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LOYOLA UNIVERSITY CHICAGO

OPEN ENROLLMENT IN ADVANCED PLACEMENT COURSES:
EXPERIENCES OF TRADITIONAL AND NON-TRADITIONAL STUDENTS

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL OF EDUCATION
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF EDUCATION

PROGRAM IN CURRICULUM AND INSTRUCTION

BY

SCOTT E. MCALISTER

CHICAGO, ILLINOIS

MAY 2013

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ABSTRACT

Beginning in the late 1990's, amongst concern that traditionally underrepresented groups of students such as minorities and low income students had been denied the opportunity to enroll in Advanced Placement (AP) courses, The College Board (the non-profit agency that runs the AP program) began to emphasize its belief that *all* students should have the right to take AP courses if they desire and that secondary schools should not limit AP enrollment based on prerequisites such as teacher recommendation, GPA, and class rank. As a result of these factors, the AP program began to see dramatic gains in the number of students enrolled in its courses over the past decade. With the rapid growth in the Advanced Placement program, however, have come concerns that the rigor of the program is being diminished, as schools and teachers work to accommodate larger and larger numbers of underprepared students who have enrolled in these courses.

The purpose of this study was to use interviews with students and teachers to explore the experiences of students who enroll in AP courses, and it sought to distinguish between the experiences of "traditional" AP students versus "non-traditional" AP students. The study also used student GPAs, class rank, ACT scores and attendance records to build an academic profile of a successful AP student. The goal of the study was to identify the types of skills and dispositions necessary to achieve success in an AP

course in order to provide school administrators and counselors helpful information as they engage in course selection with their students. The results of the study showed that there are many similarities between traditional and non-traditional students with regard to their AP experiences but differences do exist, and school personnel would be well-served to learn the motivations and goals of their students as they work to help them achieve academic success. The findings help to show the value that open enrollment has on a school and its students, and to highlight the attitudes, skills, and dispositions that enable such a policy to be successfully implemented.

CHAPTER I

INTRODUCTION

Statement of the Problem

The Advanced Placement program (AP) has been recognized for several decades as the highest degree of academic rigor in which a secondary student can partake in the United States. Created in 1955 as a collaboration between several top-tier universities and elite prep academies (Schneider, 2009), the AP program allows academically advanced high school students to enroll in a curriculum considered to be the equivalent of an entry-level college course, with the class culminating in an end-of-the-year exam administered by The College Board, the not-for-profit agency that runs the AP program. The exam is scored on a scale of 1-5, with 1 being the lowest score a student can receive and 5 being the highest. According to The College Board:

AP Exam grades of 5 are equivalent to the top A-level work in the corresponding college course. AP Exam grades of 4 are equivalent to a range of work representing mid-level A to mid-level B performance in college. Similarly, AP Exam grades of 3 are equivalent to a range of work representing mid-level B to mid-level C performance in college. (College Board, 2011e)

A passing score on the AP exam (defined by The College Board as a 3 or higher) has been recognized by colleges and universities as worthy of credit in the corresponding

entry-level college course, and strong student performance has been utilized by admissions counselors to gauge placement decisions for those matriculating to college. Because the end-of-the-year exam is optional, however, there are many students who enroll in and complete an AP course without completing the corresponding summative course assessment.

Beginning as early as the mid-1960s, but becoming increasingly common in the late 1980s and early 1990s, more and more universities began to use mere student *enrollment* in high school AP courses as a basis for admission decisions for its incoming freshmen classes (Bragdon, 1960; Casserly, 1966). Particularly troubling with this trend in admissions practice was that admissions decisions were being made irrespective of how those students performed on the end-of-the-year AP examination, if they took the AP exam at all (Klopfenstein & Thomas, 2009). Highly selective colleges and universities placed an increasingly strong degree of confidence in the value of AP course enrollment as part of their admissions criteria (Burdman, 2000; College Board, 2002b; Geiser & Santelices, 2004), and AP course participation began to rapidly increase as students, parents, and schools began to realize the new-found importance of a high school transcript laden with AP courses.

As this proliferation of AP participation began to accelerate in the 1990s and into the 21st century, concern began to be expressed at the inequality of opportunity for AP participation, especially for students attending schools with high percentages of low-income and minority students, as well as those located in rural or urban areas (College

Board, 2002a; College Board, 2002b; Schmeiser & Haycock, 2005). Research has shown that schools serving low-income students offer significantly fewer AP courses than do schools in high-income communities (Dougherty, Millor, & Jian, 2006b; Zarate & Pachon, 2006), and suburban schools offering AP courses to their students far outnumbered those in rural and urban areas (United States Department of Education, 2005). Consequently, beginning in the late 1990s, The College Board began to emphasize its belief that *all* students should have the right to take AP courses if they desire, and secondary schools should not limit AP enrollment based on prerequisites such as teacher recommendation, GPA, and class rank (College Board, 2002a).

As a result of this paradigm shift, the AP program began to see dramatic gains in the number of students enrolled in its courses over the past decade. For example, from 2000-2010 the number of schools participating in the AP program has grown 35%, the number of students enrolled in AP classes has grown 140%, and the number of exams students have taken has increased 153% (College Board, 2011a). With this rapid growth in the Advanced Placement program, however, have come concerns that the rigor of the program is being diminished, as schools and teachers work to accommodate larger and larger numbers of underprepared students (Mollison, 2006). These critics point to the declining percentage of passing AP exam scores over the same period as evidence that the program has grown too quickly and is losing its status as a highly demanding curriculum (Banchemo, 2011; Ewers, 2005; Lichten, 2000). For example, from 2000-2010 the percentage of students receiving a score of 3 or higher on the AP exam (the

score research has validated as being indicative of future success in college) has declined from 64.0% to 58.0% (College Board, 2011b). Colleges and universities have responded to the dramatic rise in AP student participation by being increasingly selective in the AP exam scores they will accept in order to award credit at their universities (College Board, 2011e). For example, in 2007, only 30% of colleges and universities accepted an AP exam score of 3 for advanced placement, whereas 89% accepted a 4, and 95% accepted a score of 5 (Lichten, 2007).

Some prestigious secondary schools, sensing the changing perception that the AP program had become too inclusionary, began to drop their AP programs in favor of their own, highly demanding Honors courses (Hager, Laipson, & Daniel, 2006; Schneider, 2009). In response to these changing dynamics, in 2007 The College Board announced that for the first time in its history it would require audits to be completed for each course syllabus used by Advanced Placement instructors throughout the country. The audits would be conducted by college professors and syllabi evaluated as to their similarities in pacing and content with rubrics established by a team of high school teachers and college professors for each AP subject (Geiser, 2008). According to The College Board (2011d), the course audit “gives colleges and universities confidence that AP courses are designed to meet the same clearly articulated college-level criteria across high schools.” In 2007-2008, the first year of the audit, more than 146,000 syllabi were submitted by high school teachers. According to Trevor Packer, Vice President of the AP Program, “Sixty-seven percent received an immediate pass. Thirty-three percent of syllabi on which the college

professors had questions were resubmitted, resulting in a pass rate of ninety-three percent” (Geiser, 2008). The audit also serves to address concerns amongst colleges that student performance in AP classes is often not correlated with their performance on the end-of-the-year AP exam. Research conducted in urban schools shows that student grades in AP courses were significantly higher than scores on the AP exam, giving further credence to the argument that many underprepared students enroll in the courses, experience success in terms of their course grade, yet are not truly prepared for college-level coursework (Hallett & Venegas, 2011). The rapid rise in AP participation, combined with the emphasis at the federal, state and local levels of government for more rigorous coursework at the secondary level and increased levels of accountability for student performance make it clear that the topic of Advanced Placement is one that will continue to be at the center of secondary and post-secondary education policy for the foreseeable future.

Background for the Study

Much of the existing research on Advanced Placement is related to the degree to which students who matriculate to college with an AP background experience success in post-secondary schools (Dougherty, Mellor, & Jian, 2006b; Hargrove, Grodin, & Dodd, 2008; Keng & Dodd, 2008; Klopfenstein & Thomas, 2009; Thompson & Rust, 2007). These studies have defined success primarily in one of two ways – retention from year one to year two in college, and/or the likelihood of receiving a bachelor’s degree. According to The College Board, one of the critical metrics used to gauge the

effectiveness of the AP program is the AP exam, an end-of-the-year assessment that students have the option of taking. For those students who take and pass the exam (defined as a score of 3 or better on The College Board's 5-point scale), the likelihood of success in college is greatly enhanced (College Board, 2009; Hargrove, Grodin, & Dodd, 2008; Keng & Dodd, 2008). However, many students choose to not take the exam at all, and it is increasingly common for colleges to admit students based in part on them simply having taken an AP course in high school, irrespective of how they performed in the class and/or the AP exam. Some researchers feel that enrolling students to college based on AP course participation rather than performance on the AP exam is problematic in that it is using the AP program in a way for which it has never been validated (Geiser & Santelices, 2004). Others question whether simply increasing the number of AP courses in which a student is enrolled ensures greater success in college, especially for students in urban schools. Hallett and Venegas (2011) cite as possible explanations for this disconnect the differences in the quality of teacher preparation, school resources, and teachers' previous knowledge of the students. Hallett and Venegas also studied the disconnect between the grade a student received in the AP course and the score they received on the end-of-the-year exam. Students cited problems with teacher preparation and/or teacher motivation, as well as an AP course curriculum taught by teachers that did not match the material subsequently tested on the AP exam. Students also cited problems with trying to overcome obstacles with various school-based systems. Examples include enrolling in AP classes in schools using a block schedule in which months may go by

before the exam, or taking an AP course load without sufficient support from the guidance department at the school. Reasons such as this give further credence to the argument that the end-of-the-year AP exam is the only way to assess student understanding of course content.

In addition to the benefits derived from preparing for a challenging cumulative assessment, many studies describe other benefits of taking AP courses. Many speak anecdotally about how students are better prepared for the rigors of college by virtue of having taken rigorous courses in high school (McNeil, 2007; Potter & Morgan, 2000; Santoli, 2002). Others are more empirical in nature, describing the college success of AP students versus non-AP students (Dodd, Fitzpatrick, De Ayala & Jennings, 2002; Dougherty, Mellor, & Jiang, 2006b; Mattern, Shaw, & Xiong, 2009). However, according to Klopfenstein and Thomas (2009), caution must be used when describing the predictive power of AP course-taking on college success as opposed to establishing causality between those two variables. According to their work, AP courses serve as a signaling mechanism to college admissions directors, showing that the best and brightest students take AP courses, a statement whose efficacy will be increasingly challenged as AP continues to serve a larger and larger number of students. Another criticism of studies that show the benefit of AP courses question the fact that the research does not appear in peer-reviewed journals, and they also question from where the funding for these studies is derived (Sadler & Tai, 2007). Finally, much has been written about the dramatic rise in the number of students enrolled in the AP program (Ewers, 2005;

Mollison, 2006; Rossi, 2008). Whether looking at the number of schools participating in the AP program, the number of students enrolled in AP courses, or the number of AP exams taken each spring, the AP program has seen tremendous gains in the decade since the Equity Policy Statement was first released. Many authors have expressed concern with whether or not the AP program has diminished with regard to the rigor for which it is best known, especially in light of these large increases in student enrollment (Banchemo, 2011; Ewers, 2005; Gardner, 2008; Klopfenstein, 2003; Lichten, 2000).

Since much of the current literature is based upon the benefits of taking AP and the resultant rise in the number of schools and students participating in the program, schools are seeing increasing numbers of students who are enrolling in these courses without the skills, content knowledge, and/or motivation of a traditional AP student. In the past decade or so, there is a growing chorus of criticism over the purported dilution of the AP curriculum due to the rapid increases in AP enrollment. A review of the existing research necessitated a look at the reasons cited by students for their participation in AP courses and their experiences within those courses. The experiences of AP students were also examined through the perceptions of AP instructors. A close look at the differences in experiences between traditional AP students and those considered to be non-traditional will help to inform the opinions of AP purists, as well as those who continue to advocate for the elimination of barriers to AP enrollment.

Purpose of the Study

The purpose of this study was to explore the experiences of students who chose to enroll in AP courses, and it sought to distinguish between the experiences of “traditional” AP students versus students considered to be “non-traditional.” Furthermore, this study sought to identify the factors that led to the continued enrollment of students whose grades in AP courses were below a C. The goal was to identify the types of skills and dispositions necessary to achieve success in an AP course, including those attributes for students who were not well-represented in AP courses. To address a previously neglected area of research, I proposed a qualitative study that sought to discover the reasons non-traditional students enrolled in these courses. What perceived benefit(s) caused them to initially enroll? Furthermore, what was the motivation for those students in AP courses who were receiving grades considered to be below average (Ds and Fs) to stay enrolled in these AP courses? For these students, it would appear that something motivated them aside from the benefit to their GPA. Was the detriment to their GPA offset by the prestige of having an AP course (or courses) on their transcript, even though their grade was below-average or even failing? Or did students feel that the benefit of rigorous coursework would provide assistance to them in their subsequent post-secondary educational pursuits? What other reasons were cited by these students who enrolled in AP courses, encountered difficulty, yet chose to remain enrolled in these classes? Information gleaned through student and teacher interviews will be useful to school administrators and guidance counselors as they engage in course scheduling with students and parents in the future. Teachers of AP classes will also benefit by knowing the factors

that caused their students to initially enroll in AP courses and to persist in them until their conclusion. The overall goal of this study was to show the value that open enrollment has on a school and its students, and to highlight the attitudes, skills, and dispositions that enabled such a policy to be successfully implemented.

Research Questions

1. What reasons do students give for enrolling in AP courses? In what ways do these reasons differ between “traditional” and “non-traditional” students?
2. What are the experiences of “traditional” and “non-traditional” students in AP courses? How are the experiences different between “traditional” and “non-traditional” students?
3. How do students define success in an AP course? In what ways do these definitions differ between “traditional” and “non-traditional” students?
4. What are the academic characteristics (GPA, class rank, ACT scores, and attendance patterns) that distinguish successful AP students from unsuccessful AP students? Do these characteristics differ between “traditional” and “non-traditional” students?
5. For students who fail to achieve a C or better, why do they choose to remain enrolled in an AP course? How do these reasons differ from students who do receive a C or better? In what ways do these reasons differ between “traditional” and “non-traditional” students?

6. What are teachers' perceptions of the experiences and contributions of "traditional" and "non-traditional" students in AP courses?

Significance of the Study

This study addressed a neglected area of research in that it sought to distinguish between the reasons traditional and non-traditional students enrolled in AP courses. It also explored their experiences in those courses and why some students chose to remain enrolled in AP courses despite having performed poorly in those classes. Teacher perspectives on the experiences of traditional and non-traditional students added a unique viewpoint to this study as well. Because of their experiences in having taught multiple students over several school years, teachers provided a lens into the experiences of traditional and non-traditional students that differed from the students' perspectives of their own experience. This study will benefit students in that fewer of them may receive low grades and/or drop out of AP classes as a result of enrolling in a course for which they lack the requisite skills and/or dispositions. It will benefit teachers because they will be able to differentiate their instruction based on the dynamics of the students in their room while also balancing the need to thoroughly teach the AP curriculum as prescribed by The College Board. As a result of this study, administrators, guidance counselors, and teachers may better understand the motivations that drive students to first enroll in an AP course, the characteristics that enable them to be successful, and if not successful, the desired outcomes that lead them to stay enrolled in that course. It is the author's belief that this study will also be of great benefit to the many secondary schools that are faced

with the dilemma of higher and higher AP enrollment due to its perceived benefits yet have struggled with how to address the increasing numbers of students who are burdened with the rigor of these courses. By having studied the experiences of successful “non-traditional” students, schools will be able to better identify the students most likely to experience success in AP courses, including students who have never taken AP courses. In addition to benefiting secondary schools, students and parents, the field of Curriculum and Instruction benefits by having a more substantive answer as to how to simultaneously increase successful student participation in the AP program while maintaining the rigorous standards for which the program is known. The skills and dispositions of successful students identified in this study are also useful in that these same traits are likely indicators of successful performance in *all* courses, not just Advanced Placement courses.

Limitations of the Study

As a former AP teacher in an open enrollment school, it is the author’s opinion that students are encouraged to sign up for AP courses under the belief that mere enrollment in the class will provide benefits that extend in subsequent high school courses and beyond, regardless of whether or not the student performs well in the course and/or on the AP exam. The belief is that the rigor of these courses will prepare students for more challenging content in subsequent schooling, and the attraction to college admission officers of a school transcript filled with AP courses is well-established. The author’s previous experiences and biases had to be considered as the research design was

created to avoid problems with validity and reliability. The author experienced instances where some students did not possess the strong academic skills and/or the assertiveness and determination necessary to be successful in these courses. As a result, these students often struggled academically to the extent that they experienced failure in the course, dropped out of the course into a lower level, or both. These consequences could have had a detrimental impact on the school community (students, teachers, counselors, and parents) and resulted in lost classroom time for the student as they moved from one teacher and/or class level to another, and teachers worked to accommodate students who may have missed weeks of instruction in their class. A further limitation is that the data gleaned from this work cannot replace the holistic approach that school counselors must take when recommending students for enrollment in AP courses. While the profile the author has generated is based on past students who have participated in AP courses, it is not intended to serve as a determining mechanism of who should and should not be allowed to enroll in AP courses. The goal is to provide schools with as much information as possible to help inform those charged with course recommendation and selection. It cannot account for individual student differences that make each person unique, and who may therefore fall outside the parameters established by the student profile. It is possible that the profile indicates the likelihood of AP success for a particular student is very small, yet that student has the supports and personal dispositions required to overcome those challenges. Likewise, if the profile reveals that another student may be likely to be successful in an AP course, it is possible this student will not perform up to expectations.

While past academic performance can give indications of future performance, it cannot guarantee it.

Summary

This chapter provided a basis for the current study, including the research questions that the study addressed and the purpose the study served in better understanding the implications of open enrollment policies on students, teachers, schools, and the Advanced Placement program. A brief review of the literature indicated the origins of the Advanced Placement program, and also highlighted the rapid growth that the program experienced in the 1990s and early 2000s, ideas that are more fully explored in Chapter Two. Emphasis by The College Board for increased access to AP courses, especially for low-income and minority students, has been countered by concerns about AP program quality. As increasing numbers of “non-traditional” students have enrolled in AP courses, there was a need to identify their reasons for doing so, the experiences they had in those courses, and the reasons they persisted in those courses, in spite of perhaps poor academic performance. The current study provided insight into the differences in experience between “traditional” AP students and “non-traditional” AP students, and added to the existing research from which schools can draw when considering whether or not open enrollment AP programs are appropriate for their schools.

Definitions of Terms

A *gifted* student is one “who gives evidence of higher performance capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who requires services or activities not ordinarily provided by the schools in order to develop such capabilities fully” (No Child Left Behind Act of 2001, p. 522).

Open enrollment is the practice of allowing any student who has the desire to enroll in an AP course. Under an *open enrollment* philosophy, there are no pre-requisites required in order to enroll in an AP course (such as attaining a minimum grade in a previous course, having a minimum grade point average, or only being allowed to enroll with a teacher recommendation).

A *traditional AP* student is one who has received a C or better in an AP course considered to be a logical precursor to the AP course in which they are currently enrolled. A student is also considered a *traditional AP* student if they received a B or better in an Honors course considered to be a logical precursor to the AP course in which they are currently enrolled. A student is also considered a *traditional AP* student if they received an A in a regular course considered to be a logical precursor to the AP course in which they are currently enrolled.

A *non-traditional AP* student is one who has received a D or below in an AP course considered to be a logical precursor to the AP course in which they are currently enrolled. A student is also considered a *non-traditional AP* student if they received a C or below in an Honors course considered to be a logical precursor to the AP course in

which they are currently enrolled. A student is also considered a *non-traditional AP* student if they received a B or below in a regular course considered to be a logical precursor to the AP course in which they are currently enrolled.

Success in a course is defined as receiving a C or better for the credit period (semester or trimester). This assumes a 4.0 grade point scale (4.0 = A; 3.0 = B; 2.0 = C; 1.0 = D) in which pluses and minuses are not recognized for the grading period.

CHAPTER II
REVIEW OF LITERATURE

Introduction

Since its inception in the mid-1950s, the Advanced Placement Program helped to meet the needs of the United States for a literate workforce in the midst of the Cold War, and it also served to help accelerated students be placed at a level appropriate to their abilities upon matriculating to college. For the next 30-40 years, the program continued to cater to the most elite students in the nation's secondary schools, and it grew in popularity as the number of schools offering AP courses rose year after year. However, amidst concern that the Advanced Placement Program was restricting access to qualified minority and low-income students due to stringent pre-requisite requirements, The College Board began to emphasize its belief that *all* students should be given the opportunity to enroll in AP courses if they so desired. As the number of student participants grew dramatically in the late 20th and early 21st century, so, too, did the chorus of critics who felt that ever-increasing numbers of underprepared students were beginning to dilute the quality in these college-level classes. As a result of this rapid expansion, detractors began to question if the AP Program still stood as the paragon of academic rigor upon which it was founded. This study drew upon the views of students and teachers and investigated the question of how these new, "non-traditional" students differed from "traditional" AP students in terms of their reasons for enrolling in AP

courses, their experiences in those courses, and the reasons they persisted in those courses despite the possible challenges they encountered. A profile of the academic characteristics of “successful” AP students was also created in order to better help counselors, students, and teachers as they work to enroll students in AP classes and work to see those students achieve success.

