Administrative personnel also noted that there was a strong relationship between student motivation and Advanced Placement class and examination performance. The interviewees noted that if the students were not motivated to perform then they would not be successful in the class; conversely, those students who are highly motivated will perform despite outside influences.
RQ3: Is there a significant relationship between student prior academic preparation and success rates on AP exams?

It was proposed that student prior academic preparation was a factor of Advanced Placement class and exam success. The students were asked about their academic preparation prior to enrolling into the Advanced Placement course. A Pearson Coefficient Correlation was used to answer the research question through the student perception. The results in Table 15 demonstrate that there is no significant relationship between student-perceived prior academic preparation and Advanced Placement exams passed or Advanced Placement final grades.
Table 15

*Correlation between Prior Academic Preparation and AP Exam and AP Class Performance*

<table>
<thead>
<tr>
<th>Prior Preparation</th>
<th>AP World</th>
<th>AP</th>
<th>AP US</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.099</td>
<td>.113</td>
<td>.074</td>
<td>.116</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.264</td>
<td>.204</td>
<td>.407</td>
<td>.192</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>

Likewise, the teachers responded to questions regarding their perception of student prior academic performance and Advanced Placement examination and class success. The teachers’ survey questions were based upon ideas gathered from research about other Advanced Placement programs. Many Advanced Placement programs have pre-requisites, despite the College Board advising against this action. The idea of pre-requisites as a program entrance requirement assumes that a student will have some requisite knowledge prior to entering the course that will contribute to the student being successful in the program. The College Board looks at the notion of requiring prerequisites as “gate-keeping” and thus frowns upon the idea of setting pre-requisites for Advanced Placement courses. Likewise, neither the research site nor the participating school district has prerequisites for entrance into the program. As a result, teachers were asked to identify if they believed that there should be prerequisites for Advanced
Placement classes. Sixty-six percent of the teachers agreed or strongly agreed that there should be prerequisites for Advanced Placement, while 20% disagreed and 14% were undecided.

The teachers were also asked their perception about the relationship between students who lacked prior knowledge and skills and their ability to succeed in Advanced Placement. Eighty-six percent (13) teachers noted that they believe students who lack prior knowledge and skills will not be successful in Advanced Placement programs.

Lastly, teachers were asked about their perception of using Preliminary Scholastic Aptitude Test (PSAT) scores for Advanced Placement program entrance. Because the PSAT is administered as early as eighth grade, it is presumed that an acceptable score on this test demonstrates the requisite knowledge to participate in Advanced Placement courses. Furthermore, the College Board website notes that this is an acceptable way that schools can identify those students who may be ready to take Advanced Placement level courses. The research site does not utilize this method for Advanced Placement program entrance, which prompted the researcher to pose this survey question to the teachers. When asked if they believed that PSAT scores should determine Advanced Placement program participation, four teachers (27%) agreed that it should; three teachers (20%) were undecided; eight teachers (53%) disagreed or strongly disagreed that the use of PSAT scores should determine Advanced Placement program participation.

Leadership personnel noted that the prior academic performance is important when enrolling students in Advanced Placement courses. Collectively, they agreed that it
was important to examine a student’s prior academic history to ensure that the student was being properly advised about taking Advanced Placement courses.

RQ4: Is there a relationship between teaching methods, teacher training, and preparation and student success rates on AP exams?

The students were provided with survey questions that asked them about teacher teaching methods such as making cultural connections to their Advanced Placement course content as well as discussing the Advanced Placement exam with them during their classes. Table 16 demonstrates that there is a significant relationship between teaching methods and the Advanced Placement World History final grades, but there is no significant relationship to any other variable presented.

Table 16

*Correlation between Teaching Methods and AP Class and Exam Performance*

<table>
<thead>
<tr>
<th>Teaching Methods</th>
<th>AP World</th>
<th>AP</th>
<th>AP US</th>
<th>AP Calculus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.042</td>
<td>-.032</td>
<td>-.213*</td>
<td>.079</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.636</td>
<td>.718</td>
<td>.016</td>
<td>.374</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>

In an effort to further establish a relationship between the independent and dependent variables in this research, the researcher cross-referenced student survey items 22 and 23, which specifically asked students about teaching methods, with Advanced
Placement class and Advanced Placement exam performance. As a result of this
correlational analysis, a significant relationship was determined between the teaching
methods and Advanced Placement U.S. History and the overall Advanced Placement
exam passage rates. Additionally, there is also a significant relationship between
Advanced Placement exams passed and survey item 22, which asked the students about
their understanding of the content in their Advanced Placement courses. This particular
survey item has an inverse correlation, which shows that although the students self-
reported that they understood what was happening in their classes, their knowledge did
not transfer to their Advanced Placement exam performance. This correlation suggests
that students may be unaware of what they are supposed to be learning or that Advanced
Placement teachers are not teaching content that corresponds to Levels Three and/or Four
on Webb’s Depth of Knowledge, a taxonomy used by the participating school district to
show various levels and depths of learning. However, the following question (#23) asked
the students to categorize the type of instruction they received in class, it is noted that this
correlation suggests that higher-level instruction (Levels Three and Four on the Depth of
Knowledge) increases the likelihood of Advanced Placement exam success rates (see
Table 17).
Table 17

*Correlation between Survey Items and Specific AP Courses and Exam*

<table>
<thead>
<tr>
<th></th>
<th>#22</th>
<th>#23</th>
</tr>
</thead>
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<tr>
<td><strong>AP Calculus Final Grade</strong></td>
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<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.058</td>
<td>.038</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.516</td>
<td>.665</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td><strong>AP U. S. History Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.161</td>
<td>-.184*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.068</td>
<td>.037</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td><strong>AP Language Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.047</td>
<td>-.047</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.600</td>
<td>.595</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td><strong>AP World History Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.096</td>
<td>-.056</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>.531</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td><strong>AP Env. Final Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.015</td>
<td>.058</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.863</td>
<td>.511</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
</tr>
</tbody>
</table>

(continued)
In addition to surveying students, the teachers were surveyed because teachers play an integral part of the Advanced Placement program because they deliver the content to the students. This research proposes that there is a relationship between teacher training and preparation and student success rates on the exam. In order to establish a relationship between these variables, teachers were surveyed and administrative personnel were interviewed. Teachers answered a series of questions and responded to several statements in order to answer this research question. The questions and statements are listed below and their responses are in Table 18.

Q. 1  How long have you been teaching?
Q. 2  How many years have you taught Advanced Placement courses?
Q. 3  When was your most recent Advanced Placement training?
Q. 4  Advanced Placement teachers should attend training annually to remain current with practices.
Q. 5  Evaluate the quality of implementation of each of the following factors of the Advanced Placement program in your local school/district: STAFF DEVELOPMENT during the school year for AP teachers.
Table 18

*Teacher Responses to Teaching Methods, Teacher Training, and Preparation Questions*

Teacher Responses to RQ4: Is there a relationship between teaching methods, teaching training, and preparation and student success on AP exams?

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>7 or more yrs</td>
<td>5-7 yrs</td>
<td>&lt; a yr</td>
<td>STR</td>
<td>OFT</td>
<td>OFT</td>
<td>SOM</td>
<td>OFT</td>
</tr>
<tr>
<td>#2</td>
<td>7 or more yrs</td>
<td>&lt; 1 yr</td>
<td>&lt; a yr</td>
<td>STF</td>
<td>NEV</td>
<td>SOM</td>
<td>ALW</td>
<td>SOM</td>
</tr>
<tr>
<td>#3</td>
<td>&lt; 1 yr</td>
<td>&lt; 1 yr</td>
<td>NEV</td>
<td>SMW</td>
<td>SOM</td>
<td>OFT</td>
<td>NEV</td>
<td>SOM</td>
</tr>
<tr>
<td>#4</td>
<td>7 or more yrs</td>
<td>1-4 yrs</td>
<td>&lt; a yr</td>
<td>STR</td>
<td>NEV</td>
<td>NEV</td>
<td>SOM</td>
<td>SOM</td>
</tr>
<tr>
<td>#5</td>
<td>7 or more yrs</td>
<td>8 or more yrs</td>
<td>&lt; a yr</td>
<td>AGR</td>
<td>SOM</td>
<td>RAR</td>
<td>SOM</td>
<td>SOM</td>
</tr>
<tr>
<td>#6</td>
<td>7 or more yrs</td>
<td>1-4 yrs</td>
<td>&lt; a yr</td>
<td>AGR</td>
<td>ALW</td>
<td>ALW</td>
<td>ALW</td>
<td>ALW</td>
</tr>
<tr>
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<td>1-4 yrs</td>
<td>1-3 yrs</td>
<td>AGR</td>
<td>RAR</td>
<td>NEV</td>
<td>RAR</td>
<td>RAR</td>
</tr>
<tr>
<td>#8</td>
<td>7 or more yrs</td>
<td>1-4 yrs</td>
<td>3-5 yrs</td>
<td>AGR</td>
<td>NEV</td>
<td>NEV</td>
<td>ALW</td>
<td>ALW</td>
</tr>
<tr>
<td>#9</td>
<td>7 or more yrs</td>
<td>&lt; 1 yr</td>
<td>&lt; a yr</td>
<td>AGR</td>
<td>NEV</td>
<td>NEV</td>
<td>OFT</td>
<td>OFT</td>
</tr>
<tr>
<td>#10</td>
<td>7 or more yrs</td>
<td>1-4 yrs</td>
<td>&lt; a yr</td>
<td>STF</td>
<td>OFT</td>
<td>RAR</td>
<td>SOM</td>
<td>RAR</td>
</tr>
<tr>
<td>#11</td>
<td>1-4 yrs</td>
<td>1-4 yrs</td>
<td>&lt; a yr</td>
<td>SMW</td>
<td>RAR</td>
<td>RAR</td>
<td>ALW</td>
<td>ALW</td>
</tr>
<tr>
<td>#12</td>
<td>7 or more yrs</td>
<td>5-7 yrs</td>
<td>3-5 yrs</td>
<td>STR</td>
<td>NEV</td>
<td>NEV</td>
<td>ALW</td>
<td>ALW</td>
</tr>
<tr>
<td>#13</td>
<td>7 or more yrs</td>
<td>5-7 yrs</td>
<td>5 or more yrs</td>
<td>AGR</td>
<td>NEV</td>
<td>NEV</td>
<td>ALW</td>
<td>OFT</td>
</tr>
<tr>
<td>#14</td>
<td>5-7 yrs</td>
<td>1-4 yrs</td>
<td>NEV</td>
<td>SMW</td>
<td>SOM</td>
<td>NEV</td>
<td>RAR</td>
<td>OFT</td>
</tr>
<tr>
<td>#15</td>
<td>&lt; 1 yr</td>
<td>&lt; 1 yr</td>
<td>NEV</td>
<td>DIS</td>
<td>NEV</td>
<td>NEV</td>
<td>SOM</td>
<td>SOM</td>
</tr>
</tbody>
</table>

STR = Strongly Agree  SMW = Somewhat Agree  AGR = Agree
NEV = Never  RAR = Rarely  SOM = Sometimes
OFT = Often  ALW = Always
Q.6 Evaluate the quality of implementation of each of the following factors of the Advanced Placement program in your local school/district:

DISTRICT-WIDE AP teacher training.