Origins of AP

In 1949, the Soviet Union exploded a nuclear device and, in doing so, became the world’s second superpower. The event, coupled with the onset of the Korean War a year later, heightened the fear of Americans that the only way to stop the threat of communism was to speed up the rate at which the nation’s universities and colleges could produce the next wave of scientists and engineers. In 1951, in light of this heightened sense of urgency, the Ford Foundation created the Fund for the Advancement of Education (FAE), whose purpose was to encourage innovation and experimentation in the field of education (Murphy & von Stoephasius, 1961). Several topics were emphasized by the FAE, including the recruitment and training of more highly qualified teachers, innovations in teaching pedagogy, and the inclusion of newer forms of technology in the classroom, including television (Murphy & von Stoephasius, 1961). In addition, the unique needs of gifted children was an issue of interest to those at the FAE, including how to better challenge these students and to possibly provide for a more highly articulated curriculum between the secondary and post-secondary levels. In a 1951 letter to the FAE, Headmaster John Kemper of the Phillips Andover Academy stated:

...it appears obvious that school and college programs, especially during the important years from 11th to 14th grade, have not been planned as coherent wholes. Boys from the best independent schools often report that their early courses in college are repetitious and dull...It looks as though the country might no longer be able to afford the waste involved in the transition from school to college, especially for gifted and well-trained boys. (Blackmer et al., 1952, pp. 1-2)

Approximately six months after that initial letter from Kemper to the FAE, a group of administrators, teachers, and professors from three elite secondary schools (Andover, Exeter, and Lawrenceville) and three equally prestigious universities (Harvard, Princeton, and Yale) met to discuss the possibility of creating a program in which the most talented students could pursue collegiate-level studies while still enrolled in high school (Blackmer et al., 1952; Rothschild, 1999). At roughly the same time, another group funded by the FAE was also meeting to discuss the possibility of having universities award credit to students for courses they completed in high school. This group consisted of administrators from 12 different colleges (Bowdoin, Brown, Carleton, Haverford, Kenyon, M.I.T., Middlebury, Oberlin, Swarthmore, Wabash, Wesleyan, and Williams). As part of this program, students would be given the opportunity to receive advanced credit at the universities, which would help facilitate their early receipt of an undergraduate degree and subsequent entry into the workforce or a graduate school of their choosing. In the spring of 1952 the group of college administrators invited 12

administrators from secondary schools with whom they had connections, and the collective group of 24 made the decision to move ahead with pilot courses in these secondary schools (Cornog, 1980). The committee of 24 was known as the School and College Study of Admission with Advanced Standing, and they named William Cornog, a secondary school administrator, as their Executive Director. In May of 1954, for the first time, exams for advanced credit were administered to 532 students from 27 different schools (Rothschild, 1999; Schneider, 2009). To ensure the validity of the high school courses, the results of the high school students were compared to those of freshmen college students from the 12 colleges who participated in the initial study. In the final report issued by the School and College Study of Admission with Advanced Standing, the committee noted that the high school students had performed very well when compared to the college freshmen (Keller, 1980). As a result, the decision was made to move forward with courses and exams in 11 disciplines: American History, Biology, Chemistry, English Composition, French, German, Latin, Literature, Mathematics, Physics, and Spanish. Since the School and College Study of Admission with Advanced Standing had disbanded after their final report in June of 1955, there was a need for someone to take control of the newly-formed program. Two years earlier, when the committee of the General Education in School and College completed their work, they issued a “proposal for an experiment, under the direction of the College Entrance Examination Board,” for an Advanced Placement Program (Blackmer et al., 1952, p. 129). Given the leadership void created by the disbanding of both of the committees who

had studied the concept, The College Board, with encouragement from the FAE, assumed responsibility for the newly named Advanced Placement Program and contracted with the Educational Testing Service (ETS) to write, administer, and score the annual exams. The AP Program was initially a financial drain on The College Board and caused the Board to review the fees structure of the exams with ETS, which charged the Board ninety dollars for each student taking the exam while the Board only collected ten dollars in revenue from each student (Riccards, 2010). A revised fee arrangement with ETS and increased test volume eventually turned the AP Program into a profitable program for The College Board. Charles Keller, a professor at Williams College, was named the first director of the Advanced Placement Program. In order to assuage the fears of college professors regarding the ability of secondary school teachers to teach a college-level curriculum, Keller spent innumerable days traveling from campus to campus and spreading the word about AP.

During 1955-56, I visited 41 colleges in all parts of the country. I also visited 43 (secondary) schools, public and independent, and attended many educational meetings. Everywhere I talked about the aims of the program, about the courses schools would give, and the fact that (secondary) school and college people would work together in preparing the examinations and grading the essay questions, and about the June conferences....I cannot overemphasize the importance of these conferences. Many teachers and administrators wrote letters calling

attention to the fact that for the first time they had a chance to meet their opposite numbers and find out what they were doing. (Keller, 1980, p. 23)

In May of 1956, the first year of testing under the direction of The College Board and Director Keller, 1,229 students from 104 schools took 2,199 exams, a 131% increase in the number of students since the initial testing in 1954 (College Board, 2011a).

The Early Elitism of AP

There is no question that at its inception, the idea of advanced credit for students of high achievement was clearly designed for only the most gifted of students, defined loosely by one district as those students with “high intellectual capacity or unusual ability in the arts” (Murphy & von Stoephasius, 1961, p. 85). According to David Dudley, the second Director of the AP Program:

The basic philosophy of the Advanced Placement Program is simply that all students are not created equal. The more mature level of study and discussion and examination demanded in Advanced Placement classes provides the stimulus our superior students need if they are to receive the education best suited to their high potential- for the very fast student, like the very slow student, needs a pace different from the average. (Dudley, 1958, p. 1)

William Cornog, who served as the director of the School and College Study of Admission with Advanced Standing, wrote about the criteria he felt were necessary to ensure the successful initiation of an AP Program:

One condition is that the ablest students are segregated in special groups.

These intensive courses cannot, we think, best be given by way of individual enrichment and private arrangements in a heterogeneous class.

The ablest students, we have found, must be put in special...classes.”

(Cornog, 1957, p. 13)

As evidence of the strength of the initial group of AP test-takers in 1954, 32% subsequently finished in the top one-sixth of their college class at the end of their freshmen year, 65% were in the middle two-thirds of their class, and only 3% were on the bottom one-sixth of their class (Rothschild, 1999). The performance of this group did an excellent job of convincing skeptical professors of the quality of the Advanced Placement students. According to Eric Rothchild, who has studied the history of the AP Program, “The AP Program was unabashedly elitist when it began. Those taking exams in the early years were largely male, largely students from private prep schools and elite public high schools, and probably mostly Protestant” (Mollison, 2006, p. 34).

The creation and growth of the Advanced Placement Program helped meet the needs of gifted students 50 years ago, and subsequent research has continued to support the hypothesis that gifted and talented students have unique educational needs. Gross (1989) noted that gifted students differ from their peers of the same age in their social and emotional development as much as in their intellectual and academic characteristics. Her study discussed the “forced dilemma” that gifted youth face in their pursuit for academic excellence while at the same time trying to attain the development of strong social

relationships with their peers. Past AP students mentioned the refuge that AP provided from disruptive and uninterested students (Casserly, 1986), and several studies have recommended the homogenous grouping of students as a way to better provide a rich and challenging curriculum (Cornog, 1957; Foust, Hertberg-Davis, & Callahan, 2009; Gross, 1989; Kulik & Kulik, 1992). In many schools, Advanced Placement represents the only opportunity for gifted and talented youth to receive a challenging curriculum, but AP alone is not sufficient for many children (Olszewski-Kubilius & Limburg-Weber, 1999). On the other hand, despite criticism from some that the AP Program emphasizes vast coverage of content in too-little detail, others suggest that AP is exactly what gifted youth need.

The basis for differentiated curriculum for gifted learners has come from our understanding of the characteristics and needs of students who have the capacity for higher functioning in all areas of learning and from students who exhibit some specific aptitude in related academic areas such as the verbal arts and humanities, math and science, or the arts....

Advanced Placement coursework is exemplary of a tailored curricular response that recognizes advanced cognitive capacities such as abstract reasoning, higher level thinking, and rapid learning rate in such students and provides a rich and complex set of learning experiences. (Van Tassel-Baska, 2001, pp. 127-128)

Cunningham and Rinn (2007), commenting on their research regarding summer programs for gifted students, note that the programs have had a positive effect on the participant's general and emotional self-concept. This would lend support to the notion that gifted youth benefit from immersion with peers of similar interests and abilities, such as homogeneous AP classes. Other studies support this hypothesis (Foust et al., 2009; Vanderbrook, 2006).

The Benefits of AP

There have been many studies that have identified benefits derived from participation in AP. Among those benefits are the opportunity for accelerated learning, an emphasis on higher order thinking skills, an emphasis on advanced topics, a high level of expectations, and powerful incentives to those willing and able to engage in the coursework, including advanced placement in college courses (Bodfield, 2009; Nuttall & Alton-Lee, 1993; Olszewski-Kubilius & Limburg-Weber, 1999; Sheets, 1995). Students speak anecdotally about the positive benefits of AP, too, such as having to struggle with course content and being forced to have discipline and set goals (Bodfield, 2009; Santoli, 2002; Vanderbrook, 2006). They also speak of the benefit of learning much more course content than in a traditional class, that there is a greater level of discussion from class participants, and that teachers emphasize students thinking for themselves (Foust et al., 2009; Hebel, 1999). The level of acceptance that students felt as a result of being in a class with peers of similar interests and abilities was noted, with students appreciating the fact that their peers understood the pressures they faced in their studies (Sheets, 1995;

Vanderbrook, 2006). Students cited their experiences in an AP Spanish class as leading to an increased sense of ethnic identity and a greater degree of self-esteem, helping them to better feel a part of their school (Sheets, 1995).

Many studies have sought to determine the positive effect that AP course-taking has on student achievement at the post-secondary level. Several studies have shown that students who took an AP course and passed the AP exam showed greater content mastery and performed better in college (as measured by GPA) than students who did not take an AP class (Curry, Macdonald, & Morgan, 1999; Geiser & Santelices, 2004; Keng & Dodd, 2008; Mattern, Shaw, & Xiong, 2009; Morgan & Klaric, 2007; Walstad & Soper, 1988), including when these students were matched based on ability (as measured by SAT score) and participation in the free and reduced lunch program (Hargrove, Godin, & Dodd, 2008). Studies have also shown that students who bypass the introductory class at the college level by virtue of passing the AP exam perform as well if not better than students who took the introductory college class (Casserly, 1986; Dodd, Fitzpatrick, De Ayala, & Jennings, 2002; Koch, Fitzpatrick, Triscari, Mahoney, & Cope, 1988; Melican, Debebe, & Morgan, 1997; Morgan & Ramist, 1998). Furthermore, students who take the AP exam show higher rates of earning credits in college classes of the same subject matter as their AP class when compared to students who do not take the AP exam (Dodd, Fitzpatrick, De Ayala, & Jennings, 2002; Hargrove, Godin, & Dodd, 2008; Koch et al., 1988; Morgan & Klaric, 2007; Morgan & Maneckshana, 2000; Willingham & Morris, 1986). Dodd et al. (2002) also showed that students who pass the AP exam tend to have

higher college GPAs in the content area in which they passed the AP exam than students who did not take AP. There has also been research to show the benefits of AP on college graduation rates. Students who took and passed the AP exam have been shown to graduate college more quickly and at higher rates than students who have not taken AP (Adelman, 1999; Adelman, 2006; Colangelo, Assouline, & Gross, 2004; Dougherty, Mellor, & Jian, 2006b; Morgan & Maneckshana, 2000). The economic benefits to students who graduate college have been well-established (United States Department of Labor, 2011). The figure below shows the positive relationship between wages and educational level attained, clear evidence that students who take AP and graduate college can positively influence their future wages.

Unemployment rate in 2010 (Percent)	Education attained	Median weekly earnings in 2010 (Dollars)
1.9%	Doctoral degree	\$1,550
2.4	Professional degree	1,610
4.0	Master's degree	1,272
5.4	Bachelor's degree	1,038
7.0	Associate degree	767
9.2	Some college, no degree	712
10.3	High-school graduate	626
14.9	Less than a high school diploma	444
8.2	All Workers	782

Note: Data are 2010 annual averages for persons age 25 and over. Earnings are for full-time wage and salary workers. (Bureau of Labor Statistics, Current Population Survey, 2010)

Figure 1. Comparison of Unemployment Rate and Earnings Based on Educational Attainment

Research shows that the likelihood of college success is much greater if a student takes and passes the AP exam, but there is also evidence that students who take the AP exam and score a 1 or a 2 – a score considered not passing by The College Board – are

still more likely to receive college credit as opposed to students who do not take an AP class at all (Mathews, 2009). There is also evidence that students who take AP and score a 1 or a 2 on the AP exam have demonstrated stronger content mastery of advanced math and physics than students who have not taken AP courses (Gonzalez, O'Connor, & Miles, 2001). The Gonzalez et al. study also showed that AP Calculus students, including those with scores of a 1 or a 2, performed as well as students from the top-scoring country on the TIMSS (Trends in International Math and Science Study) exam, a test administered to students from over 20 different nations. Physics students performed comparably on the TIMSS study as well. Another benefit of AP is that the program is nationally recognized by colleges and universities because of the prescribed curriculum and the standardized end-of-the-year exam to measure student learning. As opposed to Honors courses, which vary from school-to-school in terms of curriculum and assessments, the AP experience is identical regardless of where a student lives or which school they attend.

In addition to the benefits derived to individual students from taking AP courses, research has supported that the school a child attends – as opposed to differences between individual students – makes a difference on student achievement. Variables such as a school's structure and organization, its size, the proportion of its students living in poverty, and the peers with whom a student interacts and the teachers who instruct them, can have a profound effect on student achievement (Everson & Millsap, 2004; Lee, 2000; Thernstrom & Thernstrom, 2003). Lee (2000) looked at how much growth occurred in student achievement over the four years of high school and found the greatest amount of

growth to occur in schools with an enrollment between 600 and 900 students. Schools of this size were shown to offer a diverse enough curriculum while still fostering an environment in which all stakeholders know one another. As a corollary, Lee's study showed the positive impact that occurs when teachers accept responsibility for student achievement, a quality measured to be higher in schools where teachers were able to foster personal relationships with their students. Student achievement was shown to increase amongst students who participated in extra-curricular activities, too, as researchers noted the learning opportunities that occurs both inside and outside the classroom (Everson & Millsap, 2004; Marsh & Kleitman, 2002). This extracurricular effect was found to be especially pronounced with disadvantaged students. Given this evidence of school effect, many schools are taking deliberate steps to increase the rigor of the academic offerings, in some cases eliminating their Honors courses in favor of AP courses (Solocheck, 2009). There is even evidence that students who take no AP courses, yet come from schools who offer extensive AP Programs, do better in college than would have been predicted by their secondary grades and standardized test scores (Willingham & Morris, 1986).

The Rapid Expansion of AP

Given the identified benefits of the program, AP has seen tremendous gains in the number of student participants, the number of secondary schools offering AP courses, as well as the number of colleges who accept AP courses for credit and/or advanced

standing. The following table shows the growth in the AP Program measured in five-year increments.

Table 1

Growth in Advanced Placement Program, 1955-2010

Year	Secondary Schools Participating	Students Participating	Examinations Written	Colleges Accepting AP Credit
1955-56	104	1,229	2,199	130
1960-61	1,126	13,283	17,603	617
1965-66	2,518	38,178	50,104	1,076
1970-71	3,342	57,850	74,409	1,382
1975-76	3,937	75,651	98,898	1,580
1980-81	5,253	133,702	178,159	1,955
1985-86	7,201	231,378	319,224	2,125
1990-91	9,786	359,120	535,186	2,587
1995-96	11,712	537,428	843,423	2,895
2000-01	13,680	844,741	1,414,387	3,199
2005-06	16,000	1,339,282	2,312,611	3,638
2009-10	17,861	1,845,006	3,213,225	3,855

Source: The College Board, 2011a

Interestingly, the high schools that saw the AP Program as being most beneficial were not the exclusive, private schools that helped launch the program in the mid-1950s, but rather the schools whose students were not as well known to admissions directors at

the nation's elite colleges and universities (Schneider, 2009). To them, AP offered an opportunity to compete against the best and brightest students from those elite prep schools, regardless of their background. Data from the early 1960s showed that many of the nation's top universities (such as Harvard, Yale, Cornell, MIT, Stanford, and Northwestern) had students enrolling with high numbers of AP courses under their belts (Conant, 1961). The presumption was that high school students wishing to attend these prestigious schools could gain an advantage in the admissions process by taking AP courses, and the focus of AP slowly began to shift away from its original intent – a means to acquire placement in sophomore-level courses – to an avenue for admission to college, regardless of whether credit was awarded or not (Schneider, 2009). Not even 10 years after its inception, the Advanced Placement Program gained increasing popularity as a result of its role in admissions as opposed to the advanced standing upon which the program was founded. As students began to realize the benefits that AP classes had on their admissions status, they increasingly sought these types of courses in their schools and on their transcripts. In 1980, commenting on the AP Program's success after 25 years, AP Director Harlan Hanson noted the following: "For the moment, one can only note that the program, like some roly-poly snowball, keeps growing at an accelerating pace, while all sorts of serendipities are enjoyed" (Hanson, 1980, p. 10).

As high school administrators began to see the benefits accrued to students of prestigious schools with Advanced Placement courses on their resumes, many began to push forward in their quest to offer AP courses to their students as well. Well-funded

schools – both public and private – began to expand their AP Programs to the benefit of their students. However, lower-income schools located in urban areas found it expensive to offer AP courses, and rural schools often found it cost-prohibitive as well, as locating qualified teachers for the small number of potential student participants proved challenging. As early as 1961, former Harvard University President James Conant commented on the fiscal challenges in offering AP courses in smaller, less funded schools. “Needless to say, only a high school of considerable size and adequate financial resources could possibly offer college freshman courses to twelfth graders in the eleven different subjects in which the examinations are given” (p. 92). Beginning in the 1960s, there was a new-found reaction against the elitism of the AP Program that had not existed when it was founded a decade earlier. Writing in *The College Board Review* in 1970, Hochman noted:

Programs for the gifted no longer have first priority. National attention is now directed to providing equal educational opportunity for young people who do not have the traditional skills of literateness and articulateness or the ability to deal with abstract concepts. (p. 17)

Feelings such as these added to the debate over the inequality of educational opportunities for students who did not attend the type of institutions similar to those who founded the AP Program in the beginning or adopted it early on – upper income, select schools with largely white student populations. Many of the legislative acts created in the 1960s as result of Lyndon Johnson’s Great Society (such as Medicare/Medicaid and

the Civil Rights Act of 1964, which prohibited discrimination based on race, gender, national origin, and religion) focused the public's attention on the need to provide more for those individuals who had the least, and subsequent studies show the value of providing students with schools rich in resources as a method of making up ground for the deficiencies students possess when they arrive in K-12 education (Lee & Burkam, 2002). More recently, diminishing rates of high school and college completion and the lack of international standing for the US have many leaders calling for a more rigorous curriculum at the secondary level (Adelman, 2006; Colangelo, Assouline, & Gross, 2004; Commission on Access, Admissions, and Success in Higher Education, 2008).

In 2008, The College Board made the decision to retract some of their less-popular course offerings in order to better utilize resources to realize their mission of expanding access to low income and minority students. At its peak, the Advanced Placement Program offered 37 different exams in 24 subject areas. In 2008, The College Board announced the elimination of four subjects from the lineup of AP course offerings (Cech, 2008; de Vise, 2008a). The courses targeted for elimination were Italian, Latin literature, French literature, and computer science AB. According to College Board Vice President Trevor Packer, the decision was made so that more time and resources could be devoted to other subject areas, especially those populated by low-income and minority students. Said Packer, "For us, (the question is) are we able to achieve our mission of reaching a broader range of students?" (Cech, 2008, p.13). The total number of students affected by the decision to drop these four subjects was 12,545, a tiny percentage of the

1.58 million students enrolled in the program in the 2008/2009 school year (College Board, 2011a). This curriculum revision was in alignment with the Equity Policy Statement of 2002, which made increasing the enrollment of minority and low-income students in AP courses, the official policy of The College Board.

The Equity Policy Statement

In 2002, The College Board issued its Equity Policy Statement. It read: The College Board and the Advanced Placement Program encourage teachers, AP Coordinators, and school administrators to make equitable access a guiding principle for their AP programs. The College Board is committed to the principle that all students deserve an opportunity to participate in rigorous and academically challenging courses and programs. All students who are willing to accept the challenge of a rigorous academic curriculum should be considered for admission to AP courses. The Board encourages the elimination of barriers that restrict access to AP courses for students from ethnic, racial, and socioeconomic groups that have been traditionally under-represented in the AP Program. Schools should make every effort to ensure that their AP classes reflect the diversity of their student population. (College Board, 2002a)

The statement above formalized a decades-long push for increased access to AP courses. Open enrollment was borne out of a concern that artificial barriers to AP classes had been erected by schools, whether through official policy or through existing practice.

One African-American student noted the challenge he experienced in enrolling in AP courses:

The focus is on people generalizing or characterizing, stereotyping me based on the color of my skin. And I found out that I had to work a lot harder sometimes. Because in order to get into classes that prepared me for college, I had to work a lot harder. I had to argue a little bit more with teachers. (Griffin & Allen, 2006, p. 484)

In the nine years since the Equity Policy Statement was issued, AP student enrollment has increased 94% and the number of exams written has increased 99% (College Board, 2011a). Furthermore, in accordance with the goal of increased diversity in the AP Program, there do appear to be gains being made by traditionally underserved student populations. In urban areas, the gains in AP participation have been especially strong. For example, the number of test-takers in the Chicago Public Schools in 2008 represented a 108% increase over a 5-year period (Rossi, 2008). Then-Chicago Schools CEO Arne Duncan (prior to being named United States Secretary of Education by President Barak Obama in 2008) called the jump in AP test-takers “phenomenal,” but he also stated that past AP participation numbers in Chicago Public Schools represented the “historical heartbreak of low expectations” (Rossi, 2008). Echoing the sentiments of The College Board in their push for increased access to AP courses for students of all ability levels, Duncan also criticized the practice of underestimating students and keeping them out of AP classes unless they were among the academically elite. After Duncan’s

departure in 2009 the Chicago Public Schools continued their growth in the AP Program and saw student enrollment increase another 20% from 2008 to 2010 (Chicago Public Schools Press Releases, 2011).

The Concern Regarding AP Quality

This rapid increase in AP participation has also raised concerns that the integrity of the AP Program is being diminished, as larger and larger numbers of non-traditional students enroll in these courses. As the number of AP test-takers in the nation rose dramatically, the success rate of those students slowly diminished. Nationwide, the percentage of students scoring a 3 or better on the AP exam fell from 61.6% to 58.0% from 2003 to 2011, and in the state of Illinois the success rate fell from 69.4% to 59.1% over the same time period (College Board, 2011a). As the percentage of Latino and African-American students enrolled in AP courses has grown with the emphasis on open enrollment, these groups have also seen the largest declines in test-proficiency (College Board, 2011g). Furthermore, the number of students receiving the lowest test-score possible (a 1 on The College Board 5-point scale) was 21.1% in 2011, while 10 years ago that number was 13.3% (College Board, 2011a). Trevor Packer, College Board Vice President, said that the higher percentage of students scoring a 1 is an “enduring concern” (Banchemo, 2011). Packer went on to state that schools who merely open up enrollment in the absence of additional supports are doing their students a disservice, and that high schools need to ensure that students who exit AP courses are ready for college-level work. Many critics suggest that this diminished test performance is evidence that with

greater enrollment has come more and more underprepared students, necessitating a watered-down curriculum that is not truly “AP” (Ewers, 2005; Mathews, 2009; Solochek, 2009). Many have questioned whether the rapid rise in AP in the past decade has caused previous research that was favorable to AP to no longer be valid (Hurwitz & Hurwitz, 2003; Klopfenstein, 2004; Lichten, 2000). There is also evidence that students who have increasingly enrolled in AP courses have not displayed subsequent success in college to the degree that students a generation ago had displayed. According to Attewell and Domina (2008), as advanced course enrollment became more and more popular with high school students, the positive impact on graduation from college declined. This would indicate that as more and more students take challenging courses (such as AP) the value of those courses decline. For example, Attewell and Domina note that when only the top 25% of students took Algebra 2, then Algebra 2 was a good predictor of college success. However, as more and more students took Algebra 2, it no longer proved a reliable indicator of college success. Instead, one would have to look at the percentage of students who took the next course in the math sequence (precalculus) to get a gauge of the impact of a challenging curriculum on college success (Attewell & Domina, 2008). A 2002 report written by the National Research Council stated that as AP continues to grow, the courses are often led by teachers who lack the content knowledge and/or training to effectively teach the course, which may result in teachers who “teach to the test” and emphasize memorization over “active problem solving and discussion” (Ewers, 2005, p. 65; National Research Council, 2002). One study estimated that in 2001

approximately 24% of teachers were teaching a subject for which they lack at least a minor in the content area (Klopfenstein, 2004). While this particular study did not directly cite the high percentage of out-of-content teachers as being in Advanced Placement courses, it was nonetheless concerning and a fact with which administrators should be aware when deciding who teaches AP. The 2001 reauthorization of the Elementary and Secondary Education Act (popularly known as the “No Child Left Behind” Act) has appeared to have a positive impact on the number of teachers teaching courses for which they do not have proper credentials. According to the United States Department of Education, the percentage of teachers employed on waivers decreased 51% from the 2003/2004 academic year to the 2006/2007 academic year (USDOE, 2010). In total, 1.5% of teachers were employed on waiver status for the 2006/2007 school year.

The Scoring of AP Exams

The College Board uses a 5-point scale as the basis for judging performance on the end-of-the-year Advanced Placement exam. The exam format in all disciplines is comprised of multiple-choice questions and a free response section (and also a portfolio of work for courses such as AP Studio Art). For each subject matter, the free-response exams are scored on college campuses throughout the country in a week-long event known as the *AP Reading*. The College Board states the following regarding the scoring of the exams:

The Chief Readers, relying on their subject-matter expertise, statistical equating data, data from comparability studies, and historical trends, determine the score-setting thresholds for the 5-point AP score scale:

5 = extremely well qualified,

4 = well qualified,

3 = qualified,

2 = possibly qualified,

1 = no recommendation. (College Board, 2011a)

One of the concerns borne out of the push for increased AP enrollment is related to the validity of this 5-point scale as a representation of the ability of a student to receive credit in college or receive advanced standing. Some studies question whether a score of 3 (the lowest passing score as defined by The College Board) is truly worthy of receiving college credit and/or placement in the sequent course. This concern over whether or not credit and/or placement should be awarded for different scores on the AP exam is not a new development, however. Ten years after its inception, a study based on interviews with college faculty and administrators showed a similar degree of hesitance in awarding credit and/or placement for scores of less than 5 on the AP exam (Peterson, 1966). These same concerns have persisted over time. In the year 2000, The College Board reported that 64% of students received a 3 or higher on the exams and thus were qualified for college credit, yet according to one study the number of students worthy of college credit should be closer to 50% because more and more colleges are requiring a score of 4 or 5 to

receive credit (Lichten, 2000). Lichten also argues that since its inception The College Board has pegged its 5-point AP exam scale to the grades received by students in comparable courses in college. However, research suggests grade inflation at the nation's universities has been evident in the 50 years since the AP Program was founded. At Yale University, the average grade in a 1950s traditional introductory course was approximately 80%, midway between a letter grade of C and a letter grade of B. In the year 2000, however, Lichten cites that the average grade in those same courses was midway between a B and an A, or closer to a 90%. If this phenomenon is universally true at colleges throughout the country, then it would seem that the 5-point exam scale should have shifted up by one letter grade. However, this has not happened, and The College Board has held to its position that a score of 3 or better represents a score worthy of college credit and/or advanced standing at the university level.

There is also evidence of a phenomenon similar to grade inflation at the high school level. "Course credit inflation" is a term used to describe the level of content mastery by the median student declining over time (Dougherty, Mellor, & Jian, 2006a), and there is evidence of this occurring at the high school level for several decades (Wildavsky, 2000). Using data from the Texas Education Agency that enabled the researchers to link enrollment, course completion, graduation, and high school and college test records, Dougherty et al. found large percentages of students who had received credit in advanced high school courses yet were unable to pass a state exit exam that measured their knowledge in that subject area. Furthermore, the evidence showed

that the percentages of low income and minority students unable to pass the state exit exam were much higher than the percentage of non-low income students and white students (Dougherty, Mellor, & Jian, 2006a). High school grade point averages appear to be similarly skewed as well. Since AP courses are often awarded extra weight in terms of a student's GPA, students with large numbers of AP courses often have higher GPAs than their non-AP peers. The large number of students now enrolled in AP courses has resulted in higher GPAs when compared to decades ago but without a corresponding increase in skill level (Attewell & Domina, 2008). Evidence such as this, combined with the rapid expansion of the AP Program in the late 1990s and early 2000s, began to give rise to concern over program quality by various different stakeholder groups. In February of 2002, Harvard University announced that it would grant credit only to those students who scored a 5 on the AP exam, and numerous other colleges and universities quickly followed suit (Gardner, 2008; Hurwitz & Hurwitz, 2003).

Schoolwide Supports and AP

In 2005, College Board Vice President Trevor Packer acknowledged that questions began to be raised about the integrity of the AP Program (Ewers, 2005). Packer noted how many schools- in an effort to start AP programs as quickly as possible- had done so without establishing the proper supports for the students and teachers of those classes. The College Board recommends that a strong support of professional development occur before a teacher is asked to teach an AP course, including the following trainings offered by The College Board: participation in 1-day AP workshops

or 5-day AP summer institutes, working as a reader of AP exams, and attending the annual AP conference (College Board, 2011b). Given the additional amount of preparation and grading that is required to teach the course effectively, it is also recommended that teachers be assigned a teaching load that is less than non-AP teachers. In an effort to ensure that students have the proper preparation to succeed in AP courses, The College Board encourages that high schools articulate with their feeder schools in offering pre-AP courses. According to The College Board, pre-AP is based on two premises: that all students can be successful in rigorous academic classes, and that schools can prepare younger students for higher levels of intellectual engagement by teaching literacy skills as early as possible (College Board, 2011c). Another example of a program designed to help prepare students for the rigor of AP classes is found in schools which offer summer programs for their future AP students. The Newark (New Jersey) School District started its AP Summer Institute in 2009, with the goal of offering high school students an intensive 2-week introduction to AP classes. The program offers students summer reading and practice in writing and studying, skills that are essential in an AP class (Hu, 2009). Schools in the suburban Washington, D.C., area also offer open enrollment to their students but only after they participate in a summer program that teaches time-management and study skills (Clark & Natale, 2004). Other examples of supports include intense counseling of students and parents on the need for rigorous courses at the middle-school level; additional tutoring before and after school, as well as during lunch; creative scheduling that eliminates course conflicts which allows students

to take multiple AP classes; frequent monitoring of student grades; and advisement of the rigor and demands of AP courses prior to student enrollment on those courses (Potter & Morgan, 2000). A study by ACT and The Education Trust identified four factors that were essential to student success in advanced, college-level courses: high-level content, taught by well-qualified teachers who employed a variety of pedagogical styles, and who also provided tutorial support if and when it was needed (Schmeiser & Haycock, 2005). The quest by high school administrators to offer as many AP courses as possible has often resulted programs being instituted without the above-mentioned supports for teachers and students. One successful example of the expansion of an AP Program can be found in a 6-state pilot program backed by the National Governors Association in which expanding AP opportunities, especially for non-traditional students, was attempted. After two years, schools in the states of Alabama, Georgia, Kentucky, Maine, Nevada, and Wisconsin were able to increase their minority enrollment in AP classes by 52%, the number of low-income students by 57%, and their overall AP offerings by 27 percent (McNeil, 2007). Critical to the success of this initiative is a focus on teacher training, the active recruitment of non-traditional students, and the articulation of the middle and high-school curriculums. Examples such as this show how The College Board is constantly balancing the desire to increase the opportunities for students to participate in the AP Program while ameliorating the concerns of those who speak of diminished rigor within AP due to its rapid expansion (Hurtwitz & Hurwitz, 2003).

The AP Course Audit

The College Board has also had to deal with high schools that were labeling courses as AP despite the fact that The College Board did not offer such a class within the AP curriculum. For example, The College Board discovered instances of courses being taught such as AP Accounting, AP Botany, and AP West Virginia History (Ewers, 2005), despite no such classes existing within The College Board's Advanced Placement program. In 2007, as a result of occurrences such as these, The College Board announced that for the first time in its 52-year history it would require all courses to be audited and approved before they could carry the AP label. According to The College Board, the purpose of the AP Course Audit is "to provide AP teachers and administrators with clear guidelines on curricular and resource requirements that must be in place for AP courses, and to give colleges and universities confidence that AP courses are designed to meet the same clearly articulated college-level criteria across high schools" (College Board, 2011d). In order to have their 2007-2008 courses recognized as AP, teachers had to submit their syllabi to a review panel comprised of college professors. The professors decided whether or not the content described in the syllabus aligned with the standards established in the AP Course Guide for each subject. According to Trevor Packer of The College Board, 67% of the nearly 150,000 syllabi that were submitted that year received an immediate pass by the review panel, and those that were initially rejected were allowed to be resubmitted. After the second round of faculty reviews, the overall pass rate for the syllabi was 93% (Geiser, 2008). While pleased with the results, Packer also

noted that in the 2007-2008 school year there were over 16,000 schools offerings AP exams to their students, but only 14,300 that had passed the audit, meaning they were providing a rich enough curriculum, with sufficient lab time, instructional materials, and depth of content to properly prepare students for the AP exam (Geiser, 2008). In a follow-up survey conducted by The College Board, the reaction by teachers to the audit was mixed. Most experienced faculty said the audit impacted their teaching and class very little, but younger AP teachers considered the audit process very helpful in properly constructing their course. In 2006 The College Board introduced a new measure known as the AP Equity and Excellence score, the purpose of which was to identify schools which had grown their AP programs while including traditionally underserved groups of students and also maintaining the quality of the AP Program. The AP Equity and Excellence score is defined as the percentage of the graduating class that earns a passing score of 3 or higher on at least one AP exam during their tenure in high school (College Board, 2011g). As published in The College Board's *5th Annual Report to the Nation*, "True equity is not achieved until the demographics of AP participation and performance reflect the demographics of the nation" (College Board, 2009). The advantage of this measure of AP is that a school cannot receive a higher score by benefitting from a handful of students who take and pass multiple AP exams, nor can they raise their score by only testing their strongest students (Mollison, 2006). The AP Equity and Excellence score is but one quantitative measure introduced to try and put a numeric value on a school's AP participation rate. Another such measure is The Challenge Index, created in

1998 by *Washington Post* columnist Jay Mathews, a noted AP proponent. The Challenge Index is most known for its use by *Newsweek* magazine in their annual rating of “America’s Best High Schools” and is calculated by dividing the number of AP and International Baccalaureate (IB) exams taken within a school each year by the number of students in the graduating class (Mathews, 2005). The higher the resulting quotient the more indicative that a school is opening up its AP classes and encouraging more non-traditional students to enroll in these college-level classes. Mathews has long been a proponent of giving more students the opportunity to experience AP and IB courses, and he is frequently at odds with teachers and other educational leaders who claim that enrollment in AP should be only for the most academically elite students. Mathews claims that even for students who do not pass the AP exam, the immersion in an AP class offers them an opportunity to experience the lengthy reading assignments and difficult exams they will experience in college prior to enrolling in college (Mathews, 2009). The Challenge Index has drawn criticism in that it encourages schools and administrators to load up their AP classes with students who aren’t academically capable and are unmotivated as well, all in an effort to boost their ratings in “America’s Best High Schools” (Mathews, 2008). Many schools have been making AP enrollment a mandatory part of a student’s high school experience, or have been using a *de facto* mandatory AP enrollment policy by eliminating their own Honors courses, leaving students who would like an academically rigorous course with no option other than AP (de Vise, 2008b). Partially in response to criticism such as this, *Newsweek* magazine, for the first time in

2011, changed the formula used for their annual rankings issue by using more variables to better reflect a school's success in turning out college-ready graduates (Merrefield, Streib, & Yarett, 2011). The new formula includes the following components: graduation rate (weighted at 25% of the overall formula score), college matriculation rate (25%), AP tests taken per graduate (25%), average SAT/ACT scores (10%), average AP/IB scores (10%), and AP courses offered per graduate (5%). The belief is that a more holistic approach still rewards schools for the rigor of their programs while also considering other important indicators of school success as well.

The Funding of AP

Political leaders at the state and national level have also helped garner support for AP by enacting a variety of legislative programs designed to encourage student participation in the program. Much of this funding increase has occurred simultaneously with the increased emphasis on open enrollment, and money allocated to AP has been done so with the goal of helping traditionally underserved student populations enroll in the AP program. The passing of the Civil Rights Act in 1964 mandated a survey be taken to gauge the educational opportunities available to minority students in public schools throughout America. The survey, completed in 1966, found that minority students were unequally segregated from their white counterparts and that minority student achievement paled in comparison to white students (Coleman et al., 1966). The survey, more commonly known as the Coleman Report, found that academic achievement was less related to the quality of a student's school and more related to factors such as the social

breakdown of the school, the student's sense of self-direction, the verbal skills of teachers, and the student's family background (Coleman et al., 1966). The report was important in that it addressed the inequality that still existed in education more than ten years after the U.S. Supreme Court declared “separate but equal” facilities (including schools) were unconstitutional. Nearly 50 years after this ruling, *Brown v. Board of Education of Topeka, Kansas* (1954), The College Board addressed the persisting inequity that had existed in its AP courses by issuing its Equity Policy Statement (College Board, 2002a). By encouraging schools to open their doors to AP enrollment to any student willing to accept the challenge, The College Board simultaneously necessitated an influx of funding to help pay for the newly-expanding program. Implementing an AP Program for the first time, or increasing an existing AP program, can be a costly venture for several reasons. New AP teachers must receive extended training, AP courses typically use college textbooks (which carry a relatively higher cost than high school textbooks), and keeping AP course enrollments at the levels recommended by The College Board necessitates the hiring of additional faculty. According to The College Board, 27 states currently offer general support to their local school districts in the form of subsidies for AP exams, paying for the professional development of faculty, and/or the purchasing of equipment (College Board, 2011f). Several states have gone even further in their support of AP. California, West Virginia, and Wisconsin have laws that mandate state universities accept AP grades, and states such as Hawaii, Idaho, and Oklahoma offer grants to local school districts who implement AP Vertical Teams between their middle

and secondary levels (College Board, 2001f). The state of Texas instituted a program known as the Advanced Placement Incentive Program, in which a cash reward of \$500 was paid for each passing AP exam score received in qualifying disadvantaged schools (Jackson, 2007). While AP course enrollment and the number of AP exams administered rose after the implementation of the program, the results of the study were not able to attribute the cash reward to the rise in student performance. Rather, the study stated that factors such as access to AP classes and changing student attitudes toward AP tended to have a positive impact on student performance. In addition to state funding support, the federal government also provides money to states to help with the payment of exam fees for low-income students and to help with summer programs designed to prepare students for the rigor of AP (Hu, 2009). In announcing the Advanced Placement Incentive Program in 2001, U.S. Secretary of Education Rod Paige stated:

College entrance exams reveal that young people who take challenging classes, such as Advanced Placement classes, perform better than their peers regardless of their family or financial background. Taking harder classes is one of the keys to academic success. These grants can help encourage students to challenge themselves and help our schools to close the achievement gap between students from disadvantaged backgrounds and their peers. (U.S. Department of Education, 2001)

In 2005, Paige's successor, Margaret Spellings, also lauded participation in AP courses by stating, "I am especially encouraged to see more minority students taking

advantage of these courses” (Kyburg, Hertberg-Davis, & Callahan, 2007, p. 181).

Throughout the Bush Administration (2001-2009), the federal government continued to support the AP program by allocating money towards it. In fiscal year 2009, the United States Department of Education spent nearly \$29 million to fund incentive programs designed to increase the participation of low-income students in both pre-AP and AP courses and exams, an increase of 31% in the nine years since Secretary Paige’s announcement coincided with the authorization of No Child Left Behind Act (United States Department of Education, n.d.).

This influx of money from both federal and state sources is often justified on the grounds of research that suggests that strong AP exam scores predict success at the college level (Hargrove, Godin, & Dodd, 2008; Keng & Dodd, 2008; Morgan & Manackshana, 2000; Willingham & Morris, 1986). Others believe that these research studies have been misinterpreted to mean that success in AP *causes* success in college, rather than merely showing a correlation between high AP exam scores and success in college. Some feel that this faulty interpretation can result in money being appropriated to AP that may otherwise be spent on other, research-proven curricula (Klopfenstein & Thomas, 2009). Klopfenstein and Thomas also argue that that the influx of federal money in the 1990’s failed to effectively increase the number of low-income and minority test-takers because it failed to increase enrollment by these groups in AP courses. Programs such as one initiated by the National Governors Association in 2006 have been shown to increase AP course enrollment by using federal money to pay for

teacher training, actively recruiting low income and minority students, and emphasizing middle-school preparation (McNeil, 2007).

AP for Use in Admissions versus Placement

At its inception, the AP Program was intended to be an avenue for gifted students to accelerate the rate at which they could complete college by awarding them credit for college-level courses they completed while still enrolled in high school and then granting them advanced placement in the sequent course at the university (Rothschild, 1999). Describing their proposal for an experiment in Advanced Placement, the committee report for the General Education in School and College study noted, “It should be understood that these examinations would be used, not for admission to college, but for *placement after admission* (original emphasis)” (Blackmer et al., 1952, p. 129). The reason the program was solely viewed as a placement program and not as a criterion for college admissions was partially due to the philosophical origins of the program, but also because of practical considerations as well. The AP exams are not administered until the first two weeks of May, and student scores are not released until mid-July. By that point, a graduating high school senior will have more than likely selected the college they will be attending. Out of necessity, then, admission decisions had to be made independent of performance on the AP exam (Commission on the Future of the Advanced Placement Program, 2001). When the program was originally started in 1954, a student’s actual AP exam was sent to the college of their choice so the professors could decide for themselves whether or not to accept the AP Exam grade that was recommended by the AP Reader

(Casserly, 1986; Dudley, 1958, Hurwitz & Hurwitz, 2003). Over the years, professors and their universities have become more and more willing to accept the AP readers' judgment of what AP Exam score to award (Casserly, 1986), and today, credit is automatically awarded so long as a student's score falls within the designated range based on the university they are attending. Students can research each university's AP credit policy on the AP Central Website (College Board, 2011e). Given the prestigious reputation of the secondary schools which originally offered these courses for advanced placement, as well as the strong intellect of those students who were involved in the program in the early years, it did not take long for the nation's universities to start to use AP enrollment in a different manner – as a criterion for identifying the strongest students, those worthy of admission to the best schools. The strength of a student's curricular intensity was used as a sorting mechanism to identify those students who stood out in a pool of national candidates (Attewell & Domina, 2008). Since the number of students attending college had been accelerating in the decades after the inception of the AP Program, colleges began to seek finer and finer distinctions amongst the increasing number of student applicants (National Research Council, 2002). AP courses were one indicator of a student's willingness to engage in a challenging curriculum, the importance of which was addressed in a 1999 report by Clifford Adelman, a senior research analyst for the United States Department of Education. Adelman's (1999) study, *Answers in the Tool Box*, looked at national data accrued over an 11 year period and studied what variables were most likely to lead to bachelor's degree completion. Adelman's results

showed that two factors were most predictive of college completion- the intensity and quality of the secondary school curriculum, and continuous enrollment in college once a student had started. Proponents of AP took this as evidence that the best way for students to prepare for college was to enroll in the most challenging curriculum they could, which in most high schools meant AP. Colleges could assumedly find the most prepared high school students by looking at those with the greatest number of AP courses. Students, too, began to realize the importance of AP classes on their transcript when it came to admissions. In 1986, when asked why they chose to enroll in AP courses, students cited “being considered a serious student” as one of their reasons (Casserly, 1986, p. 8).

Students also mentioned that pressure from family members who had been in the program played a role. Numerous studies have shown the admissions benefit accrued to students if they have a strong history of participation in AP courses (Breland et al., 2002; Casserly, 1986; Willingham & Morris, 1986). College admissions officers were noted to give preference to AP course enrollment in admissions decisions, regardless of whether or not a student took the end-of-the-year AP exam and if so, how they performed on that exam (Bodfield, 2009; Casserly, 1966; Migdail-Smith, 2011; Santoli, 2002). These officers are quick to point out that the pace, pressure, and enriched coursework offered by the AP courses helps to build a student’s content base as well as their work ethic. One admissions officer noted, “Just the presence of an advanced placement course on a transcript is enough. ...Whether the candidate gets a 1 or a 5 on the examination, we know he’s put out and gained something extra” (Casserly, 1966, p. 19). By utilizing AP

course enrollment in this fashion, it is conceivable that a student in high school takes a very heavy load of AP courses and gets accepted by a university because of the rigor of their schedule, yet may be able to show little to no proficiency in the subject matter.

The practice of giving preferential treatment to AP students in the college admissions process resulted in two lawsuits in the state of California in 1999. The University of California at Berkeley had established the practice of awarding an extra grade point to students with AP classes on their transcript, and then using this weighted GPA when making admissions decisions. One lawsuit contended that minority and low income students were being denied equal consideration in the admissions process because these students were more likely to attend those high schools that do not offer as many AP courses to their students, and even if they do offer the courses students are often unable to afford the cost of the AP exams (Hebel, 1999). A second lawsuit, filed a few months after the first, accused the state of violating California's Constitution by not offering AP courses equally across the state and thereby harming some of the students who apply to college (Hebel, 1999). When filing the suit, one attorney noted, "California is flunking when it comes to educating students, denying them intellectually challenging courses designed to prepare them for college and holding them back by squelching their competitive chances of acceptance at colleges and universities" (Thernstrom & Thernstrom, 2003, p. 184). The university contended that a 1996 amendment to the state constitution disallowed using race as a criterion for admissions purposes, and therefore a merit-based system (including AP courses taken) was the best way to choose prospective

students. The university also said it did not penalize students who had few AP opportunities available at their school and instead judged candidates based on how many AP courses they took from those which were available at their school. To better equalize AP opportunities, the state legislature granted \$30 million to improve AP access to minority students, including \$8 million to help create the College Preparatory Initiative, which offered AP courses to students at low income and high minority schools (Burdman, 2000; Hebel, 1999). A subsequent study at the University of California investigated the role that AP and Honors courses play in the admissions decisions of colleges (Geiser & Santelices, 2004). After looking at a sample of over 80,000 freshmen entering the University of California system between 1998 and 2001, they found that there was no statistical relationship between AP course-taking and a student's subsequent performance in college. They did find a strong relationship between college success and those students who took and scored a 3 or better on the AP exam, but felt the practice of awarding admissions to college based on AP enrollment alone was not justified. Said Geiser, "AP is being used for a purpose for which it has never been validated" (Ewers, 2005, p. 65). Geiser and Santelices (2004) noted that there was a lack of research that explored whether or not using AP course enrollment (in the absence of the AP exam) for admissions decisions was educationally sound or not. There are multiple studies that discuss the importance of taking the AP exam in terms of validating the degree to which students have mastered the AP curriculum. These studies show that students who take and pass the AP exam are likely to be successful in college (Hargrove, Godin, & Dodd,

2008; Keng & Dodd, 2008; Willingham & Morris, 1986). The Hargrove et al. (2008) study also showed that students who took the AP exam had higher college GPAs, earned more credit hours, and graduated college sooner compared to those students who only took the AP course but no AP exam. These studies are often interpreted to mean that strong performance on the AP exam *causes* success in college, and subsequently many secondary schools have ushered in high numbers of students into AP Programs, regardless of their level of preparedness. However, there are hundreds of thousands of students who take AP courses yet do not sign up for the AP exam, a troubling development given the importance that college admissions officers place on AP courses (Mollison, 2006). Researchers have found that several variables were statistically significant in terms of predicting successful college performance, including a student's high school grade point average, their SAT score, and the level of their parent's education and income (Geiser & Santelices, 2004; Mullis, Rathge, & Mullis, 2003). Klopfenstein and Thomas (2004) also found a similar outcome when looking at the records of 28,000 students who graduated from Texas high schools and enrolled in state universities. After variables such as high school GPA, SAT scores, parent income and education, and the percentage of experienced high school teachers in a student's high school were factored out, the researchers found no extra predictive power of AP course enrollment (Klopfenstein & Thomas, 2005). In an interview, Thomas stated that she was concerned that school districts might be paying too little attention to the *quality* of their AP programs in an effort to quickly get increasing numbers of students enrolled in these

courses (Glenn, 2005). Another study showed that while AP students rated the quality of their high school AP courses as exceeding the quality of their non-AP courses, the study did not show that students who took AP courses in high school had higher GPAs in college than students who did not take AP courses in high school (Thompson & Rust, 2007). In response to these criticisms of the AP program, College Board Vice President Trevor Packer stated that increasing numbers of people feel that AP courses are meaningful to the admissions process but that research has only found statistical evidence of success in college being related to performance on the AP exam (Glenn, 2005).