Q.7 Evaluate the quality of implementation of each of the following factors of the Advanced Placement program in your local school/district:

COLLABORATIVE AP content area training.

Q.8 I incorporate culturally relative material in my Advanced Placement classes.

Because teacher training and development is an integral part of the learning process and contributes to successful AP exam passage rates, teachers were asked a series of questions about their own training and their perception of training procedures put in place by their school and school district. As noted in the previous chapters, Advanced Placement teachers typically have a number of years in the profession. The same holds true for the teachers at the participating site. At least 78% of the teachers in the program have been in the profession at least seven or more years. However, only 58% of the teachers have had recent Advanced Placement training. There were some teachers who have received Advanced Placement training during some point in their career, while there were other teachers who have never received Advanced Placement training but are currently teaching the course; yet, 78% of all teachers believe that Advanced Placement teachers should attend trainings annually.

The teachers were asked to evaluate the quality of implementation of factors that contribute to program implementation such as district-wide staff development for AP
teachers, district-wide AP teacher training, and collaborative AP teacher planning. Though there was a diverse selection of content-area AP teachers surveyed, many of them had the same responses. When asked about their perception of school and district implementation of teacher training and preparation procedures of the Advanced Placement program, a majority (78%) of the teachers noted that their district rarely or never implemented district-wide AP teacher trainings or staff development. Conversely, 11 teachers (78%) noted that their local school implemented collaboration amongst AP teachers.

When asked about the teacher's role in Advanced Placement, all interviewees had a similar response. They noted that the teacher is an integral part of the success of the program. Because the teacher delivers the content, it is important for the teacher to have the requisite skills and knowledge as well as the dispositions needed to teach students who are motivated to learn.

RQ5: Is there a relationship between the organizational structure of the Advanced Placement program and success rates on AP exams?

In order to retrieve data to answer this question, the researcher interviewed administrative personnel and surveyed teachers. Also, the students answered survey questions related to this question to provide depth to the research and explain the relationship between organizational structure and the Advanced Placement program. A t-test was done based on the student responses to the survey. Because this research presumes that organizational structure encompasses awareness of rules and governing policies of the Advanced Placement program, the two groups used in this t-test were
those students who self-reported that they were unaware (a) of the Advanced Placement rules at their school and those students who self-reported that they were aware (b) of the Advanced Placement program requirements (see Table 19).

Table 19

*T-Test Comparing Student Knowledge of AP Requirements to AP Class and Exam Performance*

<table>
<thead>
<tr>
<th>Aware of A</th>
<th>Std.</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite</td>
<td>N</td>
<td>Mean Deviation</td>
</tr>
<tr>
<td>AP Exams Passed</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>AP Env. Final Grade</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>AP World History Final Grade</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>AP Language Final Grade</td>
<td>1</td>
<td>32</td>
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<tr>
<td></td>
<td>2</td>
<td>97</td>
</tr>
<tr>
<td>AP U. S. History Final Grade</td>
<td>1</td>
<td>32</td>
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<td></td>
<td>2</td>
<td>97</td>
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<td>1</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>97</td>
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</tbody>
</table>

The data from this T-test shows that those students who were unaware (a) of Advanced Placement program requirements at their school performed better on the Advanced Placement exam and in the AP US History and AP Environmental Science
classes than those students who did know (b) about the Advanced Placement program requirements. Conversely, those students who had knowledge about the Advanced Placement program requirements outperformed their peers in AP U.S. History and AP Calculus. Both groups of students performed the same in AP Language as indicated by a mean of 3.16 (see Table 20).

Table 20

**T-Test between Students who are Aware and Unaware of AP Program**

<table>
<thead>
<tr>
<th></th>
<th>T-Test for Equality of Means</th>
<th>95%</th>
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<tbody>
<tr>
<td></td>
<td>Levene's Test</td>
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</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>F</td>
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</tr>
<tr>
<td>AP Exams Passed</td>
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<tr>
<td>Equal variances</td>
<td></td>
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<tr>
<td>Assumed</td>
<td>217.763 .000</td>
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</tr>
<tr>
<td></td>
<td>5.822 127 .000</td>
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<tr>
<td></td>
<td>.729 .125 .481 .977</td>
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</tr>
<tr>
<td></td>
<td>Equal variances not</td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
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<td>.298 1.161</td>
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<td>AP Env. Final Grade</td>
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<tr>
<td>Assumed</td>
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<td>.411 127 .682 .108 .262</td>
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<td>-.410 .625</td>
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<td>Equal variances not</td>
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<tr>
<td>Assumed</td>
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<tr>
<td></td>
<td>-.398 .614</td>
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(continued)
Table 20 (continued)

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<tr>
<th></th>
<th>F</th>
<th>Sig</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-Tailed)</th>
<th>Mean</th>
<th>Error</th>
<th>Difference Lower</th>
<th>Difference Upper</th>
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<td>.176</td>
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<td></td>
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<td>-.009</td>
<td>.169</td>
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<td>.154</td>
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<td>127</td>
<td>-.308</td>
<td>.214</td>
<td>-.737</td>
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(continued)
Table 20 (continued)

<table>
<thead>
<tr>
<th>t-Test for Equality of Means</th>
<th>95% Confidence Interval of the Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
<td>Std. Mean Error Difference</td>
</tr>
<tr>
<td>Variances</td>
<td>Sig. (2-Tailed) Diff. Diff. Lower Upper</td>
</tr>
<tr>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
</tr>
<tr>
<td>AP Calculus Final Grade</td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>8.473</td>
</tr>
<tr>
<td>Equal variances not Assumed</td>
<td></td>
</tr>
<tr>
<td>Assumed</td>
<td>-1.919</td>
</tr>
</tbody>
</table>

**Requirements Assuming Equal Variances**

Additional testing was done to determine a statistical significance between those students who had knowledge of the Advanced Placement program requirements at their school and those students who did not. This statistical test was done assuming equal variances between the two groups. The data provided suggests that there is a statistical significance of .000 and that those students who are unaware of the Advanced Placement program requirements perform better on the Advanced Placement examination than those students who are aware of the program requirements. There are no additional significant relationships present in the t-test.

This research proposed that an organization’s structure, which includes but is not limited to foundational support, governing policies and procedures, and instructional
leaders, contributes to its overall success; therefore it is necessary to examine the teacher and administrative perceptions of the research site’s organizational structure and connect it to the quality of implementation of the Advanced Placement program. This question addresses the organizational structure of both the school and the school district.

Of the 15 teachers who participated in the survey, 12 (80%) of them said that the school did not have a clear defined Advanced Placement policy. However, the administrative personnel readily noted that the Advanced Placement policy is open enrollment—meaning that any student who wants to participate is welcomed to do so. The teachers were also given a matrix in which they had to rate several aspects of organizational structure from “never implemented” to “always implemented.” Table 21 shows the teacher responses to the questions and provides a visual representation of their perceptions of the Advanced Placement program implementation at their site.

Table 21

*Teacher Perceptions of Organizational Structure*

<table>
<thead>
<tr>
<th>Utilizing PSAT</th>
<th>Disaggregating</th>
<th>Vertical Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scores as Predetermining</td>
<td>Previous Year’s AP</td>
<td>Planning (Pre-AP Students)</td>
</tr>
<tr>
<td>Factors for AP</td>
<td>Exam Data</td>
<td></td>
</tr>
<tr>
<td>Teacher 1</td>
<td>Rarely Implemented</td>
<td>Sometimes Implemented</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>Sometimes Implemented</td>
<td>Always Implemented</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>Never Implemented</td>
<td>Sometimes Implemented</td>
</tr>
<tr>
<td>Teacher 4</td>
<td>Never Implemented</td>
<td>Never Implemented</td>
</tr>
</tbody>
</table>

(continued)
Although the sampling size of the teacher participants was small, it is significant to highlight the similarity in their responses. Seventy-eight percent of the teachers said that their school never implemented the practice of using PSAT scores as predetermining factors for Advanced Placement participation although this practice is recommended by College Board as a way to identify potential Advanced Placement students. However, the teachers (73%) did note that their school disaggregates AP test score data. Likewise, 86% of the teachers noted that their school and/or district never implemented vertical teaming for its AP program.
During the interviews, administrative personnel noted that the primary goal of instructional leaders in Advanced Placement is to support the teachers and students. Some of the interviewees noted that because teachers deliver the content, it is important to support them so that they can be useful to the students. Some of the administrative personnel noted that the school leadership should vary Advanced Placement teachers because a variance in teaching styles and techniques may help those students who are not typically successfully in Advanced Placement.

RQ6: Is there a relationship between the district and local school organizational leadership and the quality of implementation of Advanced Placement programs?

The teachers were provided with a free-response space on their surveys to provide comments about the overall strengths of the program at their school. Teacher responses were listed under this particular research question because many of the responses were related to the overall organizational leadership and structure of the Advanced Placement program at the research site. Fifty-three percent of the teachers noted that the opportunity provided to the students is one of the largest strengths of the program. Because the school has an open enrollment policy, the students can sign up for Advanced Placement courses at their leisure. Some of the teachers noted that this policy allows the students to be responsible for their own success and take ownership of their learning, which is a necessity when preparing students to enter the workforce and postsecondary education. Additionally, the teachers noted that the collaboration amongst teachers and teacher autonomy was a positive aspect of the program.
Likewise, the teachers were provided with a free-response space to discuss any weaknesses of the Advanced Placement program at their school. The teachers noted that the open enrollment policy at their school was both a blessing and a curse. Additionally, the teachers noted that the lack of pre-requisites for entering the courses is a hindrance to the overall structure and integrity of the Advanced Placement program. Many of the teachers noted that attaching the quality point to the Advanced Placement courses has been detrimental to the success of the program because the students are motivated by the extra weight and not actually learning the course material. A lack of grade equivalency to actual course performance was also noted as one of the major weaknesses of the program. The teachers noted that since the Advanced Placement course is supposed to be equivalent to a college course, teachers should not be held to the same grading requirements and re-take policies instituted for the general population at the research site.