Colleges are beginning to take note of the admissions dilemma as well. Daniel Walls, dean of admissions at Emory University, noted that his school is becoming more cognizant that the sheer quantity of AP courses on a candidate's transcript may not be as important as other factors. "We're very careful in training new (admissions officers) to be wary of the fact that this person who has 6 AP's is not obviously better than someone who has two or three" (Ewers, 2005, p. 65). The intense race for admission to colleges has also led to some students using illicit means to achieve success in their AP courses. Studies have estimated the percentage of students who cheat on homework and/or exams in high school and college to be as high as 80-90% (Davis & Ludvigson, 1995; Whitley, 1998). When questioned, students enrolled in AP and IB courses cited two primary reasons for cheating: the competitive pressure to exceed the performance of their peers in terms of class rank and GPA, and the pressure from their parents to be highly successful in school (Taylor, Pogrebin, & Dodge, 2002). Many students feel that in order to get into

a highly prestigious school, they will need excellent grades in AP and IB courses, which sometimes necessitates them cheating in order to maintain their competitive edge. The study also found that a majority of students felt justified in cheating, citing it was part of the culture and was so pervasive that it was accepted.

Inequitable Distribution of AP Opportunities

These studies make the practice of basing college admission on the number of AP (and Honors) courses a concern, especially in light of evidence that opportunities for AP enrollment are inequitably distributed throughout the country. Several studies have shown that students in private and middle/upper-class suburban schools have more AP classes from which to choose when compared to their peers in rural, urban, or lower-income schools (Attewell & Domina, 2008; Gamoran, 1992; Griffin & Allen, 2006; Mollison, 2006; Rado & Malone, 2011; Santoli, 2002). When interviewed in 1986, students who did have the opportunity to take AP courses shared their thoughts on the inequity that existed within the AP program at that time. One student commented:

Well, somebody's not doing their job. I mean the College Board should *legislate* (original emphasis) that schools offer AP. I came here with credit for five AP's and now I'm a second semester junior with a double major...Could I be doing this without AP? Of course not. But there are lots of students who are just as bright as me. Brighter! And they're slogging along and it just isn't fair... (Casserly, 1986, p. 7)

The discrepancies between AP opportunities at different schools can be substantial, and often exist between schools of close geographic proximity. In just one example, a suburban Chicago high school offers two AP subjects to their students, while a high school just seven miles away offers 25 (Rado & Malone, 2011). A study by Burney (2010) found that the number of AP course offerings in a high school contributed uniquely to the explanation of the variance in high achievement in students, and suggests that schools must find ways to increase their AP offerings. Several studies recommend online courses as one way for smaller, more rural districts to offer a curriculum that challenges their students if resources are otherwise prohibitive (Burney, 2010; Olszewski-Kubilius & Limburg-Weber, 1999). AP courses were some of the first to be offered electronically, partly due to the attention raised about the inequity of course offerings to students in poor and/or rural schools. Schools such as Kentucky Virtual Schools, part of the Kentucky Department of Education, were created with the intent of providing more equitable access to AP courses (Davis, 2011). Today, Kentucky Virtual Schools offers 23 AP classes, and there are other state and private agencies that offer a catalog of AP courses online. The Florida Virtual School offers free AP courses to students who want to take an AP course that isn't offered in their own school (Mollison, 2006). Between 1995 and 2005, the number of students in the state of Florida who took AP exams jumped by 95%, including triple-digit increases for African-American and Hispanic students. In a 2005 report, the United States Department of Education reported that 74% of students attended a high school in the year 2000 that offered at least one

advanced course in math, science, English, or foreign language (USDE, National Center for Education Statistics, 2005). These participation numbers fall to 58% when considering schools that offer two or more advanced course in these subject areas, and only 22% of students have the opportunity to take four or more advanced courses in these disciplines. Furthermore, students in rural areas were one-fifth as likely as their peers in suburban or large towns to have access to advanced courses, and the study also showed that minority students had fewer opportunities for advanced study than their white and Asian counterparts. The report noted that high school students living in rural areas are less likely (6.8% vs. 26.5%) to take AP science courses than students who live in suburban and central cities, largely due to a lack of teachers and resources. Discrepancies in opportunity such as these are one reason many have promoted the implementation of online learning as a way to offer AP classes to students who otherwise would not have them.

A study conducted by the Department of Education was one of the first to look at how technology-based distance education was being utilized in elementary and secondary schools (Setzer & Lewis, 2005). During the 2002-2003 school year, about one-third of public school districts offered online courses to their students, and of these districts, half of them utilized Internet technology to offer AP or college-level courses. AP/college-level enrollments represented roughly 14% of the total number of student enrollments in online courses that year, and it is estimated that in 2011, nearly 18% of the 17,000 schools who offer AP courses will offer at least one of them as an online option (Davis,

2011). The 2005 Department of Education study also showed rural districts more likely to utilize online courses compared to urban or suburban districts, and higher poverty districts were also shown more likely to utilize online learning compared to districts with lower levels of poverty (Setzer & Lewis, 2005). A similar study conducted during the 2007-2008 school year showed large growth in the use of technology as a form of instruction. According to Picciano and Seaman (2009), 75% of school districts had one or more students enrolled in an online course, and more than one million students were enrolled in online courses during the 2007-2008 school year. This number represents an increase of nearly 50% from the 2005-2006 school year (Picciano & Seaman, 2009). The most vocal respondents in this survey were those from smaller, rural districts, who noted online learning was a lifeline to basic quality education and enabled them to provide courses with much greater variety, and at much higher levels of difficulty, than they would otherwise be able to offer (Picciano & Seaman, 2009). The report predicts that given its advantages, fully online courses (those taught with no face-to-face interaction between teacher and student) and blended online courses (those taught primarily online but with occasional face-to-face interaction) would continue to show strong growth in the near-future. One example of this type of curriculum is Project Aspire, a federally funded program that targets impoverished, academically-gifted students who attend rural middle and high schools (Cross & Burney, 2005). The goal of Project Aspire is to offer rigorous courses to students regardless of where they live, and to utilize distance education platforms as the medium through which to teach the courses. Through the use of

technology, Project Aspire looks to recruit low-income students into AP courses, and it also works to ensure their success by developing strong articulation programs with middle school teachers and helping them to develop strong pre-AP courses. The results of this study showed that online opportunities helped to remove one barrier faced by students in rural, poor areas, but that other challenges (such as limited time available to engage in rigorous studies due to family obligations and the limited support given by some parents due to a perceived lack of benefits) still exist (Cross & Burney, 2005).

In many respects the AP Program has gone full-circle, from the initial skepticism of those in higher education about its merits as a college-equivalent curriculum, to steady growth over several decades, to new-found concerns that the program is now too-open and that it has lost its status as a signaling mechanism that distinguishes the elite high school student from the average high school student. Consider that in the first year of testing under the auspices of The College Board, 1,229 students from 104 schools took 2,199 exams. In 2010, 54 years later, 1.8 million students from 17,861 schools took 3.2 million exams (College Board, 2011a). As a result of the lost confidence in the validity of the AP Program, many colleges and universities have begun to question the idea of awarding advanced credit for scores of 3 or better, and they have consequently responded by tightening the credit-awarding policies they employ. This shaking of the foundation on which AP stands could result in a complete breakdown of the AP Program itself, as support from the nation's universities and colleges is critical if the program is to successfully serve as a bridge between 2 separate educational bodies. Shortly after its

birth in 1956, AP Director David Dudley acknowledged the critical nature of the support from those in higher education:

It is wise – and essential in the long run, of course – for the colleges to give their whole-hearted backing to the program. The Advanced Placement Program will bring to the colleges abler students, better prepared to do richer and more advanced work in the college years; it is a means whereby school and college teachers may work together to strengthen American education. And the program must have the nourishing support of the colleges if the (high) schools are to make their extra effort at truly college-level heights. (Dudley, 1958, p. 3)

Borne out of the perceived necessity to accelerate the education of the nation's most gifted students, the pushback against AP began as early as the 1960s, when social angst in America brought much-needed attention to the discrepancy in opportunities afforded to those students who resided in upscale, suburban communities versus those living in urban, largely low-income and minority, areas. From its beginning, the AP Program had used a variety of measures to ensure that only the best and brightest students enrolled in these courses, including intelligence tests, GPA, class rank, teacher recommendations, and parental support (Cornog, 1957). However, the realization that differing rates of maturity affect student performance in the classroom, as well as the possibility that one poor performance on a standardized exam could have huge implications for AP enrollment caused many to reconsider the exclusive nature of AP

enrollment. When considering the low percentages of minority students enrolled in AP, some people began to consider the program as being touched with “institutional racism,” which is to say that the very structure of the program (i.e., its closed enrollment policies) resulted in the unintended exclusion of minorities (Hochman, 1970). While examples of successful minority performance in AP could be found, they were considered the exception (Sheets, 1995). Even very early in the history of the program, it was suggested that some type of open enrollment procedures should be used that placed student desire—rather than academic benchmarks — as the main criteria for admission to AP classes.

The Secondary Schools Backlash Against AP

As the number of students participating in AP has grown into the millions, there have been a small but increasing number of elite private and public schools that have begun to turn away from AP as their top-tier curriculum. What is the reason for this shift in attitude against AP? According to Schneider (2009), there was not a philosophical shift in the AP curriculum, nor did anyone at The College Board offend the leaders of these selective schools. And the program has continued to offer a challenging curriculum that allows high school students to earn college credit by passing the end-of-the-year exam. It is with that exam, however, that Schneider suggests the backlash against AP originated. Critics of AP have targeted its over-reliance on standardized assessments as the sole metric of learning, and the resultant breadth of the curriculum necessary to ensure success on that exam. Given the sheer quantity of content within each discipline, teachers often resort to lecturing as the preferred method of teaching, to the detriment of

other effective, research-based strategies (Marzano, Pickering, & Pollack, 2001; Whitaker, 2004; Winebrenner, 2006). The importance that college admissions directors placed on AP courses as a predictor of qualified student applicants, however, always offset these concerns with the AP Program. So long as the AP Program was selective in the number of participants, colleges could continue to use AP enrollment as a filter for admissions. Once the number of students participating in the program began to grow dramatically, however, colleges could no longer use AP enrollment as a barometer of distinction. Enrollment numbers certainly show the rapid expansion of the AP Program, but critics of AP are quick to point to two factors that give serious cause to question whether or not the program is offering continued rigor. First, the number of students enrolling in AP classes nationwide but choosing to not take the AP exam has been estimated to be approximately one-third in 2001, and that number has remained relatively static over the last decade (Commission on the Future of the Advanced Placement Program, 2001; Hurwitz & Hurwitz, 2003; Meyers, 2011; Mollison, 2006). In Texas, the Department of Education estimated the number of AP students who did not take the AP exam to be as high as 54% in 2001, although that number has diminished to more closely match the national estimate in recent years (Meyers, 2011). There are a variety of reasons cited by teachers for students not taking the AP exam, including students not feeling prepared, the test not having any bearing on their admissions status because they've already been admitted, and the cost of the exam, to name a few (Mollison, 2006). The optional nature of the AP exam has many researchers concerned that AP

participation is being misused by colleges and universities due to the lack of a standardized measure of performance. The other concern that has critics questioning the rigor of AP is that for those who do take the AP exam, the average exam grade has slowly diminished over the past 10-15 years, and the percentage of students receiving a score of 3 or better has declined as well (College Board, 2011b). Some select secondary schools, looking for an avenue to retrench from AP, used the ubiquity of the program to review the role of AP within their curriculum. In 2002, Fieldston School in New York State received national attention when they made the decision to drop their AP Program in its entirety. Principal Rachel Friis Stettler explained the decision as follows:

Over time, we came to the conclusion that the AP program at Fieldston was not only at odds with our educational and social purpose, but it lacked classes with multicultural content; in some disciplines, most notably history and science, it left little room for divergence. The AP course encouraged teachers to cover a great breadth of material superficially, leaving little time for in-depth analysis, emphasizing speed of assimilation and memorization of information rather than a deep understanding of ideas and themes...In short, the AP Program never satisfactorily accommodated our students' needs for advanced work that stimulated them. (Stettler & Algrant, 2003, pp. 45-46)

In considering their own debate about whether or not to drop AP, the Academic Dean at Concord Academy in Massachusetts spoke of the school's calling "to create a

program founded upon love of learning, commitment to an experience of diversity in learning, intellectual rigor, and creative endeavor. Establishing standardized testing as the focus of our program doesn't accomplish that mission" (Hager, Laipson, & Daniel, 2006, p. 11). At Fieldston, Concord, Phillips Exeter Academy in New Hampshire, Crossroads School in California, and other similar schools, there have been a variety of criticisms levied by various constituency groups against the AP Program. Teachers complained about the lack of freedom to diverge from the tightly-bound curriculum and felt their creativity was curtailed, even commenting that the AP curriculum feels similar to a series of scripted lessons that must be followed closely day-to-day if their students are to do well on the AP exam (Berger, 2006; Ewers, 2005; Gardner, 2008; Hager et al., 2006; Van Tessel-Baska, 2001; Zhao, 2002). One teacher at Fieldston recalled how his AP U.S. History class was very interested in a discussion about the role of females in the Progressive Era, but due to the time constraints imposed by the AP curriculum he was forced to move ahead into World War One (Zhao, 2002). When engaged in a discussion with the school's Academic Dean, an AP Statistics teacher at Concord Academy noted his frustration by stating, "I could teach a project-based statistics course that would provide students with a much better understanding of the power of statistics than the AP curriculum" (Hager et al., 2006, p. 10). Students felt that the "mile wide and an inch deep" approach to AP classes offered little chance for divergent opinions to be expressed or topics to be delved into to any degree of complexity. A graduate of Fieldston had written his former school to question the school's decision to continue with the AP

Program. He wrote about the dilemma faced by students forced to choose between AP courses versus the school's own Honors electives. For example, many students enrolled in AP English instead of the school's Honors course "The Literature of New York City." They did so because of the status AP carried with college admissions directors, not because of the intellectual rewards it offered. He wrote, "It is ironic that the top students, who will be trying to take the most specialized courses available in college, are taking the most general courses available in high school, largely because the course titles are preceded by the letters 'AP'" (Stettler & Algrant, 2003, p. 47). He suggested that if Fieldston's goal was "learning for the love of learning, the school should end the artificial hierarchy between the two courses, eliminate the AP Program, and assert confidence in its own Honors courses" (p. 47).

A separate study showed that many students enroll in a high quantity of AP courses in order to remain competitive in the college admissions process. The researchers had hypothesized that the trade-off of this rigorous course load would be social acceptance from their peers, which this study did not validate. However, students consistently cited a lack of sleep as being necessary to maintain success in their AP courses, which emphasized breadth of coverage within each content area (Foust, Hertberg-Davis, & Callahan, 2008). Other studies have noted the stress and fatigue that goes with preparing for the academic demands required of AP (Foust et al., 2009; Sheets, 1995). School administrators have also been stuck in the difficult position of promoting a program for which there was much criticism while at the same time understanding the

premium college admissions officers placed on a student transcript laden with AP courses. Parents at these schools were understandably leery that if their school dropped AP then their children might be placed at a competitive disadvantage in the college admissions process. The high schools considering the implications of a shift away from AP needed assurance that dropping Advanced Placement would not hurt their students' admissions opportunities. When college admissions directors were asked their opinion about the proposed change in curriculum, several universities responded enthusiastically. The Dean of Admissions at Stanford University responded to Fieldston's inquiry by stating: "I applaud Fieldston's proposed decision to drop the AP curriculum. Your decision reflects the courage of your convictions about teaching and learning. I hope it encourages other schools to follow Fieldston's lead" (Stettler & Algrant, 2003, p. 50). Harvard University replied, "We look at whether the applicant has taken the high school's most demanding courses. But whether the classes are designated as AP or not is irrelevant. Abolishing AP won't hurt the kids" (Zhao, 2002, para. 17). After making the final decision to drop its AP courses altogether, Fieldston anxiously awaited the admissions results of their first class of non-AP graduates. Of their graduates, 110 out of 127 students were admitted to their first or second choice of schools, and 92 of those students were admitted to schools considered to be the most selective in the nation (Stettler & Algrant, 2003). It appeared that the decision to drop AP did not negatively affect the admissions status of their students, as had been originally feared when the proposal was being considered.

Rationale for the Study

Since 2002, The College Board has emphasized its belief that any student who has the desire should be able to enroll in AP classes. This change in philosophy from that which existed when the program was founded in the 1950s has resulted in tremendous growth within the AP Program that has also paralleled concerns that the quality and rigor for which the program is noted has diminished. This chapter outlined the origins of the AP Program and its founding as a program for gifted students. The benefits of the AP Program were explored by citing studies that have shown the college success of students who have taken and passed the AP exam, and the resultant growth that resulted as secondary school administrators, parents, and students began to seek the admissions benefits that were bestowed upon students enrolled in AP courses. Concern over the exclusion of minority and low-income students has led to an emphasis on the elimination of pre-requisites as a basis for AP enrollment. As a result, rapid growth and the increased inclusion of students considered to be “non-traditional” has caused decision-makers at both the secondary and post-secondary levels, as well as individuals not directly involved in K-16 education, to question to degree to which AP represents a college-level curriculum for its students. This study addressed a previously neglected area of research by distinguishing and better understanding the experiences of “traditional” AP students versus students who are considered to be “non-traditional.” Given the challenges these “non-traditional” students sometimes face, this study sought to identify the factors that have led to the continued enrollment of students whose grades in AP courses were below

a C. Utilizing the perspective and insight of AP students and their teachers, the goal was to identify the types of skills and dispositions necessary to achieve success in an AP course, and to show the value that open enrollment can have on a school and its students.

Specifically, this study addressed the following research questions:

1. What reasons do students give for enrolling in AP courses? In what ways do these reasons differ between “traditional” and “non-traditional” students?
2. What are the experiences of “traditional” and “non-traditional” students in AP courses? How are the experiences different between “traditional” and “non-traditional” students?
3. How do students define success in an AP course? In what ways do these definitions differ between “traditional” and “non-traditional” students?
4. What are the academic characteristics (GPA, class rank, ACT scores, and attendance patterns) that distinguish successful AP students from unsuccessful AP students? Do these characteristics differ between “traditional” and “non-traditional” students?
5. For students who fail to achieve a C or better, why do they choose to remain enrolled in an AP course? How do these reasons differ from students who do receive a C or better? In what ways do these reasons differ between “traditional” and “non-traditional” students?
6. What are teachers’ perceptions of the experiences and contributions of “traditional” and “non-traditional” students in AP courses?

CHAPTER III

METHODOLOGY

Purpose of the Study

The purpose of this study was to compare the expectations of traditional and non-traditional students who enrolled in Advanced Placement courses and to discuss their experiences in those courses. This study also investigated the reasons students persevered in AP courses despite not achieving a grade of C or better. In addition, the study looked at the academic characteristics (class rank, GPA, and ACT score, and attendance patterns) of students who achieved a grade of C or better in an AP course. Teacher perspectives on the experiences and contributions of traditional and non-traditional students were also explored.

Research Questions

This study sought to answer the following research questions:

1. What reasons do students give for enrolling in AP courses? In what ways do these reasons differ between “traditional” and “non-traditional” students?
2. What are the experiences of “traditional” and “non-traditional” students in AP courses? How are the experiences different between “traditional” and “non-traditional” students?
3. How do students define success in an AP course? In what ways do these definitions differ between “traditional” and “non-traditional” students?

4. What are the academic characteristics (GPA, class rank, ACT scores, and attendance patterns) that distinguish successful AP students from unsuccessful AP students? Do these characteristics differ between “traditional” and “non-traditional” students?
5. For students who fail to achieve a C or better, why do they choose to remain enrolled in an AP course? How do these reasons differ from students who do receive a C or better? In what ways do these reasons differ between “traditional” and “non-traditional” students?
6. What are teachers’ perceptions of the experiences and contributions of “traditional” and “non-traditional” students in AP courses?

Research Design and Methodology to be Employed

Because of the rapid increase in the number of students taking AP courses in the last 10-15 years, my research concentrated on the reasons cited by students for taking such courses and their experiences in those courses. Historically, the highest achieving students (those with high GPA/class rank) enrolled in AP courses, while those thought to be “average” would have not considered AP enrollment. Today, however, it is not unheard of for students who rank in the bottom half of their classes to enroll in AP courses, so traditional justifications for course enrollment (to avoid boredom, to learn additional content, to gain accelerated placement in college) may be different from those given today. Also, many students sign up for AP courses only to drop out or experience failure because they are not prepared for the academic rigors that such courses entail. My

research sought to distinguish between the reasons “traditional” and “non-traditional” students enrolled in AP courses and the experiences they had in those courses.

Interviews with students helped to identify the desired outcomes they hoped to achieve through AP enrollment, and also helped identify dispositions that were important to their success. This information can help persuade undecided students as to whether or not AP enrollment is justified, and whether or not they share the attributes of successful AP students. Teacher interviews also provided insight into the experiences of traditional versus non-traditional students in AP courses as teachers drew upon their experiences of teaching dozens of different students each year. Information gleaned through these interviews will better enable teachers to meet the needs of the different learners who may be enrolled in their classes in the future.