Leadership personnel were also interviewed to answer this particular research question. These questions asked personnel about the governance of their district’s Advanced Placement program, their district policy, selection of Advanced Placement teachers, and management of data received from Advanced Placement examination scores and class grades. All respondents noted that there was no district policy for the Advanced Placement program and the implementation of the Advanced Placement program was left to the individual schools. Two of the respondents mentioned that there was once a district-level Advanced Placement coordinator, but due to budget cuts the position no longer existed. They mentioned the absence of a district-level Advanced Placement coordinator because they believed that this absence has hurt many school
districts that practice the open-enrollment policy for Advanced Placement. When asked about Advanced Placement data management, all of the participants noted that their schools disaggregated the data and used it for teacher development and to identify trending data in the schools.

RQ7: Is there a relationship between the educational organization’s interactions with Advanced Placement program constituents and success rates on AP exams?

This research question was devised as a result of the role theory, which states that behavior in a role is influenced by the interplay of other people. These questions asked the students specifically about the tutorials at their school and how often their school leaders met with them to check on their Advanced Placement progress. A Pearson Correlation Coefficient was done to determine if there was a significant relationship between the educational organization’s interactions with program constituents and the Advanced Placement exam and class success rates. Table 22 shows several findings.

The data showed a significant relationship between tutorials and passing the Advanced Placement exam with a correlation of .016. Furthermore, the data showed a significant relationship between the knowledge of Advanced Placement program requirements and the Advanced Placement exams passed with a correlation of .000. There is no significant relationship between school support and the Advanced Placement pass rate. Additionally, there are no further significant relationships present in the data.
Table 22

Correlation Analysis between Organizational Interaction and AP Class and Exam Success

<table>
<thead>
<tr>
<th></th>
<th>AP World</th>
<th>AP</th>
<th>AP US</th>
<th>AP</th>
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<tr>
<td>Exams</td>
<td>Final</td>
<td>Final</td>
<td>Final</td>
<td>Final</td>
</tr>
<tr>
<td>Passed</td>
<td>Grade</td>
<td>Grade</td>
<td>Grade</td>
<td>Grade</td>
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</tbody>
</table>

School Has Tutorials

<p>| | | | | |</p>
<table>
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<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.215*</td>
<td>.031</td>
<td>.027</td>
<td>-.017</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.016</td>
<td>.730</td>
<td>.762</td>
<td>.848</td>
</tr>
<tr>
<td>N</td>
<td>126</td>
<td>126</td>
<td>126</td>
<td>126</td>
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</table>

Aware of a Prerequisite

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<tr>
<td>Pearson Correlation</td>
<td>-.459**</td>
<td>-.036</td>
<td>-.068</td>
<td>.005</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.682</td>
<td>.446</td>
<td>.959</td>
</tr>
<tr>
<td>N</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>129</td>
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</table>

School Support

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<tbody>
<tr>
<td>Pearson Correlation</td>
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<td>.104</td>
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<td>.042</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<td>.290</td>
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<tr>
<td>N</td>
<td>105</td>
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<td>105</td>
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</tbody>
</table>

The teachers were also asked to evaluate the school's interactions with Advanced Placement program constituents. There were several statements provided and the teachers had to evaluate the quality of program implementation of each statement. Their responses are charted in Figure 7.
Figure 7. Teacher Perception of Organizational Leadership

The graph above displays teacher responses to questions about their perception of the organizational leadership in their building. The teachers were asked about three specific items that directly relate to interactions with Advanced Placement program constituents: monitoring student progress, providing mock Advanced Placement exams, and communicating expectations prior to course enrollment. The teachers reported that their school monitors student progress well and also provides mock Advanced Placement testing, but also noted that the school should do a better job of communicating Advanced Placement expectations prior to student enrollment.

Leadership personnel noted that it often communicates with Advanced Placement participants through activities such as curriculum night and counselor guidance. These
activities are designed to help foster a relationship between students, parents, and administrative personnel to keep Advanced Placement program constituents knowledgeable about the program and its requirements so that students will have a better chance of success.

**Summary**

The purpose of this chapter was to present statistical and qualitative analyses of primary data obtained from the researcher. This research sought to establish relationships between the independent variables of student, teacher, and organizational structure of Advanced Placement programs and dependent variables of quality of implementation and Advanced Placement class and examination success rates. The researcher used Statistical Package for Social Sciences (SPSS) for testing the research questions. The Pearson Correlation Coefficient was used to establish a significant relationship between the variables, while the researcher also used coding and transcribing to collect qualitative data for the research questions.

The relationships of variables investigated to support or reject previous theoretical frameworks were varied. The researcher also used specific Advanced Placement courses as variables to measure against the theoretical framework. It was discovered that there was a significant relationship between teacher delivery and Advanced Placement examination success rates. There was also a significant relationship between schools providing academic support and tutorials to students and Advanced Placement examination success rates. Additionally, a significant relationship was established between some of the independent variables and the Advanced Placement history courses.
However, many of the independent variables did not prove to have a significant relationship with the Advanced Placement success examination success rates. Contrarily, the qualitative data did connect the independent and dependent variables through the theoretical framework.
CHAPTER VI

FINDINGS, DISCUSSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of this research was to examine the relationship between the independent variables of teacher, student, organizational structure and organizational leadership and the dependent variables of the quality of implementation and class and exam success rates of the Advanced Placement program at a specific urban high school in a large metropolitan Atlanta school district. Because of their direct connections to the Advanced Placement program, the researcher used the aforementioned variables as overarching themes for the more specific variables such as student demographics, prior academic preparation, student perceptions about Advanced Placement, teacher training, culturally responsive teaching, organizational structure, organizational leadership and interactions with the Advanced Placement program constituents to examine the quality of implementation of the Advanced Placement program at the research site.

Chapter II provides an extensive review of literature regarding various academic programs and facets that contribute to the overall implementation of Advanced Placement. More specifically, the literature review analyzed the successes and challenges of the Advanced Placement program for minority students. This literature review helped to establish the theoretical framework that supports the foundation for this study. Theoretically, the literature explores race, motivation, culturally responsive
pedagogy, and identified academic roles as key components to the overall success of Advanced Placement for minority students. In Chapter III, the researcher uses the aforementioned theories to support the research and to establish relationships between the independent variables of student, teacher, leadership and organizational structure and the dependent variables of quality of implementation and the Advanced Placement class and examination success. The research design and methods, sampling type, target population, and data collection methods and instruments that were best suited for this study were identified in Chapter IV. An analysis of the quantitative and qualitative data from the findings is located in Chapter V.

This chapter seeks to explain the findings, conclusions, implications and recommendations for educational leaders, policy development, and further academic research. The research was guided by the following research questions:

RQ1: Is there a significant relationship between student demographics and student success rates on AP end-of-course grades and examinations?

RQ2: Is there a significant relationship between students’ perception of the value of Advanced Placement classes and success rates in AP classes and on AP examinations?

RQ3: Is there a significant relationship between student prior academic preparation and success rates on AP exams?

RQ4: Is there a relationship between teaching methods, teacher training, and teacher preparation and student success rates in AP class and on AP examinations?
RQ5: Is there a relationship between the organizational structure of the Advanced Placement program and the student success rates on AP exams?

RQ6: Is there a relationship between the district and local school organizational leadership and the quality of implementation of Advanced Placement programs?

RQ7: Is there a relationship between the educational organization's interactions with Advanced Placement program constituents and success rates on AP exams?

Due to the mixed methods design of this study, the researcher administered surveys to teachers and students as well as interviewed administrative personnel. All of the research participants were stakeholders in the Advanced Placement program. Although the research site had sophomores and freshmen enrolled in Advanced Placement courses, for the purpose of this study, the researcher used juniors and seniors because of their familiarity with the Advanced Placement program. The researcher used the student surveys to provide statistically significant relationships between the independent and dependent variables and treated the teacher surveys qualitatively due to the small sampling size of teachers. There were 129 students surveyed, 15 teachers surveyed, and five administrative personnel interviewed; all survey responses were submitted electronically and all interviews were conducted individually. Survey instruments were carefully constructed to test the relationships and the interview protocol was designed to further support the research and provides additional depth to the study. Due to the correlational nature of the study, all quantitative data was analyzed through
the Pearson Coefficient Correlation with a <.05 value deemed as establishing a significant relationship between the variables.

Findings

Advanced Placement – Student Findings

- There were more female respondents than male respondents to the survey. These results are indicative of overall Advanced Placement program population at the research site.
- There were more junior respondents than senior respondents to the survey.
- Fifty-eight percent of the respondents did not receive free and/or reduced lunch.
- More African-American students responded to the survey than any other demographic.
- Although the relationship between ethnicity and Advanced Placement success is insignificant, there is a significant correlation between student classification (junior/senior) and the Advanced Placement Environmental Science and Advanced Placement Calculus class grades.
- Students who do not receive free and/or reduced lunch perform better on Advanced Placement exams.
- Students who do receive free and reduced lunch have better Advanced Placement course final grades.
- After a t-test was done, it was found that there was no statistical significance between students who receive free and reduced lunch and students who do not
receive free and reduced lunch; therefore socioeconomic status is not a factor in Advanced Placement examination and class performance.

- There is a significant relationship between student perception of the value of Advanced Placement courses and Advanced Placement exam performance.

- There is a significant relationship between the number of Advanced Placement courses a student takes and Advanced Placement exam success rate.

- There is a significant relationship between the student perception of the benefits of an Advanced Placement and the Advanced Placement United States History course.

- There is no significant relationship between student-perceived prior academic preparation and Advanced Placement exam and/or class success.

- There is a significant relationship between teaching methods and the Advanced Placement World History grade.

- There is an inverse significant relationship between student understanding of the course knowledge and Advanced Placement exam performance.

- There is a relationship between higher-level instruction and Advanced Placement exam performance.

- There is a significant relationship between teaching methods and the Advanced Placement U.S. History grade.

- There is no significant relationship between teaching methods and Advanced Placement exam performance.
• Students who self-reported that they were unaware of the Advanced Placement program and requirements performed better on the Advanced Placement exam than those students who reported that they were aware of the program requirements.

• There is a significant relationship between schools providing tutorials and passing the Advanced Placement exam.

• There is a significant relationship between knowledge of the Advanced Placement requirements and Advanced Placement exam pass rates.

• There is no significant relationship between school support (i.e. counselors checking on student progress, schools meeting with program constituents) and Advanced Placement exam pass rate.

Advanced Placement – Teacher Findings

• Teachers believe that students’ cultural experiences factor into their academic performance.

• Teachers strongly agree that students are more concerned about receiving a “quality point” towards their grade point average than learning the course content.

• Teachers believe that students who lack prior academic preparation will not be successful in Advanced Placement courses.

• Teachers believe that the PSAT should not determine students’ placement in Advanced Placement courses.
• Majority of the teachers believe that Advanced Placement teachers should be trained annually.

• Teachers believe that Advanced Placement exam scores should be used for college credit and that the scores should be somewhat comparable to a student’s grade in the course.

• Teachers believe that their school system does a poor job of implementing district-wide Advanced Placement teacher training and/or staff development.

• Teachers believe that their school implements teacher collaboration well.

• Teachers believed that the school did not have a clear, defined Advanced Placement policy.

• Teachers said that the school district rarely/never implements vertical teaming for its Advanced Placement program.

• Teachers believe that the open enrollment opportunity for Advanced Placement benefits the students.

• Teachers believe that the “quality point” has negatively impacted the integrity of the Advanced Placement program.

• Teachers believe that the grading policy outlined by the school gives students a false sense of academic achievement in Advanced Placement courses.

• Teachers believe that the school does sufficiently provide mock testing for the students.

• Teachers believe that the school could improve their monitoring of Advanced Placement student progress.
• Teachers believe that the school could improve their method of communicating Advanced Placement program expectations to students prior to entering the courses.

Advanced Placement – Leadership Personnel Findings

• Leadership personnel believe that there is a strong relationship between student motivation and performance in Advanced Placement classes.

• Leadership personnel noted that the prior academic performance is important when enrolling students in Advanced Placement courses.

• Leadership personnel noted that they support teachers in their Advanced Placement content delivery.

• Leadership personnel noted that there was no district policy for the Advanced Placement program.

• Leadership personnel believe that the Advanced Placement program should have a district-wide coordinator.

• Leadership personnel noted that their schools disaggregated data and used it for teacher development.

Discussion and Conclusion

This case study sought to examine the quality of implementation of an Advanced Placement program through student, teacher, and administrative personnel perceptions. The researcher attempted to investigate a statistical relationship between many of the suggested variables; however, many of the relationships proved insignificant.
Nonetheless, there were many significant findings that evolved from the study and the researcher has drawn several conclusions.

Initially, the researcher sought to determine a correlation between demographics and Advanced Placement program success. There was no statistical relationship between ethnicity and Advanced Placement exam success rates; however, there was a statistically significant relationship between student status and Advanced Placement exam success rates. The study concluded that students who are seniors performed better on the Advanced Placement exams than juniors.

The data in this study concluded that students who receive free and/or reduced lunch perform better on the Advanced Placement courses, while the students who do not receive free and/or reduced lunch perform better on the Advanced Placement exams. However, a further t-test was completed and it was found that there was no significant relationship between the two groups and therefore could not be said that socioeconomic status was a factor for Advanced Placement success at the research site.

Additionally, students were asked about their perceptions of the value of Advanced Placement courses and it was statistically proven that there is a relationship between student perception of the value of Advanced Placement courses and the Advanced Placement exam performance. Furthermore, there was a statistically significant relationship established between the number of Advanced Placement classes a student takes and the Advanced Placement exam passage rates.

A statistical relationship was found between teaching methods and the Advanced Placement U.S. History and Advanced Placement World History courses. Although there
was no statistically significant relationship between teaching methods and overall student examination performance, the significance between teaching methods and these classes proved that teaching methods do impact student success in Advanced Placement, and teachers benefit from relevant staff development and training sessions.

Also in the student survey, the students self-reported whether or not they were aware of the Advanced Placement requirements in their building. There was a significant relationship between the students who reported that they were unaware of the Advanced Placement program requirements and Advanced Placement exam performance. The data indicated that students who self-reported that they were unaware of program requirements had a higher Advanced Placement exam pass rate than their counterparts who indicated that they knew the Advance Placement requirements.

Teachers were asked several questions regarding their perceptions of students’ experiences leading to the following conclusions. Seventy-eight percent of the teachers believes that a student’s cultural experience influences the way he/she learns in the classroom. Although there were minimal findings to substantiate this belief, a review of student data coupled with the teachers’ beliefs demonstrate that there is a need for culturally relevant material in today’s classrooms. Additionally, teachers believe the students’ extrinsic motivation of receiving a “quality point” towards their grade point average hurts the learning environment and compromises the integrity of the program.

Teachers also revealed their perceptions about teacher training and the development of Advanced Placement teachers. When surveyed, teachers noted that their school system does not implement district-wide training, which further denotes that there
is not a strong network for Advanced Placement teachers, which ultimately hurts the students. The teachers noted that their school implemented collaborative training often, helping to establish a sense of camaraderie amongst each other.

Lastly, teachers believe that the bureaucracies of schools and lack of policies supported by boards of education prevent them from being successful in their classrooms. Through their free-response sections, they noted that schools implement rules that do not/should not apply to a supposed college courses. This might indicate that boards of education and administrators are often out of touch with the reality of the classroom and thereby implement rules and regulations that are difficult to enforce or rules that have no true academic bearing on instruction, ultimately impeding the overall progress of the students.

The leadership personnel interviewed for this study provided depth to the research and either agreed or disagreed what the teachers noted. The interviewed participants all agreed that a student’s cultural experience impacts their academic performance. Furthermore, the administrators/leadership personnel noted that there should be a district-wide coordinator spearheading Advanced Placement. They noted that one person who oversees all Advanced Placement protocol procedures would bring consistency to the program opposed to several schools implementing the program as they see fit.

**Implications for Educational Leaders**

This study was designed to examine an educational program that has become a staple in high schools across this country: Advanced Placement. More specifically, this study examined Advanced Placement in a school that has a high minority population.
Because of the financial investment that federal, state, and local governments continue to put into this program, it was deemed necessary to examine potential causes of successes and failures of Advance Placement at this select high school. As program expansion continues, it is essential for educational leaders to examine why minority students are not performing well on the Advanced Placement end of course examination despite unrestricted access to the program.

Data provided in this study suggests that at the research site program participants were confused about the policies and procedures governing the Advanced Placement program. This is a significant implication for educational leaders because if program participants are unaware of the program rules, then the overall objective of the program is lost and the participants suffer greatly. Although the autonomy provided to schools through College Board, the governing body for Advanced Placement, gives educational leaders the opportunity to be creative, it provides no basic guidelines for success, ultimately continuing the pattern of low-performance rates on Advanced Placement exams.

Another implication presented in the study was that students valued the Advanced Placement program because of the weighted quality point attached to the course, not because it can potentially benefit them in their post-secondary careers. This implication is significant to educational leaders because it suggests that the policy regarding the weighted grade is detrimental to the success of Advanced Placement and should be revisited. Provided most colleges and universities use the “unweighted grade point average” as a determining factor for admissions, this policy benefits students temporarily
and also shows a false sense of academic achievement, which ultimately impacts the overall organizational structure of the academic program.

Likewise, the researcher can infer that student perceptions of the Advanced Placement program influence their performance on the exams, and if they did not believe the class was valuable they would not do well on the exam. This implication is significant to educational leaders because most school districts pay for the entire Advanced Placement exam or some portion of it, but despite concerted efforts to provide access to this program, there are still some students who do not and will not see the benefits of the program, causing detriment to the overall quality of the program.

Because there was a significant relationship between the number of Advanced Placement classes a student takes and the Advanced Placement exam passage rates, it can be implied that the number of Advanced Placement classes a student takes is significant to their examination success. Furthermore, this implication is important for educational leaders because it emphasizes the ideology of quality versus quantity in student academic performance. And it further suggests that the College Board open enrollment policy is not a “one-size fits all” solution to minority participation in Advanced Placement.

The data from this study showed no significant relationship between prior academic preparation and student performance on the Advanced Placement exam; however, the teachers and administrative personnel noted that prior academic preparation was vital to the success of a student in Advanced Placement courses. These conflicting results imply that the teaching strategies used in Advanced Placement courses are inhibiting student success in the courses. This implication is important for educational
leaders because it suggests that even though Advanced Placement teachers have received formal training, their delivery methods may be the cause for student lack of success in the courses and on the final examinations.

Lastly, this study showed a significant relationship between the type of delivery method and Advanced Placement exam success. This finding implies that teaching concepts not skills is beneficial to student growth and achievement. This implication is significant to educational leaders because it suggests that transforming the design and implementation of the curricula and educational standards helps students prepare for advanced learning. Furthermore this implication suggests that teachers may acknowledge their understanding of implementing higher-level thinking in their classrooms, but their actions prove otherwise. This is significant to educational leaders because it causes them to examine the benefit of mandatory staff developments and other trainings in which teachers participate.

Limitations of the Study

Though this research established significant relationships that will impact future studies of Advanced Placement, it is important to note several limitations that may have affected this study:

- **Sampling**: In order to provide a fair and unbiased opinion, the researcher attempted to acquire information from a random selection of schools, but due to constraints beyond the researcher's control, convenience sampling was used. The researcher used convenience sampling because of the accessibility of information. Nevertheless, the testing data that was used is proposed to be
representative of the general population of minority students in metropolitan school districts.

- **Self-reported data:** Both the students and teachers self-reported the information on the surveys. Although the researcher used a Likert scale, which provided a variety of attitudes and ideas, survey participants may have responded based upon a certain emotion at the specified moment or they may have rushed through the survey, both of which may have skewed the data.

- **Bias:** The researcher used convenient and purposive sampling for this study. Because the researcher is employed at the research site, some participants may not have been as forthcoming in the survey because of the fear that their responses would be revealed to a superior.

- **Participant response:** Although all potential participants were familiar with the researcher, some of them did not choose to participate in the research for various reasons. Their lack of participation may have impacted the findings of the research.

**Suggestions for Further Research**

As a result of this study, the researcher discovered that there are misconceptions about what Advanced Placement is and how it looks programmatically. A further study should be conducted to assess successful Advanced Placement program implementation procedures in schools with a high minority population. This type research will provide struggling districts with new program design strategies to ensure that proven
implementation procedures will benefit minority students and perhaps increase the Advanced Placement examination success rate.

Although this case study was limited to one school, a similar study should be conducted in all high schools across the participating school district. By conducting this comprehensive research in all high schools, local school and district leaders may be able to analyze trends in various Advanced Placement classes and school-based programs. Through a critical analysis, district leaders will be able to analyze the strengths, weaknesses, opportunities, and threats to the Advanced Placement program and determine what changes can be made to create success for all students district-wide.

**Recommendations**

Based upon the findings from the study, the researcher suggests the following recommendations for implementation:

- **Educational leader**
  
  ➢ Educational leaders should seek to fully understand current policies and practices in educational programs they supervise. Because educational leaders are the instructional leaders of the building, it is necessary that they are well informed and in a position where they can help students and teachers do well in Advanced Placement.

  ➢ Educational leaders must create a network or support for Advance Placement teachers by requiring them to pursue training as well as investing in training for teachers.
Educational leaders must develop a structure for their organization that contributes to the success of teachers and students within the academic program.

Educational leaders must advocate for and embrace the cultural differences of the students in their building. By acknowledging the differences and providing opportunities for minority students to access the curricula through culture, the educational leader will validate the students’ experiences and create an environment where teachers practice cultural sensitivity and students aspire to academic success.