The research design most suited to this type of study was a qualitative design. The question of why students initially chose to take AP courses was best handled by interviews with a sample of students who had agreed to participate in this study. A comparison of students who are “non-traditional” versus those who are “traditional” was made, and the perceived goals of course enrollment for each group were compared. In addition to determining the reasons students enrolled in these courses, the interviews yielded evidence to help understand the experience students had in those courses and how they perceived success within the course. The ability to persist and stay enrolled in a course despite not achieving “success” in terms of their letter grade was also studied. In addition to student interviews, interviews were conducted with AP teachers in the same

school. The goal of these teacher interviews was to gauge the differences in student experiences and engagement from the perspective of the instructor. While teacher interviews were not able to provide insight into some of the research questions (for example, student reasons for enrolling in AP courses and student definitions of success in those courses), instructors have a unique lens through which to view student experiences in those classes, especially when comparing “traditional” and “non-traditional” students. Teachers have the ability to compare their current students with those whom they have taught in previous years, giving additional insight into the experiences of traditional and non-traditional students. Teachers with more experience were also able to discuss the implications of the Equity Policy Statement from its inception, offering a sense of change over time that student interviews alone could not provide. While there was no established definition of “traditional” and “non-traditional” in the existing literature, the author established some criteria to identify these types of students. Generally, a student was considered “non-traditional” if they received a D or an F in a previous AP course and chose to enroll in a subsequent AP course within that same discipline. A student was also considered “non-traditional” if they received below an A in a lower-level course (i.e., a “regular” course) yet chose to take an AP course in a similar discipline the following year.

The remainder of the study used school data to compare “successful” and “unsuccessful” students on the basis of their class rank, GPA, ACT score, and attendance patterns. The goal was to build a profile of a “successful” AP student based on their

performance in various academic indicators. Secondary schools will be more able to provide guidance and input to students who desire to enroll in AP courses and to provide information as to who best meets the profile of those who have achieved success in past years as a result of this study. Furthermore, when combined with the qualitative research findings described earlier, successful AP students who are atypical to the majority in terms of GPA, class rank, and other quantitative variables can be used as case studies to discover the characteristics they possessed that enabled them to be successful. The results of this study can also be used as a basis of discussion with students and parents as counselors sit down with them to discuss course enrollment. The data from this study could be shared with a student and their parents if they express interest in signing up for an AP course yet do not fit the profile of a student who has been successful in the past in these courses, or if they fit the profile of a successful – yet non-traditional – student. The data needed for this academic profile was gleaned from student records.

Participants

The participants for this study were high school students of mixed genders who were enrolled in an AP Psychology course. Possible participants were identified as traditional or non-traditional based on their performance in the previous course sequence (AP United States History). Students were contacted in school by the researcher to judge their desire in being a part of this study and, if they appeared to be interested, their families were contacted via telephone to gain their initial consent. For those willing to participate after these initial two phases, official consent was gained from the research

subjects and their families using the approved consent forms found in Appendices A and B. Interviews ranging in length from 22 to 32 minutes were conducted with five traditional students and five non-traditional students.

In addition to students, there were also interviews conducted with instructors who had experience in teaching AP courses. Teacher participants were of mixed genders and included those from different content areas and levels of experience. Teachers were contacted in school by the researcher to gauge their desire in being a part of this study. For those willing to participate, official consent was gained from the research subjects using the consent form found in Appendix G. Twenty-four to 37-minute interviews were conducted with five AP teachers.

Setting

The setting for this study was a grade 9-12 high school of approximately 3,000 students located in the suburbs of a large Midwestern city. The racial composition of the student body was approximately 70% White, 15% Hispanic, 8% Asian, and 7% African-American. Roughly 14% of the student body was low income, the daily attendance rate was approximately 95% and the school had a graduation rate of 85%. The selection of this school was made because the school had a broad AP program that utilized an open enrollment policy, a characteristic essential to this study.

Data Gathering/Instrumentation

The interviews that were conducted with study participants were done using an established interview protocol. Creswell (2009) suggests that each interview be documented with the date, time, and location of the interview, and that the interviewer use a pre-determined set of questions in order to ensure consistency across the study. The questions used in this study can be found in Appendices C (student) and E (teacher). Each main question (identified in bold font) is followed by a series of additional questions that helped to serve as prompts for the participant if they struggled to answer or did not provide thorough enough detail.

In order to build the academic profile of a successful AP student, I accessed student records for any student enrolled in an AP Psychology class during the 2009/2010, 2010/2011, and 2011/2012 school years who also took the ACT exam. The four variables that I used to build this profile were the student's GPA, their class rank, their ACT score, and their attendance patterns. Students were categorized into one of two groups for the basis of comparison- those with a first semester grade of C or better (the definition I've used to define a successful AP experience) in the AP Psychology class and those who received a D or an F for their first semester grade. An average GPA, class rank, ACT score, and number of days absent from class were calculated for each group so that a profile of academic characteristics could be assembled for students who had achieved success in AP classes versus those who had not. The purpose of this profile was to better identify those students who had historically performed well in an AP course in order to better inform parents, students, and counselors during the course selection

process. One concern of this approach is that the data gleaned from this work could be used in place of the holistic approach that school counselors should take when recommending students for enrollment in AP courses. The academic profile that was generated is based on past students who have participated in AP courses, but it is not intended to serve as a determining mechanism of who should and should not be allowed to enroll in AP courses. The goal of building such a profile is to provide schools with as much information as possible in order to inform those charged with course recommendations and selections. It cannot account for individual student differences that make each person unique and who may therefore fall outside the parameters established by the student profile. The academic profile of successful AP students is one piece of an overall process that should be used in the course selection process.

Data Collection Procedures

This study utilized a triangulation of data collection techniques in an effort to best ensure accuracy of findings. The first data collection technique was to conduct face-to-face interviews with individual students. Denzin and Lincoln (2003a) identified distinctions between structured and unstructured interviews. Structured interviews require the interviewer to proceed with a set list of questions, each of which is asked using the same verbiage and in the same sequence from one respondent to the next. The role of the interviewer in a structured setting is to stay detached from participant responses and to not show any emotion nor disclose any personal attitude towards the subjects. By way of comparison, unstructured interviews allow for interaction between

the interviewer and the respondent, and provide for a more wide-ranging set of responses. Whereas structured interviews attempt to capture data that meets categories which have been determined ahead of the interview, unstructured interviews attempt to understand the views of the respondent in their entirety (Denzin & Lincoln, 2003a). In this study my interviews more closely resembled a structured interview in that an established set of questions were asked of the respondents. However, I also used discretion to probe more deeply if and when the respondents' answers deemed it appropriate. Given that I was the sole person responsible for conducting both student and teacher interviews, a structured format was not a necessity in order to ensure consistency of protocol between the different respondents.

Creswell (2009) describes several advantages and disadvantages of using interviews as a data collection technique. The advantages of face-to-face interviews are that they provide the researcher the ability to ask the specific types of questions related to the research study and that it enables the students to provide detailed explanations as to their reasons for signing up for AP classes and the experiences they had in those classes. Drawbacks of face-to-face interviews are that participants may not be as open and/or honest as they would be if they had anonymity, and not all students and teachers who are interviewed will be as articulate and/or perceptive of their experiences as one another. Respondents may also try to please the interviewer by responding in the manner in which they feel the interviewer would most like (Denzin & Lincoln, 2003a). However, these

drawbacks to interviews are offset by the thick, rich detail provided during the interview process. A protocol used for the student interviews is located in Appendix C.

The second form of data collection was face-to-face interviews with teachers who had Advanced Placement experience, either presently or in the past. Whereas students could offer personal insight as to their reasons for enrolling in AP classes, their experiences in those classes and the factors which led to their persistence in the class, teachers were able to offer a different perspective on student experiences and contributions to the classroom. Teachers who have taught AP classes in previous years were able to draw on their experience and compare students from the current year not only against one another but also versus those from the classes that came before them. Since the onus of responsibility for engaging the ever-increasing diversity of learners promulgated by the Open Enrollment Policy falls on teachers, their insight into the experiences of traditional versus nontraditional students was valuable. The protocol used for the teacher interviews is located in Appendix E.

The third form of data collection was to use student records to help build the academic profile of a successful AP student. There were four specific data points that were collected: cumulative GPA, class rank, ACT score, and the number of days absent from class. The goal of building such a profile was to better define the academic characteristics that a student who received a C or better in an AP course possessed. The drawbacks of building this profile of the successful AP student are that the potential always exists to interpret the data in a manner that is misleading and, secondly, that

school personnel who hold positions of power could misuse the data. It is my belief, however, that the benefits derived from building a profile of past students who were successful in AP courses and then using that profile to best schedule students into current and future AP courses offsets the potential misuse of the data.

Data Analysis Procedures

According to Creswell (2009), there are several steps that should be followed to ensure the data are analyzed and interpreted in a manner consistent with established protocols and norms. First, the data should be organized by transcribing interview notes, typing them up, and organizing the different sources of data in groups. Next, Creswell suggests the researcher thoroughly read all of the data to try to gain a general understanding of the overall tone it is conveying. Interview data should then be coded so that large amounts of data can be interpreted as effectively as possible. Coding is a procedure of disaggregating data, breaking it down into manageable parts, and identifying or naming those parts (Miles & Huberman, 1994). One question that should be considered is whether codes should be determined *a priori* or if they should arise concurrently with the data collection process. The greater the number of researchers involved in the data collection process the greater the benefit to having pre-established codes. This helps to ensure the questioning and coding stays as consistent as possible, an increasingly difficult procedure given the greater number of individuals involved in the process. Since this particular study involved a single researcher, I was able to conduct the interviews, transcribe them, and then develop the codes during the coding process.

Once the codes were established I used them to establish the overall themes that I built upon in the “explanation of findings” section of my study. The final step of the data analysis procedure involved an interpretation of the data. The goals of this step were to “make sense” of the data and, for this particular study, to discuss its implications for schools and students as they move forward regarding placement decisions.

Two issues of concern to researchers are to ensure that data collected is reliable and valid. Two characteristics of reliability are if the data is consistent across time and if it is able to be replicated by another. There are several steps that can be taken by researchers to help with the reliability of their data (Gibbs, 2007; Yin, 2003). These include making careful documentation of the steps and procedures taken so that others could, if desired, replicate the study. During the interview process, care must be taken to ensure that transcriptions accurately reflect what was said by study participants, and the researcher must also be certain to reflect on coding definitions throughout the entire transcription process. This is important to help ensure that themes are defined consistently throughout the interview process and do not change from the first interview to the last. This particular study did not face the challenge of multiple researchers conducting the interviews, which would make the issue of consistency in coding definitions even more difficult. For studies that do include multiple researchers, it is important to develop procedures that require cross-checking of codes and themes to ensure intercoder agreement.

One final consideration during the data analysis process was to ensure that the data collected were valid. Validity means that the findings of the study accurately represent the events that they say they represent and that the results can be backed up by evidence (Schwandt, 2007). There are several different procedures that can be employed by researchers to ensure their studies are as valid as possible (Creswell & Miller, 2000; Lincoln & Guba, 1985; Merriam, 1998). Triangulation is the process of using multiple different sources of information to try and find common themes amongst them (Creswell, 2009; Creswell & Miller, 2000). The greater the number of sources used for data collection and convergence of themes, the greater the degree of validity can be claimed by the researcher. Member checking is the act of having the researcher take the overall themes that have been identified in the study back to the participants of the study “to ask (them) if the themes or categories make sense, whether they are developed with sufficient evidence, and whether the overall account is realistic and accurate” (Creswell & Miller, 2000, p. 127). In this study, the researcher debriefed with each student and teacher participant the comments they made during the interview, and the researcher edited any information the participant chose to clarify during this debriefing session. The use of feedback in this manner added to the credibility of the study in that participants were given the opportunity to comment on its authenticity.

Maintaining a research journal is another method of controlling for bias during the transcription phase (Denzin & Lincoln, 2003b). In this study the researcher reflected upon each interview and recorded his thoughts into a journal before the next interview

began. The act of reflection enabled the researcher to consider not only the responses given by the research subjects but also the role the researcher played during each interview. The researcher's previous experience as an AP teacher increased the likelihood of bias influencing the flow of the interview, but the journal provided a systemic, organized method of reviewing the outcome of each interview shortly after its completion. The journal forced the researcher to concentrate on sticking to the established protocol of questions and it also served as a reminder to minimize the degree to which the researcher instilled his own thoughts into the interviews as opposed to letting the research participants speak. The absence of a research journal would have made maintaining consistency between interviews much more challenging.

Another way to ensure an accurate portrayal of the participants' experience is through the use of what Clifford Geertz (1973) described as a *thick, rich* description. Rather than merely describing events as they are seen, thick descriptions attempt to understand events by interpreting the circumstances, meanings, intentions, and motivations of the study participants (Schwandt, 2007). Interpretations done in this manner allow the reader to believe they could have experienced the event firsthand, and add credibility to the research study. Combined with the member checking described above, thick, rich descriptions help to provide a high degree of validity to a research study.

Methodological Limitations

The purpose of this study was to explore the reasons students enrolled in AP courses, the experiences they had in those courses, and the reasons they persisted in those courses despite possibly having poor academic performance. Comparisons were made between traditional and non-traditional students to discover any differences in the above-stated experiences. One limitation of this study concerns its ability to generalize the findings to other settings. Generally speaking, the intent of qualitative research is to develop an understanding of contexts and themes as they exist within a particular setting, so the goal of generalizability in a qualitative study is secondary (Gibbs, 2007; Greene & Caracelli, 1997; Yin, 2003). Differences in the participants, setting, and instrumentation/data collection are all variables that affect the ability to generalize the results of this study to other settings. This particular study used interviews from ten students and five teachers as the basis for the analysis of student experiences in AP courses. It is possible that these students do not represent the typical experience of students enrolled in AP courses, or that the teachers do not represent the views of the majority of AP teachers. Furthermore, the setting for this study is a suburban school with a moderately low poverty rate. These school characteristics affect student and teacher perspectives on student AP experiences, and this makes it difficult to generalize the results to other school which do not share these characteristics.

Another limitation is that the AP class used for analysis in this study was AP Psychology, an elective course that was open to seniors only at the research site. It is

evident that differences will exist between the experiences of students taking AP elective courses (such as Art History, Economics, and Psychology) versus those who enroll in courses that are more sequential in nature, such as World Languages (German, Spanish, Latin, etc.), Math (Calculus and Statistics), and Science (Biology, Chemistry, and Physics). AP elective courses do not require that students have a previous history in the content matter, while many of the more sequential courses assume students have a solid understanding of the subject matter before enrolling at the AP level. Many of the questions asked in this study, such as reasons for enrolling, definitions of success, and reasons for perseverance in the course will likely have different responses from students in elective courses versus those in more sequential courses. It is important to understand that had this study been replicated using a cohort of students from a course such as Calculus instead of Psychology, the themes that emerged would likely be different.

The academic profile that was created is one that helps to assess if there is a relationship between successful performance in an AP class and variables such as GPA, class rank, ACT score and attendance. High GPA's and ACT scores, however, cannot be assumed to *cause* strong performance in an AP class. Since the research design in this study is a nonexperimental design, one cannot establish a causal relationship between GPA/ACT scores and performance in an AP class. Nonexperimental designs are ones in which the participants in the two groups being compared are not assigned by random, nor are there any design elements (e.g., control groups, pre-test/post-test comparisons) that are used to provide an alternate explanation of academic performance (Shadish, Cook, &

Campbell, 2002). In this study, students were not randomly categorized into one of two groups, but instead were selected based on their academic performance in a class. Also, the focus of this study was not to determine if AP course participation *caused* strong GPAs and standardized test scores, but there are numerous studies in which this is the topic of interest (Curry, Macdonald, & Morgan, 1999; Geiser & Santelices, 2004; Keng & Dodd, 2008; Mattern, Shaw, & Xiong, 2009; Morgan & Klaric, 2007; Walsted & Soper, 1988).

This is not to say, however, that there is no possibility of using the results of this study and applying them to a broader context. As opposed to experimental research in which the results can be generalized due to the representative sampling used in the research design, theoretical generalizations rely on research settings and participants that are chosen because of their ability to support or refute the argument being developed by the researcher (Schwandt, 2007). The idea of being able to transfer the results of this study to another school setting is possible if the researcher provides sufficient details that it would enable readers to determine if the results are applicable to other schools with similar characteristics (Lincoln & Guba, 1985; Stake, 1995).

Ethical Considerations

This study involved the participation of a vulnerable population, students under the age of 19. Protection was provided to all students in that their participation was completely voluntary and only with the consent of their parents. All students and teachers were informed of their right to discontinue participation at any time. The

anonymity of all participants, as well as the school itself, was protected through the use of aliases. Transcripts from interviews, as well as school demographic data, will be kept in a locked cabinet in the researcher's home for a period of one year after completion of the dissertation, at which point it will be destroyed. In order to ensure that interviews are interpreted accurately, the researcher debriefed with each participant the comments made during the interview, and the researcher edited any information the respondent chose to clarify in this debriefing session. The questions posed during the interviews with student and teacher participants were not considered intrusive and only sought to discover attitudes and experiences of students enrolled in Advanced Placement courses. Student data gleaned from school records was identified using randomly chosen numbers rather than student names. This helped to ensure the confidentiality of student records was maintained.

CHAPTER IV

ANALYSIS OF DATA AND FINDINGS

Overview of the Study

The purpose of this study was to explore the experiences of students who chose to enroll in AP courses, and it sought to distinguish between the experiences of traditional AP students versus students who are considered to be non-traditional. Furthermore, this study sought to identify the factors that led to the continued enrollment of students whose grades in AP courses were below a C. The study also sought to build an academic profile of a successful AP student, consisting of GPA, class rank, ACT score, and attendance patterns. The goal of this study was to identify the types of skills and dispositions necessary to achieve success in an AP course, including those attributes for students who are typically underrepresented in AP courses. Information gleaned through student and teacher interviews will be useful to school administrators and guidance counselors as they engage in course scheduling with students and parents. Teachers of AP classes will benefit by knowing the factors that cause their students to initially enroll in an AP course and to persist in it until its conclusion. Students and families will benefit in knowing the characteristics of students who were able to persist in an AP class until its conclusion. The overall goal of a study such as this was to show the value that open enrollment has on a school and its students, and to highlight the attitudes, skills, and dispositions that enable such a policy to be successfully implemented. This chapter will provide a

description of the process used to collect the data used in the study and the analyses used to answer each research question.

Format of the Study

Completion of the study consisted of six visits to a large, suburban high school located outside a major Midwestern city. After receiving approval from the Institutional Review Board (IRB), the researcher contacted the principal of the building and set up a time to meet and discuss the specifics of the study and the parameters as established by IRB. At this first meeting, a list of potential student and teacher participants was given to the researcher by the principal and a date was determined for the second visit to the school. The principal also determined the statistical data the researcher would need in order to complete the academic profile for the study, and the principal promised the data would be provided via e-mail from the Technology Coordinator for the district. During the second visit, the researcher met in a private room with potential participants and described the study to them in detail using the scripts approved by IRB (see Appendices D, F, and H). During this meeting the researcher also notified potential participants of the date he would return to collect the consent forms (see Appendices A, B, and G) for those willing to participate in the study. Approximately one week after the initial meeting with the potential participants the researcher returned to the school to collect consent forms and determine the official list of those who would participate in the study. The date of the interviews was established at this meeting as well. The interviews with research participants took place over a two-day period. Interviews ranged from a

minimum of 20 minutes to a maximum of 37 minutes with an average length of 27 minutes. The interviews were recorded using a digital audio recorder and a second digital audio recorder served as a backup. The researcher then transcribed the interviews verbatim and a final date was determined for the researcher to return to the school. On this final visit the transcript of each interview was shown to each participant, who was given the opportunity to clarify their responses with the researcher. Participants were also given a \$15 gift card for their participation in the study.

Description of Participants

Participants in the study consisted of five teachers and ten students. When considering teachers for inclusion in the study, the sole requirement was that the teacher must have either taught AP in a previous school year or the school year 2011-2012. Once a list of teachers meeting that requirement was created, an effort was made to include teachers of different genders and content areas and who had different levels of AP teaching experience. Table 2 shows the characteristics of the teachers who participated in the study.

Table 2

Characteristics of Teacher Participants

Participant	Gender	AP Content Area	Years of Teaching Experience/ Years of AP Teaching Experience
Teacher 1	Male	Language and Composition	15/3
Teacher 2	Female	Psychology	17/16
Teacher 3	Female	Biology and Environmental Science	29/7(Biology) and 3(ES)
Teacher 4	Male	Calculus and Statistics	31/13 (Calculus) and 11(S)
Teacher 5	Female	Psychology	1/1

Student participants were selected for inclusion after being drawn from a list of students enrolled in Advanced Placement Psychology during the 2011-2012 school year. Psychology was chosen because it offered a large number of potential participants and its elective nature made it more likely that there would be a higher percentage of non-traditional students enrolled in this course. At the school in which the research took place there were 123 students enrolled in AP Psychology for the 2011-2012 school year. The 123 students were classified as either traditional or non-traditional AP Psychology students based on the grade they received in United States History during the 2010-2011 school year. After consulting with the building principal it was determined that US History was the most logical precursor course to AP Psychology given the reading requirements of both classes and the social science similarities of both disciplines. At the school in question, there were three different levels of U.S. History from which a student could choose: Regular, Advanced, or Advanced Placement. Students who received a C

or better in each of their two semesters of AP U.S. History, a B or better in each of their two semesters of Advanced U.S. History, or an A in both semesters of Regular U.S. History were considered traditional AP Psychology students for the purpose of this study. Students who received a D or below in either semester of AP U.S. History, a C or below in either semester of Advanced U.S. History, or a B or below in either semester of Regular U.S. History were considered non-traditional AP Psychology students for the purpose of this study. Of the 123 AP Psychology students, 116 were considered traditional students (94%) and seven were considered non-traditional students (6%). From these two groups, seven students were randomly chosen as potential traditional student participants and all seven non-traditional students were considered as potential non-traditional student participants. The students from each group were called down in random order and the first five from each group who agreed to participate were chosen for inclusion. Two of the seven non-traditional students were not interested in participating, while the first five traditional students all agreed to participate.

Research Questions

This study attempted to answer the following research questions:

1. What reasons do students give for enrolling in AP courses? In what ways do these reasons differ between “traditional” and “non-traditional” students?
2. What are the experiences of “traditional” and “non-traditional” students in AP courses? How are the experiences different between “traditional” and “non-traditional” students?

3. How do students define success in an AP course? In what ways do these definitions differ between “traditional” and “non-traditional” students?
4. What are the academic characteristics (GPA, class rank, ACT scores, and attendance patterns) that distinguish successful AP students from unsuccessful AP students? Do these characteristics differ between “traditional” and “non-traditional” students?
5. For students who fail to achieve a C or better, why do they choose to remain enrolled in an AP course? How do these reasons differ from students who do receive a C or better? In what ways do these reasons differ between “traditional” and “non-traditional” students?
6. What are teachers’ perceptions of the experiences and contributions of “traditional” and “non-traditional” students in AP courses?