Educational Leaders must utilize data results from Advance Placement Exams to collaborate with program teachers to develop instructional strategies that will ensure student success.

- **State of Georgia**

  Although the state board of education cannot develop an Advanced Placement policy because College Board owns the name and franchise, it can and should implement statewide standard operational procedures that all Advanced Placement programs must to adhere to within the state of Georgia for consistency purposes and for the success of transient students across the state.

- **Local School District**

  **Local policy change:** The researcher recommends that the local board of education reconsider the amount of the quality point/grade weight
opportunity for students who take Advanced Placement courses. Although it is commendable that the school district offers this external motivator, it is noted that Advanced Placement students should have a certain level of intrinsic motivation; therefore, a weight of 10 additional points should not be the primary reason for taking Advanced Placement courses. This incentive has compromised the integrity of the Advanced Placement program.

➢ **Local policy implementation**: The researcher recommends that the participating school district implement a district-wide implementation policy for Advanced Placement. Although College Board owns the name and franchise, the local school districts are the organizations that have to implement this program daily. Considering the substantial amount of money that is placed into Advanced Placement Summer Institute training and the Advanced Placement examinations in the spring, the school district should have an overarching uniformed policy in place to help assess Advanced Placement program implementation district-wide. Consequently, the establishment of uniformed policies and procedures that provide Advanced Placement stakeholders with a balance of autonomy and uniformity will allow students to be successful, not just in the classes, but on the examinations.

➢ **Staff development**: Although school districts offer staff development for various required courses, there should be staff development designated
specifically for Advanced Placement teachers. The participating school
district has approximately 20 high schools and some of those schools have
successful Advanced Placement examination passing rates and could
possibly help neighboring schools be successful.

> **Vertical alignment planning:** The researcher recommends that the
school system implement vertical team planning amongst pre-AP and AP
teachers. This vertical teaming would allow Advanced Placement teachers
to help pre-AP teachers prepare and deliver curricula that would
eventually benefit Advanced Placement teachers and allow those teachers
to expand the depth of knowledge of their students.

> **Advanced Placement Coordinator:** The researcher recommends that the
school district hire an Advanced Placement coordinator to facilitate AP
implementation at schools around the district. This aids to the consistency
of the program and will aid to program participant success.

- **Building – level:**

  > **Limit number of Advanced Placement classes:** Students at the research
  site are allowed to enroll in an unlimited number of Advanced Placement
courses in a school year. This practice impacts the Advanced Placement
exam success rates at the school. The researcher proposes that the school
limits the number of Advanced Placement classes a student can take in a
year. This policy will force students to choose classes in which they
believe they will be most successful. This policy will eliminate some students from taking the course just for a grade point average booster.

➢ **Teacher training**: The researcher recommends that teachers participate in training that exposes them to Webb’s Depth of Knowledge or Bloom’s Taxonomy. This training will help teachers deliver content that is both engaging and beneficial to student growth and progress.

➢ **School Policy**: Although College Board owns Advanced Placement’s name, the local school can and should implement a governing policy for Advanced Placement in the building. This policy will help curtail the massive amounts of students who sign up for Advanced Placement because they are seeking quality points only.

➢ **Student orientation**: The researcher recommends that the school implement some well-designed orientation to Advanced Placement for participating students. This orientation will make students aware of what Advanced Placement is and how it will benefit them in the future. This orientation may ultimately change the student’s perception of Advanced Placement, which may impact their future success on Advanced Placement exams.

**Summary**

Findings from the data analysis were presented within the chapter. Using the quality of implementation and Advanced Placement class and examination success as dependent variables, the researcher was able to establish relationships between the
student, teacher, and leadership personnel and Advanced Placement program success. Through the use of quantitative and qualitative research, it was discovered that the number of Advanced Placement courses a student takes impacts their overall Advanced Placement exam success and that teaching methods and tutorials impact the Advanced Placement examination success and class grades. The researcher surveyed teachers and found that teachers believe the Advanced Placement open enrollment policy is both a benefit and a burden to the overall success of the program. Additionally, administrative/support personnel noted that it is their primary responsibility to support the teachers in their delivery of the content and ensure that the site-based program policy is implemented. The researcher has developed implications and recommendations for educational leaders in hopes of initiating policy reform for the implementation of Advanced Placement. Furthermore, the researcher hopes to do more research with high school minority students who participate in advanced academic programs.
APPENDIX A

Letter of Informed Consent: Parents/Guardian

January 23, 2011

Dear Parent/Guardian:

I am currently enrolled as a graduate student at Clark Atlanta University. As a requirement for my degree I will be conducting a research project entitled "A Mixed Methods Study Examining the Factors that Impact the Quality of Implementation of Advanced Placement Programs and Exam Passage Rates of Program Participants". The purpose of this research is to examine factors that contribute to the quality of implementation of Advanced Placement programs and exam passage rates in program participants. Because your student is currently a junior/ senior enrolled in Advanced Placement, their participation in this research will provide answers to the research topic. I am requesting your permission to include your child in this study.

This project will begin on January 31, 2012 and end on February 8, 2012. The project will involve your child completing a 30-minute electronic survey providing their honest opinions about the Advanced Placement program at their school. As a part of this research, your child will provide general information about their demographics and whether or not they have passed any End-of-Course-Tests and Advanced Placement exams. I will not need to examine their personal files for this study.

Your student(s) will benefit from participating in this research because he/ she will have an opportunity to influence the way the Advanced Placement program is structured in her/ his school. Although, this may not directly benefit seniors, they will have the opportunity to voice their opinions about their education and hence help future Advanced Placement participants. There are no foreseeable risks or discomforts for participants in this project. Your child’s name and all other personally identifiable information will be kept confidential. The name of your child’s school will not be included in the final report.

Your child’s participation in this project is voluntary. Your child will not be penalized or lose any benefits to which your child is otherwise entitled if you decide that he/ she will not participate in this research project. If your child decide(s) to participate in this project, he/ she may discontinue participation at any time without penalty or loss of benefits. You have the right to inspect any instrument or materials related to the proposal. Your request will be honored within a reasonable period after the request is received.

Quail T Arnold
Clark Atlanta University
(678) 875-3668
apresearchqta@gmail.com

Dr. Barbara Hill, Dissertation Chair
Clark Atlanta University
(404) 880 – 6126
bhill@cau.edu

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Appendix A (continued)

If you agree to let your child participate in this research, please complete the information below:

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<thead>
<tr>
<th>Participant’s Name (please print)</th>
<th>Participant’s Signature</th>
<th>Date</th>
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<tbody>
<tr>
<td>Parent/Guardian’s Name (please print) (For student participant)</td>
<td>Parent/Guardian’s Signature (For student participant)</td>
<td>Date</td>
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Return to: Quail T. Arnold by January 31, 2012
APPENDIX B

Letter of Informed Consent: Colleagues

January 23, 2011

Dear Colleague:

I am currently enrolled as a graduate student at Clark Atlanta University. As a requirement for my degree, I will be conducting a research project entitled “A Mixed Methods Study Examining the Factors that Impact the Quality of Implementation of Advanced Placement Programs and Exam Passage Rates of Program Participants”. The purpose of this research is to examine factors that contribute to the quality of implementation of Advanced Placement programs and exam passage rates in program participants at our site. Your participation in this research will provide answers to the research topic because of your teaching experience within the Advanced Placement program. I am requesting your permission to include you in this study.

This project will begin on January 31, 2012 and end on February 8, 2012. The project will involve your completion of a 30-minute electronic survey, providing your honest opinions about the Advanced Placement program at your school. As a part of this research, you will provide general information about your teaching expertise, but no other personal information will be needed.

As an Advanced Placement teacher, you will benefit from participating in this research because you will have an opportunity to influence the way the Advanced Placement program is structured in our building. This research provides you with the opportunity to voice your opinions free from external bias and gives you a voice and an opportunity to help students achieve success in this program. There are no foreseeable risks or discomforts for participants in this project. All names and other personally identifiable information will be kept confidential. The name of the school will not be included in the final report.

Your participation in this project is voluntary. You will not be penalized or lose any benefits to which you are otherwise entitled if you decide that you will not participate in this research project. If you decide to participate in this project, you may discontinue participation at any time without penalty or loss of benefits. You have the right to inspect any instrument or materials related to the proposal. Your request to respect the survey instrument will be honored within a reasonable period after the request is received.

Quail T Arnold
Clark Atlanta University
(678) 875-3668
apresrearchgta@gmail.com

Dr. Barbara Hill, Dissertation Chair
Clark Atlanta University
(404) 880-6126
bhll@cau.edu

Participant’s Name (please print) Participant’s Signature Date

Return to: Quail T. Arnold by January 31, 2012

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APPENDIX C

Advanced Placement Student Survey

Thank you for taking the time to complete this survey. Your honest response to all questions is sincerely appreciated. All responses will remain anonymous. Please select the response that in your opinion best answers each statement.

* Required

1. Please select your gender *
   - Male
   - Female

2. Please select your classification for the 2011 - 2012 school year. * Only select one
   - Junior
   - Senior

3. Do you qualify for or receive free and/ or reduced lunch? *
   - Yes
   - No

4. Please identify your ethnicity * Only choose ONE
   - Black/African American
   - White
   - Hispanic
   - Asian
   - Other

5. I have taken more than one Advanced Placement course in high school. * Please select the answer that describes you best.
   - Yes
   - No
Appendix C (continued)

6. I take Advanced Placement courses to potentially earn credits for college. * Please select the answer that best describes you.

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

7. I take Advanced Placement classes to learn more about the specific content of the course. * Please select the answer that best describes you.

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

8. My Advanced Placement teachers make cultural connections between the students and the content. *

- Never
- Rarely
- Sometimes
- Most times
- Always

9. My teachers discuss the Advanced Placement exam with my classes. *

- Never
- Rarely
- Sometimes
- Most times
- Always

10. My Advanced Placement class provides a challenge for me. *

- Never
- Rarely
- Sometimes
- Most times
- Always
11. I enrolled in Advanced Placement classes so that I could increase my grade point average. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

12. I knew what my Advanced Placement class was going to be about before I signed up for the course. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

13. My Advanced Placement class is preparing me for the AP exam in the spring. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

14. I was prepared to take Advanced Placement courses prior to enrolling in the course. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

15. My school meets with Advanced Placement students to check our progress in the classes. *

- Never
- Rarely
- Sometimes
- Most times
- Always
Appendix C (continued)

16. My school limits the number of Advanced Placement courses a student can take at one time. *

   • Yes
   • No

17. My school has programs, such as tutorials and special sessions, in place to help Advanced Placement students prepare for the Advanced Placement exam. *

   • Yes
   • No
   • I don't know

18. The AP tutorials and study sessions helped me prepare for the exam. Only answer this question if you selected YES for number 18

   • Strongly Disagree
   • Disagree
   • Somewhat Agree
   • Agree
   • Strongly Agree

19. I feel more confident in my academic abilities by taking Advanced Placement courses. *

   • Strongly Disagree
   • Disagree
   • Somewhat Agree
   • Agree
   • Strongly Agree

20. Even if I don't pass the exam, I still believe I will benefit from taking an Advanced Placement course. *

   • Strongly Disagree
   • Disagree
   • Somewhat Agree
   • Agree
   • Strongly Agree
Appendix C (continued)

21. How many AP classes have you taken? * This number should include any AP classes you are taking this year.

- One
- Two – Four
- Five – Seven
- Eight or more

22. I understand the course content in my AP class(es). *

- Never
- Rarely
- Sometimes
- Most times
- Always

23. My AP classes normally consist of work that entails the following directions: * Choose the one response that best answers the question.

- Recall, recite, memorize, identify
- Classify, organize, interpret, modify
- Revise, critique, cite evidence, hypothesize
- Create, analyze, design, prove

24. My AP classes discuss content that is relative to my daily life *

- Never
- Rarely
- Sometimes
- Most times
- Always

25. My AP classes have helped me in other courses. *

- Strongly Disagree
- Disagree
- Somewhat agree
- Agree
- Strongly Agree
Appendix C (continued)

26. I am aware of the requirements for AP students in my building *

  • Yes
  • No

27. How many AP exams have you passed? *

  • none
  • 1-3
  • 4-5
  • 7 or more

- Mark your end of semester (if you are currently in the class) or final grade. If you have never taken the class select "did not take class."

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28. AP Environmental Science

29. AP World History

30. AP Language

31. AP U. S. History

32. AP Calculus
APPENDIX D

Advanced Placement Teacher Survey

Thank you for taking the time to complete this survey. Your honest response to all questions is sincerely appreciated. All responses will remain anonymous. Please check the response that best answers each question. * Required

1. How long have you been teaching? *
   - Less than or equal to 1 year
   - <1 - 4 years
   - 5 - 7 years
   - 7 or more years

2. How many years have you taught Advanced Placement courses? *
   - Less than or equal to 1 year
   - <1 - 4 years
   - 5 - 7 years
   - 8 or more years

3. When was your most recent Advanced Placement training? *
   - Less than one year ago
   - One to three years ago
   - Three to five years ago
   - Five or more years ago
   - Never had AP training

4. Advanced Placement classes should have prerequisites. * In this section you will identify your degree of belief with each statement.
   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree
Appendix D (continued)

5. Advanced Placement teachers should attend trainings annually to remain current with practices. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

6. Students who lack prior knowledge and skills have a difficult time succeeding in Advanced Placement. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

7. My school has a clear, defined Advanced Placement policy. *

- Yes
- No
- I don't know

8. I incorporate culturally relative material in my Advanced Placement classes. *

- Never
- Rarely
- Sometimes
- Most times
- Always

9. Advanced Placement students should be evaluated based on their AP exam scores and not course grades. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Appendix D (continued)

10. My students are more concerned with their grades than learning the actual course content. *

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

11. A student's cultural experiences factor into how they perform in the classroom. *

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

12. All Advanced Placement classes should cover the same content. *

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

13. The Advanced Placement program at my school prepares students for future academic success. *

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Disagree

14. There should be a set grading policy for all Advanced Placement classes. *

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Disagree
Appendix D (continued)

15. **Advanced Placement should have other forms of final assessment besides the AP exam.***

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

16. **Advanced Placement teachers should have at least five years of teaching experience.***

   - Strongly disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

17. **PSAT scores should be used to determine student placement in Advanced Placement courses.***

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

18. **Schools should require all students to take at least one Advanced Placement course.***

   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

19. **Advanced Placement exam scores should be used for college credit.***

   - Yes
   - No
Appendix D (continued)

20. The Advanced Placement program in my school district is structured. *
   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

21. Students should be limited to the number of Advanced Placement classes they are allowed to take in a school year. *
   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

22. Teachers' personal beliefs and attitudes about students and education affect how they deliver their content. *
   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

23. Students' grades in Advanced Placement should be comparable to their AP exam scores. *
   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree

24. Advanced Placement classes should be smaller than regular/accelerated education classes. *
   - Strongly Disagree
   - Disagree
   - Somewhat Agree
   - Agree
   - Strongly Agree
Appendix D (continued)

25. Students who take Advanced Placement courses are more determined to succeed than students who do not take Advanced Placement courses. *

- Strongly Disagree
- Disagree
- Somewhat Agree
- Agree
- Strongly Agree

26. Identify several strengths of the Advanced Placement program at your school. * Please be honest. Your response will remain anonymous.

27. Identify several weaknesses of the Advanced Placement program at your school. * Please be honest. Your response will remain anonymous.

Evaluate the QUALITY of implementation of each of the following factors of the Advance Placement program in your local school/ district. * Quality is defined as the degree of excellence.

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<th>NI = Never Implemented</th>
<th>RI = Rarely Implemented</th>
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<th>28. Staff development during the school for AP teachers</th>
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<td>29. District-wide AP teacher training</td>
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<td>30. Vertical content teaming (Pre-AP students)</td>
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<td>31. Utilizing PSAT scores as pre-Determining factors for Advanced Placement</td>
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<td>32. Collaborative AP content area planning</td>
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<td>33. Communicating AP expectations with students PRIOR to course enrollment</td>
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Appendix D (continued)

NI = Never Implemented
SI = Sometimes Implemented
AI = Always Implemented
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MI = Most Times Implemented

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<td>34. Monitoring student academic progress while in the AP program</td>
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<td>35. Providing AP Mock tests for students prior to AP exam</td>
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<td>36. Disaggregating previous year’s AP exam data</td>
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<td>37. Collective meeting with all AP teachers to discuss program concerns</td>
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APPENDIX E

Interview Protocol

I am interested in investigating how the factors of Advanced Placement program implementation contribute to student success on Advanced Placement exams. I am looking at the methods of program implementation in comparison to Advanced Placement exam performance. The information you provide will assist in further shaping future research as well as adding to the depth of this research.

1. Describe the demographics of the students at your school.

2. What role does previous academic performance play when students are seeking to enroll in Advanced Placement courses?

3. Do you believe that all students should be able to take Advanced Placement courses?

4. How does your school manage student test scores and course grades in its Advanced Placement program?

5. What do you believe is the role of administrators and counselors in the Advanced Placement program?

6. Do you believe Advanced Placement exam scores should serve as an indicator of a student’s performance in the course?

7. How does your school use data from Advanced Placement scores?

8. How does your school administration select Advanced Placement teachers?

9. What is the teacher’s role in Advanced Placement courses?

10. Should Advanced Placement teachers incorporate culturally relevant material to enhance student experiences in the course?

11. Can you explain your school district’s Advanced Placement policy?

12. How does your school district govern Advanced Placement?
Appendix E (continued)

13. How does student motivation shape student performance in *Advanced Placement* courses?

14. Are you familiar with the *Advanced Placement* teacher training procedures? If so, do you believe all teachers should go through training prior to teaching *AP* courses? Why?

15. How do a teacher's attitudes and beliefs influence how they conduct their classes?
APPENDIX F

Interview Protocol (Counselor A – Outside School of Study)

I am interested in investigating how the factors of Advanced Placement program implementation contribute to student success on Advanced Placement exams. I am looking at the methods of program implementation in comparison to Advanced Placement exam performance. The information you provide will assist in further shaping future research as well as adding to the depth of this research.

3. Describe the demographics of the students at your school. We have approximately 2700 students at our school and of that number, 40% are Caucasian, maybe 20% AA, and the rest of the population 15% Hispanics, and the rest are Asian-Indian, Asian, Native American.

4. What role does previous academic performance play when students are seeking to enroll in Advanced Placement courses? It plays a big part; for instance, if a student wants to take AP US History, then we look at their SS grades in previous courses, if they were taking gifted or honors courses or if they were coming from a CP class (and by CP – you mean College Prep) into an AP course. We look at their specific (subject matter) course history as well as their overall academic history.

5. Do you believe that all students should be able to take Advanced Placement courses? If they want to take an AP class, then they should be able to. This previous year we’ve done some things differently, as far as our AP process, but I think the purpose of the AP program is for students to have access to college-level work so I think they should be able to. (and when you say differently, what do you mean?) Well, in the past, we had an application process in order to take an AP course. Students had to complete the app as well as receive teacher recommendations. For those students who did not meet the criteria who weren’t in gifted or honors or in previous AP classes or didn’t have recommendations. They had to write an essay about why they wanted to be in AP, what their goals and expectations were, what they planned to pursue and what they wanted to get out of the AP class. Currently, its open for students, but there is still a “process for students”

A. Do you think the initial process was a deterrent?” Very much so
6. How does your school manage student scores and grades in its Advanced Placement program?

We don’t weight grades; an incentive is 10 additional points to their final grade. We keep their AP scores for brag purposes for our school profile, but we don’t really do much with the scores.

5. What do you believe is the role of administrators and counselors in the Advanced Placement program?

I believe the counselors’ role is to advise the students because we are the academic advisors for those students because we are there to guide and assist them with their academic goals. Depending on the student and whether they have taken an AP class before, I will discuss expectations and course descriptions of the AP class, I advise them to speak with the teacher and get a syllabus so they will know what to expect and they will know the expectations and the amount of reading they have to do. For those students who are not on the honors math track, I will advise them towards the LA and SS classes because our math and Science classes are connected. So I really try to advise them and have them do their leg work and research, but I always advise them to attempt at least one AP class before graduation because we offer 26 at our school and the students are competing with other students to get into these colleges and universities.

6. Do all of the counselors advise their students in this manner?

Everyone is different. Some will not advise students whereas others will provide negative comments that will deter students from taking the course. They will mention their grades and other factors. I think most times our administration gets caught up on the score versus actually allowing access and providing the student to experience that level of coursework and academic engagement. Because we know that every student is not going to college, but at least give him or her the opportunity. We have gatekeepers at our school. (Gatekeeper = someone who prevents all students from entering into AP courses due to a belief that the program is designed for a select few or a belief that AP test scores are important and some students will not perform well.)

7. Do you believe Advanced Placement exam scores should serve as an indicator of a student’s performance in the course?

That’s tough because some students have done very well in the class with tough teachers but tested poorly. I don’t think its an indicator of anything; some kids don’t test well, it could be the testing environment, say you’re testing 200 kids in a room and all of a sudden the air stops working, then those kids are miserable and they are
Appendix F (continued)

no longer concentrating on the test. Some times it can be conditional, so a lot shouldn’t be placed on low test scores

8. How does your school use data from Advanced Placement scores?

To place on our school profile, school website, teachers use it for learning purposes because teachers want an average of 3 or better for all of their students. So it helps teachers determine what they need to focus on for the next school year with their students. We also use them for college recommendations and applications for students, but other than that we don’t do much with our scores.