Analysis of Data Collected

The researcher used qualitative data to answer five of the six research questions. Interviews with teachers and students were transcribed and coded to provide insight on the feelings and experiences of both groups as they relate to the Advanced Placement Program. In addition, several independent samples *t* tests were conducted to provide evidence used to answer question #4. A detailed analysis for each question follows.

Analysis of Question 1

The first research question was as follows: What reasons do students give for enrolling in AP courses? In what ways do these reasons differ between “traditional” and

“non-traditional” students? The responses from the 10 students who participated in the study provided the following themes:

- 1.1 Both traditional and non-traditional students expressed the desire to be intellectually challenged in a subject matter of interest to them as a major reason for enrolling in an AP course;
- 1.2 All of the traditional students mentioned the possibility of receiving college credit and/or benefitting from tuition savings as a reason for enrolling in AP while just over half of the non-traditional students mentioned this as a reason for enrolling;
- 1.3 A majority of non-traditional students mentioned that taking an AP course would help them prepare for college and/or their future career while fewer than half of the traditional students cited this reason.

Theme 1.1: Both traditional and non-traditional students expressed the desire to be intellectually challenged in a subject matter of interest to them as a major reason for enrolling in an AP course. A strong majority of the students interviewed discussed the desire to be intellectually challenged as a reason for their enrolling in an AP class. One area of distinction between traditional and non-traditional students, however, centered on why they were looking for this challenge. Four of the five non-traditional students had never taken an AP course prior to their senior year, so for them AP was an unknown. Some non-traditional students stated that they had experienced success in their regular level courses and that they were looking for a challenge at the AP level in order to see if

they could handle the rigors of AP. One non-traditional student stated, “I was doing really well in my regular classes and I thought it would be a good challenge to do AP classes...I wanted to see if I could actually jump ahead a further step and achieve higher.” Another stated, “I thought it would be a good challenge to do AP classes.” A different non-traditional student wanted to experience the challenge of a college-level class while still in high school.

I just wanted to try something new, and to just challenge myself, to see how I’m gonna do. Because these are college-level classes. And I will be going to college and to just see where I stand with these courses.

For traditional students, many expressed the sentiment that regular classes were simply too easy and that the rigor of AP was necessary in order to be sufficiently challenged. “I once took a regular class and in comparison to my AP classes it was a joke...a lot of the stuff they taught in the regular course was just repeating the stuff that I already knew.” A different student noted, “My one non-AP class this year is Forensic Science and I’m honestly a little bored in it...I didn’t realize what a drop off it is because AP is what I’ve always been in.” Despite taking five AP classes her senior year (and 10 total throughout high school), this student said, “I like being challenged intellectually and I don’t regret all of the hard work I’ve put into this year taking these difficult classes.” Other comments from traditional students include, “I always push myself very hard,” “I wanted to take a hard class,” and “I couldn’t see myself stepping down from a higher class that I know I could take and do well.” A good metaphor to explain the differences

between the views expressed by traditional AP students versus their non-traditional counterparts is that the non-traditional students appeared to be “dipping their toes” into the AP pool in search of an academic challenge while the traditional AP students would not consider swimming in any pool other than that which provided the biggest challenge. Either way, though, both groups of students ended up in the same water.

Students from both groups also spoke of their desire to be enrolled in a class they find interesting as an impetus for AP enrollment. Three students from both the traditional and non-traditional groups specifically expressed that an interest in the subject matter was a reason for enrolling in an AP course. One non-traditional student said, “I took regular psychology as a junior and really liked it. So then I took AP Psych because I really liked it and wanted to further it...” Other comments from non-traditional students included, “I took Intro to Psych and really liked it,” and, “I took Intro to Psych last year and I liked it a lot.” One traditional student who had taken Introduction to Psychology noted: “Psychology has always interested me.” While the students in this study were selected from strictly AP Psychology classes, the theme of wanting to continue in a particular discipline because of an interest in that subject matter was well documented. One non-traditional student spoke of his love for Biology and his probable pursuit of a career in the discipline as the reason for his enrollment in AP Biology. A traditional student enrolled in AP Chemistry because his passion for the discipline manifested itself in his seeking a degree in Biochemistry. Whether traditional or non-traditional, the interest a

student had for a discipline certainly made it more likely that the student would pursue further study of that topic in an Advanced Placement class.

Theme 1.2: All of the traditional students mentioned the possibility of receiving college credit and/or benefitting from tuition savings as a reason for enrolling in AP while just over half of the non-traditional students mentioned this as a reason for enrolling. It appears that the possibility of receiving college credit (and thus saving money for tuition) played a large role in the decision to enroll in AP courses. However, this benefit seemed to appeal to traditional students to a larger degree than non-traditional students. All five of the traditional students cited this as justification for their decision to take AP classes in high school while three out of five non-traditional students mentioned this as a driving force behind their decision. Comments from traditional students included, "...the possibility of receiving college credit was definitely a reason for taking the class," "I want to do well on the exams to maybe get out of a class in college," "Part of it is definitely the college credit...you can save a lot of money doing that," "Taking the AP test and doing well on it will help you in college because it will get you out of classes," and "It will get you out of Gen Ed classes and that will save you money..." A non-traditional student noted that taking AP exempts her from taking that same class again in college. "It's one class you don't have to take again." Another non-traditional student said, "(Taking AP) saves money, it saves time; college is very expensive." Summarizing the thoughts of many students (traditional and non-traditional alike), one

student noted that taking AP "...would probably end up costing me less in college if I took an AP class in high school."

Theme 1.3: A majority of non-traditional students mentioned that taking an AP course would help them prepare for college and/or their future career while fewer than half of the traditional students cited this as a reason. For the non-traditional students, it appeared that AP offered a chance to show vindication of their college-preparatory plans, and that to partake in the AP experience in high school was one of the best ways to prepare for the rigors of college. One student talked about her desire to become a physician and mentioned how taking AP classes could prepare her toward that end. She said, "So I know where I wanna go and I'm trying to take steps to be what I want to be." A different non-traditional student said that she took AP Psychology because she realized "I would probably end up needing it for pre-schoolers and young children and my work with them." A third non-traditional student said, "I will be going into college and to just see where I stand with these courses. Because it's almost the same difficulty." A traditional student discussed how her past and present AP experience would help prepare her for college: "...the way I've learned to study and the types of tests we've taken, the lectures and the class structure" have all given her a good idea of what to expect once she matriculates to college. Other traditional students discuss how enrolling in AP courses will better prepare them for college and/or their post-secondary careers. "...for what I wanted to do in college maybe it would be beneficial..." and "I'm planning on majoring in it, so I figured I would (take AP courses) to better prepare myself for college." While

both groups of students commented on how their AP experience would pay dividends after high school, it appeared that such a benefit was more of a consideration to the non-traditional students who were interviewed as opposed to the traditional students.

Analysis of Question 2

The second research question was as follows: What are the experiences of “traditional” and “non-traditional” students in AP courses? How are the experiences different between “traditional” and “non-traditional” students? The following themes emerged from the analysis of the interviews with students:

- 2.1 AP classes offer a challenging, broad curriculum that moves at a much quicker pace than regular classes. As a result, AP teachers use lecture as their preferred method of instruction;
- 2.2 Both traditional and non-traditional students felt that their AP peers showed more motivation to earn high grades and were on-task a larger percentage of time than their non-AP peers;
- 2.3 AP teachers treated their students “more like adults” and were more tolerant of minor classroom distractions than teachers of regular classes.

Theme 2.1: AP classes offer a challenging, broad curriculum that moves at a much quicker pace than regular classes. As a result, AP teachers use lecture as their preferred method of instruction. When asked if they felt challenged by their AP class(es), all ten students responded in the affirmative, with most answers occurring without hesitation. In this regard there was little distinction between traditional and non-

traditional students. Traditional students responded to this question by saying things such as, “Definitely,” “Definitely this year, for sure,” and “I have been very, very challenged.” Non-traditional students said things like, “Oh yeah, I’ve been challenged,” “It’s definitely harder,” and “I’ve definitely been challenged.” When asked to talk about the types of things that distinguished an AP class from a regular class, many students talked about the pace at which the class moved and the degree to which they delved into topics. A non-traditional student said:

It’s fun. You get to learn a lot more than what I did in regular classes... now we go into details...AP definitely moves a lot faster than regular classes...in regular classes some of the words are just generalized, and in AP you go into specifics.

Several students talked about how AP classes required students to be self-directed and to spend time preparing outside of class, and that course grades were heavily dependent upon test/quiz grades. One non-traditional student said, “I’m used to having homework grades, project grades, whereas this AP class is solely based on your test. It’s weighted a lot higher than in a regular class so that was a lot to get adjusted to.” Students from both groups cited the necessity of taking good notes and reading the course textbook as an essential component if one was to be successful. Comments included “...it’s not too heavy on homework, it’s all just reading” “I realized that a lot of the demands were independent reading,” and “You have to get all of the material and read all of the stuff.” A specific term used by five of the ten students to describe the work assigned in regular

classes was “busy work,” a derogative phrase meant to imply assignments that were devoid of any real meaning and whose sole purpose was to occupy students’ time. When pressed to define “busy work,” one traditional student described it as being asked to read from the book and fill out a worksheet. When asked if completing the worksheet helped her, her reply was, “It helps me get points.” When asked about the learning that took place from the worksheet, the student said “it really doesn’t help me.” Another traditional student noted, “The work we do in AP classes is definitely much more difficult.

However, I’ve found that non-AP classes give a lot more work, a lot more busy work, and the work is not as important to...learning.” A non-traditional student said, “...in regular classes we had more tedious work. It’s like doing packets and worksheets from the book.” Students also described assignments in AP classes as requiring analysis and application of material, while regular classes often simply required memorization and regurgitation on an exam. As an example of the higher-order thinking skills required in an AP class, one traditional student spoke of the tests she takes in her AP classes:

A lot of times (the teachers) let you use your notes on the test, and that tells you a lot about the test. Because you’re not going to find the answers in your notes. You can use your notes to jog your memory about what you’re supposed to have memorized, but ultimately that’s not what (the test) comes down to.

As a result of the fast pace at which the course moves, virtually all of the students mentioned how the most common method of instruction in their AP class(es) was teacher

lecture. Some students mentioned that they preferred this type of pedagogy, while others talked about their desire to have other types of activities in the classroom. One non-traditional student spoke about her preference for teacher lecture over other, more interactive strategies that teachers might employ. She did also state, however, that lectures get a little repetitive sometimes. "...lecture, lecture, lecture, lecture gets a little boring. But I'd rather have that than almost anything else." Another non-traditional student noted, "It's all based on lectures and notes in AP...I prefer discussion, because you can actually learn what people think...you can relate to them." A third non-traditional student said, "...regular classes were more interactive whereas AP classes were more like talk to you, more lecture." A traditional student noted that, "I have a lot of just teacher lectures, and that's about it...It gets a little boring but it is the most effective way to learn, I think." Another said, "In AP classes it's just lectures the whole way through..." Another traditional student said, "...most of the AP classes involved a lot of in-class discussion and more lecture style...whereas the (regular) classes often involve a lot of in-class activities, worksheets, ...or something that was done in class." Students generally felt that lecture was the best way to successfully cover the material that needed to be covered within the timeframes allowed, and while it may not have been their first choice as a method of instruction none of the students said that they could not learn because of the heavy use of teacher lecture. As noted above, the biggest complaint with the quantity of teacher lecture was that it caused monotony and occasional boredom.

There was not a discernible distinction between traditional and non-traditional students in their feelings toward lecture.

Theme 2.2: Both traditional and non-traditional students felt that their AP peers were more motivated to earn high grades and were on-task a larger percentage of time than their non-AP peers. There was strong consensus from the students when asked to describe their peers in AP classes versus those in their regular classes. Four of the five traditional students and three of the five non-traditional students talked about the strong motivation that AP students had to do well in school and how that desire resulted in considerable on-task behavior in their AP classes. Students also spoke about how AP students were better behaved and more respectful towards their teachers and peers. Comments used to describe their fellow AP students included, “more reliable to do their work and care about their grades...much more respectful,” “It’s just really nice to have students around who care about their grades as much as you do, and I think that helps the AP students in general do better, if everyone around them cares about their grades as much as you do.” “They’re really similar to me...we can relate to one another.” A non-traditional student taking her first AP class commented that “...(AP students) are very regimented...going from my English class, where people act up or it’s not taken so seriously, where I walk into my AP class and everybody is really quiet and ready to listen and take notes.” A different student also taking her first AP class said, “...the people who are in it are really fun, and they are very smart, so that makes me feel a little bit smarter.” A male non-traditional student said ... “it’s easier to get along with them

because we're at the same level and we have the same goals." It was interesting to note that more than one student talked about the feeling of camaraderie that existed between AP students, a quality that not one student identified as existing in non-AP classes. Two of the non-traditional students spoke of feeling somewhat like an outsider in their AP class, although not to the extent that they felt unwelcome or that they felt it negatively affected their performance in the class. "I feel like I'm one of the only students in there who hasn't been in an AP class...I mean it's not that big a deal but I notice it." The other student said:

There's definitely a clique of kids...you can see that most of them have had AP classes with one another throughout the years, so they have like inside jokes with one another. So that makes me feel a little bit on the outside but it's still fun to listen to...

When asked if she still felt comfortable in the class despite the presence of these inside jokes she replied, "Oh yes, definitely."

For all of the positive attributes that were mentioned about AP students, there was a dearth of those comments when it came to discussing students in non-AP classes. The most prevalent disposition to describe a non-AP student was apathetic, with a variety of comments alluding to this quality. Among them: "...they just don't care much about their grades, and if they're getting Cs they're like, whatever," "they don't take notes, they sleep, don't pay attention, talk," "they don't have a very good attitude, they're typically disruptive, disrespectful to the teacher," and "they didn't really care...they weren't really

as motivated as AP students.” While these comments came from both traditional and non-traditional students, there did appear to be a slight distinction in the willingness of the traditional student interviewees to generalize these feelings to all non-AP students. Their comments tended to indicate a belief that all students in non-AP classes were uncaring and disruptive, while the non-traditional students were more likely to note that while those characteristics certainly existed in non-AP students, they were not the only qualities students possessed. Non-traditional students were careful to note that there were students who wanted to succeed in non-AP classes. “In the regular classes there are actually kids who do care, and they ask a lot more questions than in AP.” Another added, “There are usually some students who don’t pay attention. It’s usually the same few.”

Theme 2.3: AP teachers treated their students “more like adults” and were more tolerant of minor classroom distractions than teachers of regular classes. When describing their experiences in AP classes, several students identified what can best be described as a different atmosphere within the room, one that was created as a result of the unique dynamic between the teacher and their AP students. While noting that their AP classes were “business-like” and “professional,” students often cited a friendlier relationship between the teacher and students, one that did not exist in non-AP classes. Five of the ten students noted how the teacher treated the students more like adults, and gave them more latitude and freedoms than students in non-AP classes. One student said: “I do have expectations from my AP teachers that I will be trusted, and they do give us a lot of leniency.” This same student said that when she’s in a regular class her teachers

treat her better because she's a well-behaved, high-achieving student. "Sometimes they're impressed by my good behavior, but they'll have different expectations for their students, and those expectations influence how they treat even better students." A traditional student stated, "(AP) teachers are more flexible with their students, just because they expect us to behave like adults. They're more flexible on due dates and how you prepare for tests. No mandatory study guides." One non-traditional student who had the same teacher for Introduction to Psychology the previous year stated that her teacher is "much more laid back" with the AP students. Another noted, "The AP teachers are more comfortable with letting the kids talk out of hand a little bit...they treat the students more like adults." "The teachers understand that we are highly intelligent students and they treat us as such. Especially this year I feel like I am being treated less like a child and more like an adult." When pressed to explain how a teacher "treats him like an adult," this student said that when a case of plagiarism was discovered the teacher was very open in discussing the issue with the class and asked for cooperation from the students rather than threatening them. This student was very appreciative of the manner in which this was handled and did not see that happening in a non-AP class.

When asked if they felt that their AP teachers were of higher quality than their non-AP teachers, students were very consistent in noting that the quality of the teacher had nothing to do with whether or not the teacher was an AP teacher, and that they had had high quality teachers in both their AP and non-AP classes. One student said, "No- they all care. All of the teachers care about what they do." Another noted, "I've liked a

lot of the teachers I've had in normal classes compared to AP because even if they're an AP teacher it doesn't mean that much more." What was apparent, though, was that the quality of the teacher played a large role in whether or not a student enjoyed a class. Time and again, students mentioned how they really enjoyed a class because of a high-quality teacher, and likewise, how they disliked a class because of a poor teacher. When asked, "Is it possible to be satisfied in a class with a teacher you don't care for?" one student responded, "It's difficult." But she also noted that a high quality teacher can make a difficult subject tolerable. "I don't know of anyone who enjoys Calculus, but I have a really great teacher and it makes the class much more bearable."

Analysis of Question 3

The third research question was as follows: How do students define success in an AP course? In what ways do these definitions differ between "traditional" and "non-traditional" students? The following themes emerged from the analysis of the interviews with students:

- 3.1 Non-traditional students were more likely to define success as whether or not they learned something new, while traditional students were more likely to place emphasis on the grade they received in the AP class and/or the grade they received on the AP exam;
- 3.2 Students in both groups felt that their work ethic influenced their level of success, while traditional students also cited innate intelligence as a contributing factor;

3.3 Traditional students were more likely to cite parental support as an explanation of their academic success.

Theme 3.1: Non-traditional students were more likely to define success as whether or not they learned something new, while traditional students were more likely to place emphasis on the grade they received in the AP class and/or the grade they received on the AP exam. The most prominent definition of success cited by students in both groups was related to whether or not they felt they had learned something from the course. Four of the five non-traditional students said that this was an important component of a successful experience, and three of the five traditional students agreed with this as well. All five non-traditional students commented that their grade in the course was of secondary importance to other factors, including what they learned and whether or not they felt they had reached their potential in the course. When asked what would make her experience in AP Psychology successful or not, one non-traditional student said, "If I can come home and say I learned this in psych then I would be more happy to say I remembered the things I learned than if I got a good grade." Other comments from non-traditional students include, "Being successful means...learning the material because if you're just memorizing it and spitting it out for a test it's not helping you..." and "(Success is) if you can walk away learning a handful of new things." One student was especially proud of the fact that she was able to persist in the course until its conclusion, despite the fact that several of her friends had dropped the class shortly after

the semester began. To her, the feeling of success in completing her first AP course superseded the grade she received in the class.

Even if I don't get the grade I want I still will have learned a lot from AP Psychology. And I think that will be really helpful to me. I can take it in college and really (original emphasis) know what I am talking about.

By way of comparison, the traditional students took a more pragmatic approach to the AP experience. They noted how their performance on the AP exam could lead to tuition savings and/or advanced placement in college, and how a high grade in the AP course itself would boost their grade point average, thus improving their chances at being admitted to the college of their choice. One student was very frank about her reasons for taking AP, noting the benefits of a high AP exam grade and a high GPA in high school. "The score on the AP exam, the grade I receive in the class to help my GPA, which is good for college applications and such."

When asked if what she learned and would be able to apply in college was important, she said:

What I have taken from the class is not important because as far as the most bare bones, factual information, honestly, I don't remember anything I have learned in any of those classes, and I don't feel like a worse person for it.

Another student discussed the difference between performing well on the AP exam versus getting a high grade in the AP class. "I do (original emphasis) want to do

well on the AP exam but I'd rather my GPA be higher. I just care more about my grades than just doing well on the AP exam." However, there were traditional students who in addition to performing well in the class also spoke of the desire to learn material that they could use in their post-secondary life. "If you leave the class and actually know what it was about, rather than just the A by itself." Also, "a successful experience is if you feel like you, yourself have gained something from the experience."

Theme 3.2: Students in both groups felt that their work ethic influenced their level of success, while traditional students also cited innate intelligence as a contributing factor. Virtually all students agreed that their level of success in the class was a result of the effort they exerted. Comments from the traditional students include, "I think my grade reflects the work I put in to what I do," "I put in a lot of hard work into my studies...I always have, it's really helped," "If I'm borderline to an A, I won't settle for the B, I'll have to get the A or else I'll be mad," "I'm competitive when it comes to academics, so I drive myself to get the A," and "The amount of effort I've put in is usually what holds me back or allows me to excel." The non-traditional students also cited the importance of hard work when describing their success in school. "In classes I like I tend to push myself more," "I would say I'm hard-working and very determined," "When I put my mind to something I can get it done," and "Yeah, I try hard." Regardless of whether a student was traditional or non-traditional they recognized the importance of intrinsic motivation and how the resulting effort they put forth determined whether or not they were successful. Interestingly, two of the non-traditional students specifically spoke

of being lazy when asked what type of student they considered themselves to be, although both also recognized that they could be more successful in school if they put forth the effort of which they knew they were capable. Both students also spoke of how they worked hard specifically in those classes that they were interested in, a theme that resurfaced with other students.

What distinguished the traditional students from the non-traditional students was the degree to which they attributed success to being innately intelligent. In addition to the previously-mentioned work ethic, four of the five traditional students also credited their success to being naturally intelligent, a characteristic that was mentioned in passing by only one non-traditional student. Students said, “I don’t think I could have excelled at these classes without being smart...,” “I still get As, but I attribute that more to effort than ability. But ability certainly has a great deal to do with it,” and “I’ve always felt that I’m a fairly naturally intelligent person.” What distinguished the two groups of students was that traditional students were clear that they attributed their success to a combination of hard work and natural intelligence while the non-traditional students spoke almost exclusively of their work ethic.

Theme 3.3: Traditional students were more likely to cite parental push as an explanation of their academic success. When asked about the extent to which their parents pushed them to succeed, the traditional students were much more likely to mention parental influence as a factor that has contributed to their success in school. One traditional student said, “Yes, they expect a lot out of me. That’s a main reason I’ve

always been in honors and AP classes...they're always trying to motivate me to do my work." Other comments include, "My parents placed a lot of emphasis on doing well in school," and "My parents have had a fairly large influence on me. My dad's always sort of pushed me for my best effort."

This type of parental emphasis is distinguished from other students who mentioned that even if their families did not push them into AP courses, they were supportive of the decision. One traditional student discussed that her parents have always been supportive of her decisions to enroll in academically challenging courses and that they have known when she needs some individual time if she is feeling particularly stressed out as a result of the workload. "...they've always been good about giving me my space...they're awesome in supporting me." Several non-traditional students also mentioned that while their parents did not force them into AP courses, they were supportive of their decision to take the class. One student noted that while her father had always held high expectations for her academic performance, he was able to temper that for her first AP experience.

We all had a talk about this AP class, because it was my first one...they both kind of laid off with their expectations because they didn't know how it was going to turn out, none of us did, so thankfully they kind of took it as it came and did what they could to help me.

Another student noted that her parents told her it was her decision and to do it if she wanted, and two non-traditional students said their parents didn't even know they had

signed up for the course at all. Only one of the non-traditional students mentioned that his parents placed a strong emphasis on performing at a high level in school. “Ever since I was young my parents said, ‘School is the most important thing aside from family.’” It appears that a strong majority of the students came from households where education was valued, and while most students spoke of their families as being supportive of their academic pursuits, the traditional students reported having higher expectations placed upon them from home.