9. How does your school administration select Advanced Placement teachers?

Since I’ve been at the school, the AP teachers have not changed. Many of the teachers have doctorates in the subject matter, they have gifted certification and, they take the special training. I think some times the administration examines the teacher’s personality along with the type of students that he/ she would be best-suited for and selects the teachers in that manner. But honestly, I don’t know or understand why certain teachers teach AP.

1. Do you think certain teachers should be selected to teach AP classes or do you think it should be based on who wants to teach it?

I think the AP classes should be rotated because some of the best teachers that we have we burn them out because we put them in CP (college prep) classes. And traditionally in our school, the CP classes are the classes with the behavior problems. But I think that any teacher who wishes to teach AP courses should be able to teach them.

2. What is the teacher’s role in Advanced Placement courses?

(What do you mean?) overall in facilitating learning, tests, of course their job is to deliver the material and make sure their students learn. It is their job to deliver the content in various ways so that our students will learn the content. However, I do believe that some of our teachers could do a better job of reaching students who traditionally wouldn’t take their classes to help them know more about it. Also teachers can be more supportive of students who have started taking their classes. The demographics of our school has changed and teachers have not adjusted their teaching styles to meet the needs of those students.
Appendix F (continued)

12. Should *Advanced Placement* teachers incorporate culturally relevant material to enhance student experiences in the course?

Definitely. I think it has to be because we live in a diverse, global society. We live in a diverse society and you can’t just look at things from one view. I believe there are resources that teachers can use to incorporate diversity into their classes and make the classes more interesting.

13. Can you explain your school district’s *Advanced Placement* policy?

No, I can explain our school’s policy. It varies from school to school. The policy on paper is the same as College Board’s policy. We want our students to go to college. The policy is that once you have enrolled in the AP class, you are committed to that class for the entire school year. You cannot drop at the middle of the semester unless you fail first semester or the teacher recommends that you drop.

14. Do you think school’s having their own policies work well or do you think school districts should set a policy?

I think that there needs to be more consistency district-wide. The only consistency is that each school adds the 10 points to the grade. It needs to be more consistent, especially with students becoming more transient. I think it will help faculty and students.

15. How does your school district govern *Advanced Placement*?

It used to be awesome considering the school district used to coordinate all of our exams. They would order the exams for us, coordinate the testing locations, provide the students with reminders about the tests and other aspects of the test. Now, the AP coordinators in the buildings are responsible for all of the coordination and the entire process has not gone as smoothly. The only thing they do now is ensure that AP coordinators are trained and that they know how to order exams for the students. They would provide proctors, administer the exam and everything.

16. Do you know why they stopped offering the service?

It became expensive, we would have to rent out the Civic Center and the school district didn’t have the funds. Especially with the strict rules/procedures that AP has (students have to be four feet apart on both sides, etc.) Especially with 18 high schools and more students taking AP
Appendix F (continued)

17. How does student motivation shape student performance in *Advanced Placement* courses?

   It plays a major part. Particularly with the students I’ve worked with. If students are motivated and they feel as if someone is behind them pushing them and their teachers believe in them, their performance changes. (Ex: of current student).

18. Are you familiar with the *Advanced Placement* teacher training procedures? If so, do you believe all teachers should go through training prior to teaching *AP* courses? Why?

   No because I just disseminate info. I do think they should go through training though because sometimes the tests change, timing changes, etc.

19. How do a teacher’s attitudes and beliefs influence how they conduct their classes?

   It makes a difference especially if you have a teacher who is encouraging, empowering, and wants all their students to succeed, if they set the tone from the beginning then you will see student success. A teacher in particular sets that tone every year and his average AP scores are 4 and most of his students score a 4/5. Then, I look at other teachers who lecture and just discuss information, their scores are typically lower.

20. Do you think it’s content or it’s the teacher?

   I think it’s the teacher because this teacher is a veteran and has not changed her teaching style to meet the needs of all of her students.

21. Final Thoughts

   AP is needed and I know students who have taken AP courses in high school were well-prepared for college. Even if they didn’t do well on the exams or in the class. It is definitely a valid program, it just takes a special teacher who has a passion and is willing to remain current with the times.
APPENDIX G

Interview Protocol (Counselor B – Outside of School of Study)

I am interested in investigating how the factors of Advanced Placement program implementation contribute to student success on Advanced Placement exams. I am looking at the methods of program implementation in comparison to Advanced Placement exam performance. The information you provide will assist in further shaping future research as well as adding to the depth of this research.

1. Describe the demographics of the students at your school.
   
   We have about 95% AA, maybe 3% Mexican, 2% Asian-American.

2. What role does previous academic performance play when students are seeking to enroll in Advanced Placement courses?
   
   Well that goes under advisement when guidance counselors perform academic advisement with the students who are selecting their courses for the next year. It is a tri-part effort: teacher recommendation, student desire, and academic history. So if a student wanted to take AP with a Literature focus, then they would have to have a recommendation from World Literature courses, grades, and student beliefs.

3. Do you believe that all students should be able to take Advanced Placement courses?
   
   While I feel that we shouldn’t block it off, you can’t rule out prior academic history because work ethic plays a major role in AP. Not every student has to be gifted or on the honors track, but we should look at what they’ve done in the past and make the most informed decision for that student. It really is based on the individual, you can’t just use a template and hope all students fit that template, however, there are some students who sign up for AP and have no clue what they’ve signed up for. They don’t like to read, they don’t like to write. They don’t want to do any summer assignments. I do feel like there should be some sort of criteria in place to determine whether or not students should be allowed to take course
   
   (Most schools don’t have a policy in place, which is why I asked this question; but there are some)
Appendix G (Continued)

4. How does your school manage student scores and grades in its Advanced Placement program? Once the students take the tests, how does your school manage the scores?

It's hard to say because I feel like we should pay attention to the scores, but where I work, they're not concerned about the scores at the end; they really are concerned about the amount of students in the AP classes. I've never been on a committee where the school examined the test scores and the implications for the next year.

5. What do you believe is the role of administrators and counselors in the Advanced Placement program?

As a guidance counselor, you are to keep your students informed: risks, benefits, and expectations. Counselors are a liaison between teachers, parents, and students.

Administrators have to enforce the guidelines that are to be followed (if there is anything that school/district policy, says regarding AP enrollment, then administrators need to enforce that for their students.

AP shouldn’t just be a course to “see what you can do.” By signing up for AP, a student is saying that regular classes aren't challenging, the honors classes aren’t challenging, and the AP classes are going to challenge me to the point where I’m going to take advantage to of my academic environment.

6. Do you believe Advanced Placement exam scores should serve as an indicator of a student’s performance in the course?

That’s where the program is individualistic, because not all students are good test-takers, but they are hard workers. However, you do need some sort of measurement to assess the teachers and the students.

7. Most people say that the scores should not weigh as heavily, but the conflicting ideology is “why give the test”? Do you think there should be another form of measurement?

That’s difficult to say. I think the test may need to be revisited, but for now it serves its purpose.

8. How does your school use data from Advanced Placement scores?

I’ve never been on a committee (data team) where this data is used. When you work in a school like where I work, you can’t tell someone they CAN’T take a class, but because we can’t deny access, the data really isn’t helpful, because we don’t deny
Appendix G (Continued)

students entry. There is a certain policy that applies to the gifted population, but not with the general AP population

1. How does your school administration select Advanced Placement teachers?

You have to have a certification, go through the summer institute, and also go through some gifted training.

10. What is the teacher’s role in Advanced Placement courses?

The teacher is the vessel – they’re relaying the curricula to the students.

11. So do you believe teacher attitudes, disposition, beliefs factor into class?

We have a lot of veteran teachers who aren’t necessarily 25 – 30 years into their career, they normally come because they have financial obligations, but their passion is gone. They teach AP classes because they’ve earned the right, but these students are self-motivated so the teacher isn’t really teaching anything. And we had a teacher whose attitude affected the students’ attitude toward the class.

3. This seems to be a common thread because another counselor said this same thing regarding teachers who are not influential affecting the students in the course.

I’m not going to say that “young” teachers should be the ones who are teaching, but AP teachers should be energetic and ready to impart that knowledge.

4. Should Advanced Placement teachers incorporate culturally relevant material to enhance student experiences in the course?

I think its appropriate, but teachers must encompass all cultures bc you don’t want the students to be offended and teachers should select a curricula that talks about all cultures and backgrounds. A teacher has the autonomy to present the information however they see fit, but schools must work collaboratively to make all students feel a part of the school.

14. Can you explain your school district’s Advanced Placement policy?

As far as? Who can take it, how is it governed? – It’s open enrollment; anyone can take it.
Appendix G (Continued)

15. How does your school district govern Advanced Placement?

There has to be teachers who are qualified to teach it. So if the teachers aren’t certified, then we can’t offer the course. Additionally, if the students are not requesting the course then we can’t offer the course.

16. How does student motivation shape student performance in Advanced Placement courses?

It’s a big piece because if the students aren’t motivated then they will not perform well in the course.

17. Are you familiar with the Advanced Placement teacher training procedures? If so, do you believe all teachers should go through training prior to teaching AP courses? Why?

Yes, if a teacher does not know the type of student they are teaching, then they will do those students a disservice. The teacher has to know what the research says about how to teach that specific course.

18. How do a teacher’s attitudes and beliefs influence how they conduct their classes?

I’ve seen both ends of the spectrum, teachers can be going through a lot, but it not affect the student, and sometimes the teacher’s home life affects what happens in the class. It affects the environment, the classroom dynamic and teachers are a key piece to the learning environment.
APPENDIX H
Interview Protocol – Department Chair

I am interested in investigating how the factors of Advanced Placement program implementation contribute to student success on Advanced Placement exams. I am looking at the methods of program implementation in comparison to Advanced Placement exam performance. The information you provide will assist in further shaping future research as well as adding to the depth of this research.

1. Describe the demographics of the students at your school.

   The enrollment at my school is predominantly African American students. The breakdown is as follows: 98 percent African – American; very few SWD and other races.

2. What role does previous academic performance play when students are seeking to enroll in Advanced Placement courses?

   Prior academic performance is a good indicator for the likelihood for success in Advanced Placement Courses. However, past academic success is not required nor considered for enrollment in Advanced Placement Courses. The College Board encourages open access regardless of previous academic performance or socio-economic background.

1. Do you believe that all students should be able to take Advanced Placement courses?

   All students who desire and have the required course pre-requisite should be able to take Advanced Placement courses if they are willing to devote the requisite effort, time and dedication which are required for college level work to the course.

2. How does your school manage student scores and grades in its Advanced Placement program?

   There is no school-wide set policy regarding scores and grades. Each teacher uses the grading and score protocol common to that subject and approved during the AP Course Audit to manage student scores and grades. AP courses are very different. Therefore, student scores and grades should be managed differently.
Appendix H (continued)

3. What do you believe is the role of administrators and counselors in the *Advanced Placement* program?

   The primary role of counselors and administrators is that of support of the student and teacher. In order to accomplish this, they must understand the goals and objectives of the AP program. This knowledge is important to enable the administrators and counselors to help the student with course offering decisions and allow them to provide the teaching and learning resources in the classroom.

4. Do you believe *Advanced Placement* exam scores should serve as an indicator of a student’s performance in the course?

   As in all tests and examinations that are taken once, the score may not be the best indicator of a student’s performance in the course. For this reason, students and parents should be cognizant of this fact and look forward to using the knowledge and experience in AP courses as leverage to excel in college. Indeed, most students who did not score well on AP exam often report great success in college courses due to their AP experience.

5. How does your school use data from *Advanced Placement* scores?

   Data from Advanced Placement scores are used to determine strategies and improvement plans for students currently enrolled in AP courses.

6. How does your school administration select *Advanced Placement* teachers?

   Advanced Placement teachers are selected based on their high degree course work. Teachers are assigned to teach only courses in which they have graduate degrees or 18 graduate credit hours. These teachers must accept the responsibility willingly.

7. What is the teacher’s role in *Advanced Placement* courses?

   The teacher serves as the expert for the subject. This allows the teacher, to coach and mentor the students. The teacher becomes the facilitator of teaching and learning in order to prepare the students for the AP exam.

8. Should *Advanced Placement* teachers incorporate culturally relevant material to enhance student experiences in the course?

   This is desirable in some courses and the AP curriculum does require or mandates some of this in certain subjects. It is probably not a “one-size fit all” thing to do.
Appendix H (continued)

11. Can you explain your school district’s *Advanced Placement* policy?

There is no district policy to my knowledge. However, the district encourages offering and participation of Advanced Placement courses. And within the limit of the budget, the district pays the exam registration fees for all students.

1. How does your school district govern *Advanced Placement*?

I am not familiar with the governance of Advanced Placement in the district.

2. How does student motivation shape student performance in *Advanced Placement* courses?

Student motivation, hard work and dedication is the primary factor for performance in AP courses. These attributes bring out the best in the student and turn them to achieving excellence.

3. Are you familiar with the *Advanced Placement* teacher training procedures?

Yes.

If so, do you believe all teachers should go through training prior to teaching *AP* courses?

Contrary to the belief of many, there is no training requirement to become an AP teacher. However, the conferences serve as refresher courses for some of the teachers and most importantly, provide them an opportunity to network and to understand the depth of knowledge required to be build an AP program and to be a successful AP teacher.

Why? For the above reason, all AP teachers should attend a conference at least during their first two years of teaching AP course.

4. How do a teacher’s attitudes and beliefs influence how they conduct their classes?

A teacher’s attitudes and beliefs definitely influence if not drive how the teacher conducts his or her classes. For example, a teacher who is very confident of the subject tends to demand more from students than another who is learning the subject. A teacher who believes that hard work is a necessary ingredient for success is most likely going to encourage and demand his or her students to work hard and put in extra time outside the class to study and complete task. Such a teacher also would work hard in order to serve as role model for the students.
APPENDIX I

Interview Protocol – Administrator (Advanced Placement Coordinator)

I am interested in investigating how the factors of Advanced Placement program implementation contribute to student success on Advanced Placement exams. I am looking at the methods of program implementation in comparison to Advanced Placement exam performance. The information you provide will assist in further shaping future research as well as adding to the depth of this research.

1. Describe the demographics of the students at your school.

   My school is about 98 - 99 % African – American; about 50% of the students receive free/ reduced lunch.

2. What role does previous academic performance play when students are seeking to enroll in Advanced Placement courses?

   Previous academic performance does not play a role because there is no specific criterion. We typically review a summary of the student’s credits and identify trends in the student’s performance. Students are advised and monitored accordingly.

3. Do you believe that all students should be able to take Advanced Placement courses?

   Yes

4. How does your school manage student scores and grades in its Advanced Placement program?

   Our school provides a weighted quality point, but the students must sit for the Advanced Placement exam.

5. What do you believe is the role of administrators and counselors in the Advanced Placement program?

   The role of administrators is supporting teachers.
Appendix I (continued)

6. Do you believe *Advanced Placement* exam scores should serve as an indicator of a student’s performance in the course?

   Tough question, partly yes, partly no because in order for students to receive a quality point I do believe they should pass the exam but then there are students who may not be great test takers so that’s tough.

7. How does your school use data from *Advanced Placement* scores?

   We analyze trends. We look at teachers’ performances and also examine *Advanced Placement* exam score in relationship to class grade. We then conference with teachers and provide assistance where needed.

8. How does your school administration select *Advanced Placement* teachers?

   Strictly voluntary

9. What is the teacher’s role in *Advanced Placement* courses?

   Teacher is there to disseminate information

10. Should *Advanced Placement* teachers incorporate culturally relevant material to enhance student experiences in the course?

    Yes if it is possible

9. Can you explain your school district’s *Advanced Placement* policy?

    It’s an open door policy meaning that any student who wants to participate in the program has the ability to do so.

10. How does your school district govern *Advanced Placement*?

    It’s all site-based; AP coordinator does not exist or is located in schools. The district used to have AP coordinator position, but has since done away with the position. It would be helpful to have an AP coordinator position in a district of this size because the program would see more uniformity.
13. How does student motivation shape student performance in *Advanced Placement* courses?

There are different types of motivation; some students are intrinsically motivated and will do well based on their own merit whereas other students need incentives such as weighted grade point average grades and so forth.

14. Are you familiar with the *Advanced Placement* teacher training procedures?

YES

15. If so, do you believe all teachers should go through training prior to teaching *AP* courses? Why?

Yes because it is some of the best training any teacher can have. Even those teachers who do not teach AP should attend the training, especially for vertical alignment purposes. If Pre-AP teachers would go to these training, then I believe we would see a significant difference in the level of AP students once they actually reach the AP classes.

5. How do a teacher’s attitudes and beliefs influence how they conduct their classes?

Teachers bring certain biases to the class. Normally if they are enthused about a topic/subject then the students become enthused and likewise, if they are negative about a topic, then that transfers to the students as well.
APPENDIX J

Interview Protocol – Assistant Principal of Instruction

I am interested in investigating how the factors of Advanced Placement program implementation contribute to student success on Advanced Placement exams. I am looking at the methods of program implementation in comparison to Advanced Placement exam performance. The information you provide will assist in further shaping future research as well as adding to the depth of this research.

1. Describe the demographics of the students at your school.

You can say that the student population is 98 percent black.

2. What role does previous academic performance play when students are seeking to enroll in Advanced Placement courses?

We want to take the perspective of the teacher: if they feel that the child is capable of being placed in the Advanced Placement course. But, we cannot discriminate (the county won’t allow us to discriminate) against any students who want to apply for the Advanced Placement course. So, the child has the right, even against the teacher’s recommendation to take the course. However, when they enter the course and they are not successful, then the teacher can make the recommendation that the child be moved out of the course, but if the parent and the child refuse to move, then the counselors can give them a waiver for the 2nd semester stating that although they were not successful in the first semester of AP, they have chosen to remain in the course and whatever grade they receive, they will have to deal with the outcome.

3. Do you believe that all students should be able to take Advanced Placement courses?

I personally do not, because I believe if they do not have a foundation for the course they should not be allowed to enroll because with the AP courses you have to be self-motivated. There is a lot of reading and a lot of research and if you do not have the foundational knowledge then you may not be successful in those courses.

4. How does your school manage student scores and grades in its Advanced Placement program? (Quality Points)
Appendix J (continued)

Yes, on the children's transcript, you will see weighted and unweighted grade point averages and the quality point is factored into the weighted grade point average.

5. What do you believe is the role of administrators and counselors in the Advanced Placement program?

Our role is to be the supportive network for the teachers. Since the teachers are the ones who are actually teaching the students, it is our role to be of assistance to the teachers.

6. Do you believe Advanced Placement exam scores should serve as an indicator of a student's performance in the course?

I’m torn because sometimes students do not take test scores seriously. Meaning a child can have an “A” in the class and may have actually earned that “A”, but if looking at the AP score, it may not be a true reflection of the child’s performance. It could have been a bad day; the child may not take tests well. But I do believe that 80 percent of the scores should correlate to the grade the child receives in the course.

7. How does your school use data from Advanced Placement scores?

The school looks at trending data to see which subjects are the stronger subjects, teacher performance, and course grade in relation to exam score.

8. How does your school administration select Advanced Placement teachers?

What we’ve done in the past is asked teachers about their AP certification. We ask if they are willing to become certified and if so, are they willing to attend the summer institute because there are times where a person is teaching an AP course but has never been to the institute.

9. What is the teacher’s role in Advanced Placement courses?

The teacher’s role is significant because they are the ones who are imparting the instruction. I believe that if there is strong instruction and all of the standards are covered in the course, and then the exam scores should correlate.

10. Should Advanced Placement teachers incorporate culturally relevant material to enhance student experiences in the course?

I think they should especially if it will help students understand the standards better. There has to be a reason for incorporating the culturally relevant material, and teachers can’t be selective about what cultures they embrace.
Appendix J (continued)

11. Can you explain your school district’s Advanced Placement policy?

   The school district policy is that there are no restrictions to program entrance. Even if a student has never taken advanced level courses before, the students are allowed to participate in the Advanced Placement program.

12. How does your school district govern Advanced Placement?

   The school district gives autonomy to the local sites.

13. How does student motivation shape student performance in Advanced Placement courses?

   Based upon what I’ve been told from AP teachers, the motivation is a huge factor in the course. I’ve heard over and over that students who do not do well in the courses are the ones who are not applying themselves.

14. Are you familiar with the Advanced Placement teacher training procedures? If so, do you believe all teachers should go through training prior to teaching AP courses? Why?

   Yes: Summer Institute – I am responsible for coordinating the placements for my building.

   Participating in the training prior to teaching the course would help the teacher’s resume and also help build the school’s curricula. Additionally, participating in the training prior to teaching the course helps make their pedagogy stronger.

15. How do a teacher’s attitudes and beliefs influence how they conduct their classes?

   Teachers’ attitudes and beliefs are 80 percent of teaching. If the teacher has a positive attitude and motivates her/ his students, then the students will rise to the occasion, but if the teacher is always complaining and talking about what the students are doing wrong, then it impedes the students’ success.
REFERENCES


College Board. (n.d.). Ensure that your teachers are prepared to lead AP courses. In Training AP teachers (par. 1) [Program Information]. Retrieved from http://professionals.collegeboard.com