Analysis of Question 4

The fourth research question was as follows: What are the academic characteristics (GPA, class rank, ACT scores, and attendance patterns) that distinguish successful AP students from unsuccessful AP students? Do these characteristics differ between “traditional” and “non-traditional” students? The following themes emerged from an analysis of the quantitative data:

- 4.1 The students who experienced success in AP Psychology had a cumulative GPA that was more than one point higher than students who were unsuccessful. Correspondingly, they also had a much higher class rank than the unsuccessful AP students;
- 4.2 The students who experienced success in AP Psychology had an ACT Composite Score that was more than 4 points higher than the unsuccessful AP students;

- 4.3 The students who experienced success in AP Psychology were absent from school nearly seven days less than the unsuccessful AP students;
- 4.4 As a percentage of their representative enrollment, traditional AP Psychology students were successful at a much higher rate than were non-traditional AP Psychology students.

In order to identify distinctions between successful and unsuccessful AP students, it is first necessary to define what it means to be “successful.” At the school in which the study took place there are three different levels of courses offered: Regular, Advanced, and Honors/Advanced Placement. Regular is considered the lowest level, Advanced is the level in which most students are enrolled, and Honors is available for students seeking the highest level of academic rigor. If an Advanced Placement course is offered, it is done in lieu of a course designated Honors. If there is no Advanced Placement course offered, then Honors becomes the highest level of course offered. The school uses a 4-point scale in order to determine grade points. Furthermore, the school awards a bonus point for students who earn a grade of C or higher while being enrolled in any course designated Honors or Advanced Placement. Thus, the grading scale is as follows:

Table 3

Letter Grades and Grade-Point Equivalents

Letter Grade	Grade Point Equivalent (Regular & Advanced)	Grade Point Equivalent (Honors & Advanced Placement)
A	4.0	5.0
B	3.0	4.0
C	2.0	3.0
D	1.0	1.0
F	0.0	0.0

For the purpose of this study, a student is considered successful if they received a C or higher in their Advanced Placement course. When making this determination, it was determined that a student who received an A or a B in an Advanced Placement course would be viewed favorably when it comes to the college admission process. For some students, especially those new to AP or those meeting the definition of a non-traditional student, a grade of a C could be considered a successful experience. It is important to note, however, that while earning a C in an Advanced Placement course would not necessarily diminish a student's chance for admission to the school of their choice, it is of general belief that a student who possesses a C average would not be considered for admission to the nation's more prestigious academic institutions.

When determining whether a student is a traditional or non-traditional AP Psychology student, the researcher first had to establish which course would be the most logical precursor to a senior level course in Psychology. After consulting with the

building principal it was determined that US History was the most logical precursor course to AP Psychology given the reading requirements of both classes and the social science similarities of both disciplines. All students enrolled in AP Psychology were classified as either traditional or non-traditional students based on the grade they received in United States History during the previous school year. As juniors, these students could choose from three different levels of U.S. History: Regular, Advanced, or Advanced Placement. Students who received a C or better in each of their two semesters in AP U.S. History, a B or better in each of their two semesters in Advanced U.S. History, or an A in each of their two semesters in Regular U.S. History were considered traditional AP Psychology students for the purpose of this study. Students who received a D or below in either semester of AP U.S. History, a C or below in either semester of Advanced U.S. History, or a B or below in either semester of Regular U.S. History were considered non-traditional AP Psychology students for the purpose of this study. For this research question, data was collected for students enrolled in AP Psychology from the 2009/2010, 2010/2011, and 2011/2012 school years. In total, there were 264 AP Psychology students for the three school years, 233 of whom met the criteria for classification as traditional students (88%) and 31 who were identified as non-traditional students (12%). Table 4 shows the difference in the means between these two groups of students as measured by their seven-semester cumulative GPA, class rank, composite ACT score, and the number of days absent during the school year.

Table 4

Academic Characteristics of Traditional and Non-traditional AP Psychology Students, 2009-2012 (N=264)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Traditional	233	4.73	134.31	27.70	6.64
Non-traditional	31	3.61	396.06	23.71	10.53

Table 5 shows how this cohort of 264 students compares when looking at the students who were successful in AP Psychology (received a C or better during semester 1) versus those who were unsuccessful (received a D or an F during semester 1).

Table 5

Academic Characteristics of Successful and Unsuccessful AP Psychology Students, 2009-2012 (N=264)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Successful	243	4.70	141.23	27.57	6.53
Unsuccessful	21	3.41	440.67	23.24	13.39

Theme 4.1: The students who experienced success in AP Psychology had a cumulative GPA that was more than one point higher than students who were unsuccessful. Accordingly, they also had a much higher class rank than the unsuccessful

AP Psychology students. When analyzing the students who were successful (received a C or better during semester 1) in AP Psychology versus those who were not successful (received a D or an F) the researcher looked at the entire cohort of 264 students. Successful students had a cumulative GPA of 4.70 on a 4.0 scale and unsuccessful students had a cumulative GPA of 3.41 on a 4.0 scale. The cumulative GPA is based on seven semesters of academic coursework that were completed beginning in their freshman year of high school and continuing through the first semester of their senior year. Using a significance criterion of .05, an independent-samples t test was conducted to determine if the difference in cumulative GPA was statistically significant. The test was significant, $t(262) = 10.34, p = .00$, showing that the successful AP Psychology students ($M = 4.70, SD = .54$) have performed significantly better in their classes than their unsuccessful counterparts ($M = 3.41, SD = .58$). Since class rank is derived from a student's GPA, it is logical that the students with higher GPAs will also have a higher class rank than their peers with lower GPAs. In this cohort, the successful students had a higher class rank ($M = 141.23, SD = 118.97$) than the unsuccessful students ($M = 440.67, SD = 182.21$). There is one cautionary note when interpreting the data for class rank, however. Given that class rank is an ordinal variable, it is not accurate to compare students ranked identically (e.g., 10th in their class) over different school years. The purpose in showing the mean, however, is to convey the general understanding that successful students are ranked more highly within their classes than their unsuccessful peers.

Theme 4.2: The students who experienced success in AP Psychology had an ACT Composite Score that was more than 4 points higher than the unsuccessful AP students.

The successful AP Psychology students had an average ACT Composite score of 27.57 out of the possible 36 points one could score on the ACT exam. This figure is to be compared to the average ACT Composite score of 23.24 for those students who were unsuccessful in AP Psychology. An independent-samples t test was conducted to determine if the difference in student ACT Composite scores was statistically significant. The test was significant, $t(262) = 5.52, p = .00$, showing that successful students ($M = 27.57, SD = 3.45$) have scored significantly higher on the ACT exam than their unsuccessful counterparts ($M = 23.24, SD = 3.46$). According to the ACT Corporation (ACT, 2009), the average student shows an approximate 4-6 point improvement in their score on the ACT College Readiness System from grades 8-12. Thus, the difference in ACT scores between the successful and unsuccessful AP Psychology students is not only statistically significant but it also represents a notable distinction in the abilities of the students with whom the teachers are working.

Theme 4.3: The students who experienced success in AP Psychology were absent from school nearly seven days less than the unsuccessful AP students.

It would appear logical that the amount of time a student is present in class would have a strong correlation with the degree of success they experience academically. Consistent with that, the researcher wanted to compare the degree of absenteeism between students who were successful in AP Psychology with that of students who were unsuccessful in AP

Psychology. Successful AP Psychology students were absent from school an average of 6.53 days while unsuccessful students were absent an average of 13.39 days. An independent-samples t test was conducted to determine if the difference in the number of days that students were absent from school was statistically significant. The test was significant, $t(244) = -4.94, p = .00$, showing that successful students ($M = 6.53, SD = 5.60$) missed significantly fewer days of school than their unsuccessful counterparts ($M = 13.39, SD = 10.03$). This result would support the notion that being present in class is an important component of a successful experience.

Theme 4.4: As a percentage of their representative enrollment, traditional AP Psychology students were successful at a much higher rate than were non-traditional AP Psychology students. In addition to looking at the academic characteristics of successful versus unsuccessful students, the researcher also wished to study whether or not there were any differences in the above-cited results when comparisons of traditional and non-traditional students were made. Table 6 shows the academic characteristics for the 233 students who were classified as traditional AP Psychology students going into their respective school year.

Table 6

Academic Characteristics of Traditional AP Psychology Students (N=233)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Successful	224	4.76	124.30	27.85	6.47
Unsuccessful	9	3.76	383.44	23.89	10.49

From Table 6, one can see that 96.1% (224/233) of the traditional students who enrolled in AP Psychology received an A, B or C in the course and were thus considered successful under the definition used in this study. That number can be compared to the 61.3% (19/31) of non-traditional students who were successful in AP Psychology, as calculated from the data in Table 7 below. Also, referring to the data from the overall cohort of 264 students in Table 5, one can see that the overall success rate of all students enrolled in AP Psychology over this time period was 92.0% (243/264). A series of independent samples *t* tests showed that the means between the successful and unsuccessful traditional students (see Table 6 above) was statistically significant for the following variables: GPA, $t(231) = 6.04, p = .00$; ACT Composite Score, $t(231) = 3.43, p = .00$; and days absent, $t(214) = -2.06, p = .04$. It is important to note, however, that the sample size of one of the two groups was only nine students. A sample size of this magnitude lends itself to the higher probability of a Type II error, and larger sample sizes would increase the statistical power of the study. Additional years of data would be recommended in order to validate any hypotheses from this study.

Table 7

Academic Characteristics of Non-traditional AP Psychology Students (N=31)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Successful	19	3.90	340.79	24.32	7.17
Unsuccessful	12	3.16	483.58	22.75	15.56

Using the data in Table 7, a series of independent-samples *t* tests was conducted to determine if the differences in the means of the variables for the successful and unsuccessful non-traditional students was statistically significant. The test for all variables except ACT Score was statistically significant: (GPA, $t(29) = 4.03, p = .00$; ACT Composite Score, $t(29) = 1.49, p = .15$; and days absent, $t(28) = -2.78, p = .01$), indicating that with the exception of the ACT Score the differences between the non-traditional students who were successful and those who were not successful were not due to chance. Once again, however, the size of both groups was less than 20 students, which increases the likelihood of committing a Type II error. Additional years of data would be recommended in order to validate any hypotheses.

One other interesting item of note is that the academic characteristics of a traditional student who was not successful appear to be very similar to those of a non-traditional student who was successful. Table 8 shows these two sets of data side-by-side.

Table 8

Comparison of Traditional, Unsuccessful Students with Non-traditional, Successful Students

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
T/US	9	3.76	383.44	23.89	10.49
NT/S	19	3.90	340.79	24.32	7.17

The one variable in which there appears to be a noticeable difference between these two groups of students is in the number of days missed. It appears that despite having very similar patterns of academic success prior to their enrollment in this course, the students who achieved success in AP Psychology were in school more frequently than those students who were not in school. To test whether or not any of these variables were statistically significant, a series of independent samples *t*-tests was conducted. Neither of the academic barometers were statistically significant (GPA: $t(26) = -.78, p = .44$; ACT Score: $t(26) = -.39, p = .70$), and when the *t*-test was conducted on the days of absenteeism it, too, was not significant ($t(25) = 1.07, p = .30$). Once again, however, the sample size of both groups was very small (9 traditional and 19 non-traditional students), a sample size that increases the likelihood of committing a Type II error. Additional years of data would be required to validate these findings.

Analysis of Question 5

The fifth research question was as follows: For students who fail to achieve a C or better, why do they choose to remain enrolled in an AP course? How do these reasons differ from students who do receive a C or better? In what ways do these reasons differ between “traditional” and “non-traditional” students? The following themes emerged from the analysis of the interviews with students:

- 5.1 Students in both groups persisted due to an attitude that “quitting is not an option,” while traditional students specifically mentioned the desire to enroll in the most rigorous courses available. For them, there was no alternative to taking AP courses.
- 5.2 Students persisted because of the potential benefits they could receive by passing the AP exam;
- 5.3 Students who dropped AP courses did so out of a concern for the impact a low course grade would have on their GPA.

Theme 5.1: Students in both groups persisted due to an attitude that “quitting is not an option,” while traditional students specifically mentioned the desire to enroll in the most rigorous courses available. For them, there was no alternative to taking AP courses.

Four of the ten students identified their perseverance in the course as attributable to a belief system that once something is started it needs to be finished. The theme of intrinsic motivation as being a motivating factor for enrollment in an AP course was also

the same feeling identified by these students as a reason for not dropping the course once enrolled. This internal drive was universally cited by students with grades of C or below, assumedly because for students with an A or a B the question of dropping the course was never considered (not one student who received an A or a B cited this as a reason for their persistence in the course). One student, a self-described “hard core” athlete with a strong competitive nature, described how she was enrolled in an AP course and struggled with the pedagogical style of the teacher. Despite being in a class in which she felt the teacher could not help her, the student wanted to finish the class because of her internal drive. She said, “I did want to see what I could do on my own. I wanted to see if I could pick up the book and teach myself.” Another student, who assessed himself as being somewhat lazy and struggling as a result, stated, “...I am glad I stayed with the class. I didn’t want to let it beat me.” A first-time AP student, when asked if she ever considered dropping the course, replied, “Nope. It never even appeared to me, because my dad taught me that once you start something you need to finish it...And I won’t feel satisfied until I do, and I know I’d feel the exact same way about AP Psych.” Another student who was taking AP classes for the first time as a senior noted that, “Giving up isn’t really an option if you’re going to college, because you’re not going to be sitting there in one of your classes and say, ‘I can’t do this’ and drop.” It appears that despite not being successful as far as their letter grade was concerned, all of these students had an internal drive which led to their perseverance in the course.

However, there was a theme that distinguished the traditional students from the non-traditional students regarding persistence in AP courses. While the traditional students in this study all received grades of an A or a B in their AP Psychology class, their comments led the researcher to infer that for them it was the challenge of enrolling in the most rigorous course of study possible that led them to persevere in AP. In other words, regardless of the grade they received it seems likely that for these high-achieving students they would still enroll in- and persevere in- AP courses. One student commented, “Most of the pressure to do well in school has been internal. I always push myself very hard.” She went on to describe how her desire to make herself as appealing a candidate as possible to colleges led her to enroll in AP courses throughout high school. The benefit of having AP courses receive a weighted point for GPA is also a factor she cited for continuing in AP courses. She then stated that when she received a B the first semester she was driven to work even harder second semester to improve that grade. Another student described how she had signed up for an AP class her senior year only to drop it before the year began. Not even a week into the school year, however, she made the decision to move back up into the AP level, stating, “I knew I could be getting things out of my AP class that I could learn for the future, for college and everything. (Taking AP) says a lot about you as a person. Like what expectation you have for yourself.” Not one non-traditional student mentioned this as a reason for persisting in an AP course.

Theme 5.2: Students persisted because of the potential benefits they could receive by passing the AP exam. Students with grades of C or lower were quick to cite the

potential credit they could receive by virtue of passing the AP exam whereas few students with an A or a B directly mentioned this as a reason for staying in the course until its conclusion. These feelings run somewhat contrary to the views expressed by non-traditional students regarding their reasons for enrolling in AP courses, and one possible explanation is that these students viewed receiving credit via the AP exam as a chance to show they were appropriately placed in an AP class. Interestingly, these same students would appear to have the smallest chance of receiving credit on the AP exam, assuming their course grade is an accurate predictor of their future performance on the AP exam. Regarding the exam, students with Cs or below noted, “I really, really wanna take the exam,” “This isn’t a class anymore, it’s a thing I have to beat,” and “I have to get a three, four, or five on that test.” Another student discussed how her current teacher was not her favorite in terms of the way the class was taught, yet this student persevered in the teacher’s class because of the success the teacher had had with previous students and their AP exam scores. “I got convinced to stay in it because (my teacher) has a really good success rate with people who take the AP test and get 3s, 4s, or 5s.” For the A and B students, there was a more holistic benefit to AP that did not center on the tangible outcome of a grade on an AP exam. Citing their motivation, one A/B student who took AP said, “I knew I could be getting things out of my AP class that I could learn for the future, for colleges and everything.” Another A/B student, when asked if he ever considered dropping an AP class, said, “No, not really, because I always felt like it would be worth it in the end.” Again, these comments from traditional students appear to run

contrary to the statements they made regarding their reasons for course enrollment, as they were the group who most mentioned the importance of grades and AP exam performance as driving forces behind their decision to enroll. It appears that once they had secured a solid grade in the class, the issue of persistence was a moot point.

Theme 5.3: Students who dropped AP courses did so out of a concern for the impact a low course grade would have on their GPA. On more than one occasion non-traditional students talked about the importance of having a high GPA for the purpose of college admissions, and how any course grade that would negatively impact their GPA would cause them to reconsider enrollment in that course. Students who had dropped AP courses in the past said comments such as, “I knew the grade was going to ruin my GPA if I stayed in there,” and “I had to drop down and go for the regular class because I didn’t want to hurt my GPA because of this class.” One other non-traditional student, when posed with a statement that parents, students, and teachers sometimes lose sight of the fact that there are other things that make a class worthwhile aside from the grade said, “Grades do help, though. I’m not gonna lie.”

When one student who had struggled in her AP class was asked why she waited until second semester to drop the class, the student had cited the school’s policy on drops as a reason for her continued persistence. The school at which this study took place allowed students to drop a course through the first six weeks of the semester, after which point the student would be forced to remain enrolled in the class through the end of the semester. Local school boards have the authority to establish policies regarding dropping

courses, and it is evident that the degree to which schools allow freedom to students to change their schedules will impact the persistence that students display in their courses. Students at this school tended to express satisfaction with the length of time they were given to make the decision on whether or not to stay enrolled in a course, believing that the six-week window provided a safety net for students to try out AP and see if it was to their liking. Schools with shorter periods of time for students to drop classes (or schools that prohibit drops altogether) may discourage some non-traditional students from trying AP courses for fear of being “stuck” if they find it too difficult.

Analysis of Question 6

The sixth research question was as follows: What are teachers’ perceptions of the experiences and contributions of “traditional” and “non-traditional” students in AP courses? The responses from the five teachers who participated in the study provided the following themes:

- 6.1 While every teacher cited general support for the Equity Policy Statement, they struggled with balancing the rigor of the AP curriculum with the broader variety of students enrolled in their classes.
- 6.2 Teachers have changed the teaching methods they employ in the classroom as a result of the increased number of non-traditional students enrolled in their courses.
- 6.3 There is a social-emotional benefit to students from participating in an AP class.

Theme 6.1: While every teacher cited general support for the Equity Policy Statement, they struggled with balancing the rigor of the AP curriculum with the broader variety of students enrolled in their classes. To begin the interviews, each teacher was asked about their familiarity with the Equity Policy Statement. To ensure their complete understanding of the policy each was given a copy of the policy to read. When asked of their general feelings toward the open enrollment philosophy that is espoused in the Equity Policy Statement all five of the teachers expressed their support for allowing students the freedom to decide if they wanted to enroll in AP classes. Their comments included, “it’s good in the sense that we’re not trying to target students,” “If a student is willing to work at it then we’re willing to work with them,” “I like it. I think it really helps them learn skills for college,” and “We don’t have class pre-requisites or you must have this GPA, so I like it.” The teachers spoke about the benefits that they felt students accrued through the AP experience, and that these benefits are the underlying reason for their support of open enrollment policies. The teachers’ most commonly cited benefit of AP participation is that students will be better prepared for the challenges of college as a result of having faced similar rigors in their AP courses. One veteran teacher noted that in addition to the students she has taught for nearly three decades, her own children were beneficiaries of the rigorous work they encountered in AP classes. A younger teacher not far removed from college herself noted that the struggles students encounter in an AP class will be very similar to those upon their matriculation to college.

It's kind of nice when you see those students who are able to grasp on, adjust their skills, and kind of go on from there. And they have to learn (while in high school), because I do think a lot of them kind of get blindsided when they go to college, and they realize in the first week that it is exactly what AP Psych was.

Another teacher, drawing on the inspiration that led many adults into the field of education, noted that the Equity Policy Statement is "laudable in the sense that we all want our students to excel academically." In summary, all of the teachers were complimentary of the effort to enroll greater numbers of students in a demanding curriculum, and they were unanimous in their desire to see those students succeed.

That said, all of the teachers also described the challenges that open enrollment presented to them in their classrooms. Teachers spoke of non-traditional students getting angry at the teacher when the material was more challenging than that in their non-AP classes, or of the parents of students who were accustomed to their children getting As and Bs and who questioned the teacher over their child's C in their AP class. "Parents want to see immediate results, and they don't understand that if a student is willing to work they can get their skills up to the level where they need to be." Another teacher spoke of the challenge of having students in their class who have all but given up yet still remain in the class. "They don't necessarily disturb the class; it's that they're just not contributing anything to it." Summarizing the views of many, one teacher said:

It's really kind of a conflict because you are a democratic agent of education for all but on the other hand here's where the bar is and it's your job to meet it there. Those two things clash quite a bit in my pedagogy.

Views such as these manifest themselves in teachers' adjusting the way they teach their AP classes, something they have not been accustomed to doing prior to open enrollment.

Theme 6.2: Teachers have changed the teaching methods they employ in the classroom as a result of the increased number of non-traditional students enrolled in their courses. The biggest changes described by teachers involved the pace at which the class proceeded and the types of specific strategies they employed as guided practice. Three of the five teachers specifically cited the necessity of slowing down the class in order to ensure their students are able to thoroughly understand the material. Comments from teachers indicate how the increased number of non-traditional students has impacted the pace of instruction: "Sometimes I will slow down...if I've got a quarter of them who seem lost I will slow down," "It definitely slows you down a little bit, especially early in the year you want to try to cover it," and "...it's a bit slower pace, more discussion with the lecture because they need more examples." The teachers consistently discussed the challenge of trying to meet the academic needs of their students while simultaneously pushing to meet the deadline of the May AP exams. Some seemed more accommodating than others in this respect; contrast the above-mentioned statements with this from a more veteran teacher: "I tell them at the beginning of the course, 'It's going to be a pretty tough

course, and if you're going to take part of the year off then it's not the course for you. Go somewhere else.” The seemingly caustic nature of this comment was diminished by the teacher's willingness to work with students outside of class, however. When asked what they did to help their non-traditional students be successful, virtually all cited their willingness to come early, stay late, and give up their lunch and/or weekend to work with students who needed extra help. Comments from the students indicated the same thing as well, with many noting that their teacher's dedication to their success was very much noted and appreciated. When his teacher came in on a Saturday to help him and other students prepare for Final Exams, one student said, “I don't know of many teachers who would do that.”

Another change in instructional practice necessitated by the increased number of non-traditional students is a bigger emphasis by teachers in teaching organizational and note-taking skills. Many discussed the need of ensuring their students were able to properly glean information from a lecture, a skill they said was lacking in many of their students. One teacher discussed that her students were very vocal in being forced to spend class time learning a skill such as note-taking as opposed to concentrating on content. “We're seniors, what are you thinking? How to take notes?!!” But this teacher was also very adamant that the skills she taught were necessary and would pay dividends down the road in helping students to distinguish between big picture concepts and the details of the curriculum. Other teachers described needing to spend additional time with worksheets and drill-type assignments to better ensure their students understood the

basics of their content area. One veteran teacher also described how she has been forced to change the method in which she assigns grades, lest she see a mass exodus of non-traditional students from her class. As open enrollment has become more pervasive, she has slowly moved away from a system that places a strong emphasis on test and quiz scores to one that increasingly utilizes homework and other in-class assignments. When asked if she has observed a correlation between the final grade a student receives in her class and their grade on the AP exam, she was quick to respond that a student's grades on the unit tests were much more closely aligned with their AP exam grade. "I tell parents, 'Look at their exam scores. If they typically get an A on the exams then they'll probably get a 5 on the exam.'" The inference of this statement was that while the methods in which class grades are determined has changed as a result of open enrollment, students who have a poor understanding of the content are still likely to struggle on the AP exam. Open enrollment policies may have fostered grade inflation, but the existence of the AP exam has ensured the end-of-the-course assessment is still a good measurement of the knowledge a student has gained.

Theme 6.3: There is a social-emotional benefit to students from participating in an AP class. Throughout the interviews, teachers alluded to benefits that students received from AP classes that included not only the content knowledge they received but also the social and emotional impact. As a result of the need to better differentiate their instruction, teachers spoke of the benefits to the traditional students who were often placed in the position of teaching their non-traditional peers through paired assignments.

Academically, these traditional students were forced to understand the content deeply enough to be able to teach their peers. A veteran teacher noted how he and other AP teachers encouraged their students to work together as much as possible to ensure comprehension. "I try to encourage them to work together as much as they can...if you can teach somebody else how to do a particular concept then you basically know it much better...You know that's a key." Another faculty member commented how the greater collegiality of the students in her AP class fostered an environment that was warm and non-threatening to traditional and non-traditional students alike.

More than one teacher described the benefits to non-traditional students of being surrounded by students with high intrinsic motivation who place a premium on academic achievement. One non-traditional student persisted in his AP class not because of strong academic achievement but rather because of the welcoming environment of the teacher and peers. "He enjoyed the material, he enjoyed the other students, he enjoyed the discussions we would have in class...in some cases it (AP participation) actually raises their self-esteem." Another said, "I think most kids modify their behavior to the situation they're in. So when they see other kids working hard or taking notes or getting settled, they tend to say, 'Oh this is different. I'm really responsible for this on my own.'" Most schools offer different levels of courses for their students, and this school was no different in that they offered three different levels of courses: Regular, Advanced, and Advanced Placement. One side-effect of this is that students often viewed of as being "on the border" between two different levels (Regular versus Advanced, Advanced

versus Advanced Placement) are often inclined to enroll in the higher of the two levels out of concern that not doing so would have a negative influence on their social standing. When asked why he believes poorly performing students persist in his class, one AP teacher replied that “part of it is a social thing. If you’re not in AP then you’re in Advanced, and if you’re in Advanced...” and his voice trailed off, indicating a negative connotation with being in any class but Advanced Placement. Students, too, supported this view, describing their AP peers as academically driven and more accepting of others. Comments from non-traditional students about their traditional peers include, “they are quiet, listen and take notes,” “they are fun and smart,” “they are more serious, involved, and seem much more grown up.”

With regard to the question of perseverance in AP, it appeared that students placed a premium on factors other than academics alone, and this was evident to the teachers who worked with them on a daily basis. When asked why they believed that students were able to persevere in AP classes, teachers mentioned a variety of different reasons. Teachers were observant of the social interaction between traditional and non-traditional students in their classrooms, and expressed the opinion that students often persevered in an AP class because of this social component. Three teachers spoke of helping their students to view the AP experience as a lesson in how to overcome adversity and challenges and that through hard work they could not only be successful in AP but in other challenges they would face in their post-secondary lives. “We fight against learned helplessness. I try to encourage them so they don’t get that sort of self-

defeatist, 'I've started out poorly and now I'm done' attitude." Other teachers talked about a student's degree of success as being based on "the amount of work they're willing to put in." A different teacher told his students, "You're going to face difficult things all along, but if you can persevere and work through it then you'll be better problem-solvers and have more of a strong work habit." The other reason teachers cited as inspiring students to persevere through AP was that the students did seem to understand that the challenges they experienced in high school would yield dividends in their post-secondary pursuits. Some students wanted to study a particular discipline in college and knew that an AP course would better prepare them toward that end, and other students believed that the rigor of a college-level course (regardless of the subject matter) would help them with the challenges of college in general.

When asked to explain the reasons students dropped their course, AP teachers concentrated on two main issues: a lack of requisite skills and a lack of necessary work ethic. The pace of the AP curriculum necessitates a large amount of reading, and teachers noted that students with deficient reading skills were often the first to withdraw from a course. "If you look at the book we use, it's the book they use at the college level, so it's not an easy book." Another noted that the quickest way to distinguish between traditional and non-traditional students was their ability to decipher complex text. To further compound the problems raised by low reading abilities, many students struggle with their ability to organize their thoughts from the material they read or hear through class lectures, which is why many teachers cited the need to spend dedicated instructional

time addressing those deficiencies. With regard to work ethic, it was no surprise that students who did not have the proper work ethic were often the first to drop a course. Furthermore, the issue of poor motivation was not unique to non-traditional students. One teacher commented how the students who dropped her course were those capable of getting 4s and 5s on the AP exam but they simply weren't willing to put forth the necessary effort required to overcome the challenges of a college-level course.

It's kind of interesting because the ones who tend to drop are a lot of times the students who should be in there, but they're getting their first C and they don't want it to hurt their GPA. Unless they get an A they're not taking this class. Very often the low level kids will stick it out.

Likewise, many first-time AP students are simply unprepared for the pace and breadth of the curriculum and do not persevere as a result. One elective AP teacher said, "We have a lot of first year AP students and it was shocking to them." This teacher recommended students build up to AP through some type of Pre-AP program, a recommendation identical to that made by The College Board as they offer advice to schools navigating the waters of instituting open enrollment policies.

Summary

This study sought to explain the experiences of traditional and non-traditional students who enrolled in AP Psychology during the 2011-2012 school year. The study consisted of interviews with ten students and five teachers, and themes were identified related to reasons for course enrollment, classroom experiences, and course persistence.

An academic profile of a successful AP Psychology student was also created using student GPA, class rank, ACT score, and absenteeism as a basis of measurement.

Students stated that their desire to be intellectually challenged was a major reason for enrolling in AP courses. They also cited the ability to earn college credit and the resulting savings in tuition as a motivating factor for them to enroll in AP courses. Non-traditional students mentioned that AP course enrollment in high school is likely to yield benefits in terms of preparation for college, and this was more of a driving force for AP enrollment than was the grade they received in the class.

Traditional and non-traditional students shared similar experiences in their AP courses. Both groups of students noted that AP courses moved at a much faster pace than non-AP courses and covered the course content at a much deeper level than in their non-AP courses. The students also stated that the peers in AP courses took their studies more seriously and caused fewer disruptions than their peers in non-AP classes. The students also commented that their AP teachers lectured a majority of the time and tended to treat the students in their classes more like adults and were more accepting of misbehavior that in a non-AP course would result in a discipline referral.

Traditional and non-traditional students differed in the way they defined success. Traditional students expressed more concern with the grade they received in the class and/or on the AP exam while non-traditional students stated the grade they received was less important than what they learned. Both groups said that work ethic and intrinsic

motivation played a large part in their success, and traditional students recognized that their innate intelligence was a contributing factor as well.

The academic profile that was created showed that students who were successful in AP Psychology had a significantly higher GPA, class rank, and ACT Composite score and missed fewer days of school than their unsuccessful counterparts. Students who were defined as “traditional” in this study were successful in AP Psychology at a much higher rate than were students defined as “non-traditional.”

Student persistence in the course was dictated by an internal desire to take the most rigorous courses available and to see them to their successful conclusion. Students noted a common theme that quitting was something they did not believe in, and this belief led to their persistence in the course. The fear of a low grade and the corresponding effect on their GPA was one reason cited by students for dropping a course prior to its conclusion.

Teachers were generally supportive of the Equity Policy Statement, although they all mentioned the challenge of maintaining the depth and pacing of the AP curriculum given the greater diversity of learners in their AP classes. Teachers noted their belief that having increased academic heterogeneity in their AP classes yields benefits to traditional and non-traditional students alike. The results of this study have implications for educational leaders and their schools as they consider the adoption of less restrictive enrollment practices for their AP classes. The results also have implications for students and their families as they consider possible AP enrollment.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Overview

This chapter provides a summary of the rationale for the study, a review of the findings from Chapter IV, and a connection between the results of this study and that of previous research related to the study. Implications for school stakeholders and recommendations for further research are also presented.

Summary of Rationale for Study

Since 1955, the Advanced Placement program has provided the opportunity for academically advanced high school students to enroll in an entry-level college equivalent course, with the class culminating in an end-of-the-year exam administered by The College Board, the not-for-profit agency that runs the AP program. The AP exam is scored on a scale of 1-5, with a passing score (defined by The College Board as a 3 or higher) having been recognized by colleges and universities as worthy of credit in the corresponding entry-level college course. The program was initially conceived to be one that would offer only the most advanced students these opportunities to the exclusion of the average and below average students. According to author Eric Rothchild, who has studied the history of the AP Program, “The AP Program was unabashedly elitist when it began” (Mollison, 2006, p. 34). Over time, admissions directions at the nations’ post-secondary institutions began to consider other factors in addition to performance on the

AP exam as a basis for admission to their schools, including mere enrollment in AP courses (Bragdon, 1960; Casserly, 1966). Awareness of this fact has led more and more schools to offer a growing array of AP courses within their curriculum, and increasingly larger numbers of students have sought to enroll in these AP courses (College Board, 2011a). As this proliferation of the AP program began to accelerate in the 1990s and into the 21st century, concern began to be expressed at the inequality of opportunity for AP participation throughout the country, especially for students attending schools with high percentages of low-income and minority students, as well as those located in rural and urban areas (College Board, 2002a; College Board, 2002b; Schmeiser & Haycock, 2005). As a result, beginning in the late 1990s, The College Board began to emphasize its belief that *all* students should have the right to take AP courses if they desire, and secondary schools should not limit AP enrollment based on traditional prerequisites such as teacher recommendation, GPA, and class rank. In 2002, The College Board issued its Equity Policy Statement, in which they encouraged open enrollment to be a guiding principle for student scheduling. It read:

The College Board and the Advanced Placement Program encourage teachers, AP Coordinators, and school administrators to make equitable access a guiding principle for their AP programs. The College Board is committed to the principle that all students deserve an opportunity to participate in rigorous and academically challenging courses and programs. All students who are willing to accept the challenge of a

rigorous academic curriculum should be considered for admission to AP courses. The Board encourages the elimination of barriers that restrict access to AP courses for students from ethnic, racial, and socioeconomic groups that have been traditionally under-represented in the AP Program. Schools should make every effort to ensure that their AP classes reflect the diversity of their student population. (College Board, 2002a)

In the decade since the Equity Policy Statement was first released the AP program has seen tremendous gains in the number of schools participating in the AP program, the number of students enrolled in AP courses, and the number of AP exams taken each spring (College Board, 2011a). Much has been written about the dramatic rise in the number of students enrolled in the AP program (Ewers, 2005; Mollison, 2006; Rossi, 2008), and many authors have expressed concern with whether or not the AP program has diminished with regard to the rigor for which it is best known (Banchemo, 2008; Ewers, 2005; Gardner, 2008; Klopfenstein, 2003; Lichten, 2000). Evidence shows that while the number of students enrolled in AP has risen, student performance on the AP exam has fallen (College Board, 2001b). As a result, colleges have started to adopt policies in which students must score a four or a five on the AP exam in order to receive college credit and/or advanced standing as opposed to a three, the score The College Board indicates to be a passing score on the exam (Gardner, 2008; Hurwitz & Hurwitz, 2003). Some high schools, starting to sense that AP has lost its luster as the pinnacle of rigor in K-12 education, have begun replacing AP courses with their own, more

demanding Honors courses (Hager, 2006; Schneider, 2009). And in 2007, to allay concerns of a “watered-down” curriculum, The College Board started an auditing process of any syllabus used to teach an Advanced Placement course. The audit requires that AP teachers have their syllabus approved by The College Board before they are able to teach any course designated “AP.” So while the Equity Policy Statement has succeeded in opening the doors of Advanced Placement to an increasing number of students, teachers and educational leaders at the secondary level have grappled with the effects of larger and larger numbers of “non-traditional” students entering their classrooms.

Purpose of Study and Research Procedures

The purpose of this study was to explore the reasons students cited for enrolling in AP courses and to describe the experiences of those students in their AP courses, distinguishing between “traditional” AP students and “non-traditional” AP students. Furthermore, this study sought to identify the factors that led to the continued enrollment of students whose grades in AP courses were below a C. What was the motivation for those students who were receiving grades considered to be below average (Ds and Fs) to stay enrolled in those courses? Were students seeking to gain the college admissions benefit of having an AP course on their transcript? Or did students feel that the benefit of an academically challenging class would pay dividends in their subsequent post-secondary pursuits? The opinions and experiences of teachers were also sought as they relate to the impact of ever-increasing numbers of students in their AP classes. The study consisted of ten student interviews that were 22-32 minutes in length. Students selected

for inclusion in the study were chosen from a group of 123 students who were enrolled in AP Psychology at the research site during the 2011/2012 school year. The 123 students were first classified as either traditional or non-traditional students based on the grade they received in their US History class during the 2010/2011 school year. Next, five students were randomly selected from the traditional group and five students were randomly selected from the non-traditional group for the purpose of the student interviews. Interviews were conducted using an established set of questions (see Appendix C) in order to ensure consistency between the different interviews. Each question was followed by related sub-questions in case a student struggled to answer a question or did not go into sufficient detail. The study also consisted of interviews with five teachers that lasted 24-37 minutes in length. Teacher participants were selected from all AP teachers at the school and included varying levels of AP teaching experience, genders, and content areas. Interviews were conducted using an established set of questions (see Appendix E) in order to ensure consistency between different interviews, and each question was followed by related sub-questions in case a teacher struggled to answer a question or did not go into sufficient detail. The final portion of the study consisted of a quantitative comparison of the academic characteristics of successful and unsuccessful AP students. Using data from the 2009/2010, 2010/2011, and 2011/2012 school years, the researcher differentiated between students based on their cumulative GPA, class rank, Composite ACT score, and the number of days they were absent. The purpose of this quantitative comparison was to see whether the differences in these

academic characteristics were statistically significant between successful and unsuccessful students.

Conclusions

The goal of the Equity Policy Statement is to encourage schools to remove barriers to AP enrollment and increase student participation in the program, especially minority and low-income students. Students considered “traditional” by the definitions used in this study appear to be motivated to enroll in an AP class by the tangible benefit of receiving college credit by passing the AP exam, and they expressed confidence that they would be able to gain advanced standing in college as a result. “Non-traditional” students felt that the rigor of the AP experience in high school would help prepare them for the challenges of college, and this was a frequently cited reason for them enrolling in AP courses. Non-traditional students, who by definition have had lower grades than their traditional counterparts, expressed the feeling that it was the skills and dispositions that was motivating them to enroll in AP courses, not the possibility of receiving credit by virtue of passing the AP exam. Academic skills such as note-taking and reading strategies and dispositions such as persistence in course completion were cited as being important benefits of the AP experience for non-traditional students. Knowing these types of nuances exist between these two groups of students would be helpful information for school administrators, AP Coordinators, and guidance counselors as they target their recruitment message during the period of student course selection in their buildings. For ease and simplicity schools often publicize the availability of courses

through course selection books and flyers, which are typically uniform in nature and do not differentiate between the different students in the target audience. The results of this study and future studies can be helpful to schools looking at ways to increase their AP participation rate through active recruiting of both traditional and non-traditional students.

The feelings identified by students of both groups should also be noted when looking at ways to provide incentives for students to take the AP exam. Traditional students were clearly attracted to the possibility of receiving college credit and advanced standing in college, so for them a message emphasizing the cost/benefit advantages of the course and AP exam is appropriate. Rather than promoting the exam as a way to earn credit for college, non-traditional students appear to be more persuaded by informing them how sitting for an AP exam is an excellent way to prepare for similar, high-stakes exams in college. Further research is warranted to build upon this study in order to better discern how schools can effectively recruit students into AP and work to ensure their success in the program.

When reflecting upon their time in AP classes, traditional and non-traditional students expressed very similar experiences. Both groups spoke of the content being covered in much more depth and at a much faster pace than in non-AP classes, resulting in teachers relying heavily on direct lecture as the method of instruction that was most commonly used. There was no discernible difference between students in either group preferring teacher lecture as a method of pedagogy, although the issue of boredom and

monotony was raised by more than one student. This raises an interesting question for future researchers as the question of learning styles and their effect on student achievement are considered. Is there a difference in student achievement between traditional and non-traditional students that can be attributed to the type of teaching style employed by the teacher? While this study did not attempt to answer that question, the responses given by both teachers and students would indicate that this would be a topic worth pursuing in future studies related to this topic.

Another issue raised by the adoption of open enrollment policies is the impact that the inclusion of non-traditional students has on the rigor of the course and the overall classroom environment. This study found that students in both groups were universal in their affirmation when asked if AP courses have challenged them, a positive comment considering the desire to be challenged was mentioned as a major reason for enrolling in AP courses. While teachers acknowledged the challenge of keeping the pace and rigor of the course intact, it appears that the greater number of non-traditional students has not affected rigor to the extent that the traditional students no longer feel challenged. In addition, students in both groups cited the classroom atmosphere in AP classes as being a unique combination of intellectual focus and light-hearted interplay between teacher and students. It appears that the removal of barriers to AP enrollment has done little to stunt the unique culture that exists within the walls of the AP classroom.

The question of persistence in AP led to some responses that seemed to run contrary to those reasons cited by students for enrolling in AP. Traditional students, who

said they enrolled in the courses because they wanted to earn advanced standing in college by passing the AP exam, said they never considered dropping the course because they knew the rigor of the course would yield benefits to them in college. It is important to remember that virtually all of these students earned As or Bs in their AP Psychology course, so the issue of dropping the course was not likely. Non-traditional students had stated that the grade they received in the class was less of an incentive to enroll than the other benefits they received by virtue of being in a challenging course, yet they were the group most likely to cite a low grade in the course as a reason for dropping. Several non-traditional students attributed their persistence in the course to the hope of doing well on the exam at the end of the year, equating a passing AP exam grade as vindication of their decision to enroll in and persist in AP. Policies to off-set the impact of a low grade, such as grade weighting for AP classes, would appear to provide an extra incentive for students to persevere in AP. Also, allowing extra time for students to drop the course would encourage more students to give AP courses a try, knowing they had several weeks before making a final determination of whether to stay in the course or not.

It is important to note that in this study a successful experience was defined as one in which the student received a C or better in the class, and as a result there were fewer than eight percent of the enrolled students who were unsuccessful. Given the very small number of students in this sample who were classified as non-traditional AP Psychology students (31 out of 264) and the equally small number of students who were unsuccessful AP Psychology students (21 out of 264), the researcher thought it would be

insightful to also look at the breakdown of traditional versus non-traditional students and successful versus unsuccessful students using a different standard of performance than that defined in this study. This study defined a traditional student as one who received a C or better for each of their two semesters in AP U.S. History, a B or better for each of their two semesters in Advanced U.S. History, or an A for each of their two semesters in Regular U.S. History. The study also defined a non-traditional student as one who received a D or below in either semester of AP U.S. History, a C or below in either semester of Advanced U.S. History, or a B or below in either semester of Regular U.S. History. As a basis of comparison, Table 9 shows how the number of students classified as traditional and non-traditional changes when a different definition of performance is used. In Table 9, a traditional student is defined as one who received a B or better for their two semesters in AP U.S. History or an A for their two semesters in Advanced U.S. History. A student who received a C or below in either semester of AP U.S. History, a B or below in either semester of Advanced U.S. History, or who was enrolled in Regular U.S. History was considered a non-traditional AP Psychology student for use in Table 9.

Table 9

Academic Characteristics of Traditional and Non-traditional AP Psychology Students, Revised Definition, 2009-2012 (N=264)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Traditional	148	4.94	88.72	28.92	5.95
Non-traditional	116	4.15	262.42	25.07	8.51

When changing the definition used to classify students as traditional or non-traditional, the number of traditional students fell by 36% (from 233 to 148). Students considered traditional under this new definition now had to have received a letter grade that was one grade higher than under the old definition, so it is logical that the GPA is higher under the revised definition as well (4.94 versus 4.73). Students under the new definition also had a higher ACT score (28.92 versus 27.70) and missed fewer days of school (5.95 versus 6.64). In a similar line of thought, the researcher was interested in seeing how the data was different when a more stringent standard was used to define success. Rather than defining success as a C or better in AP Psychology (see Table 5), Table 10 shows the results when a successful experience is defined as one in which a student scores a B or better in the class.

Table 10

Academic Characteristics of Successful and Unsuccessful AP Psychology Students, Revised Definition, 2009-2012 (N=264)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Successful	187	4.85	107.23	28.40	5.95
Unsuccessful	77	3.98	305.45	24.38	9.81

When changing the definition used to define a successful versus unsuccessful experience, the number of successful students fell by 23% (from 243 to 187). Students considered successful under this new definition had to receive a letter grade that was one grade higher than under the old definition, so it would be logical to predict that the GPA of these students would be higher under the revised definition, which was confirmed (4.85 versus 4.70). Students under the new definition also had a higher ACT score (28.40 versus 27.57) and missed fewer days of school (5.95 versus 6.53). Using a significance criterion of .05, an independent-samples *t*-test was conducted to determine if the difference in cumulative GPA was statistically significant. The test was significant, $t(262) = 12.43, p = .00$, showing that the successful AP Psychology students ($M = 4.85, SD = .47$) have performed significantly better in their classes than their unsuccessful counterparts ($M = 3.98, SD = .61$). Since class rank is derived from a student's GPA, it is logical that the students with higher GPAs will also have a higher class rank than their peers with lower GPAs. In this cohort, the successful students had a higher class rank (M

= 107.23, $SD = 92.84$) than the unsuccessful students ($M = 305.45$, $SD = 165.29$). An independent-samples t -test was also conducted to determine if the difference in student ACT Composite scores was statistically significant. The test was significant, $t(262) = 9.43$, $p = .00$, showing that successful students ($M = 28.40$, $SD = 3.19$) have scored significantly higher on the ACT exam than their unsuccessful counterparts ($M = 24.38$, $SD = 3.06$). Finally, an independent-samples t -test was conducted to determine if the difference in the number of days that students were absent from school was statistically significant. The test was significant, $t(244) = -4.52$, $p = .00$, showing that successful students ($M = 5.95$, $SD = 5.18$) missed significantly fewer days of school than their unsuccessful counterparts ($M = 9.81$, $SD = 7.91$).

In addition to looking at the academic characteristics of successful versus unsuccessful students under the revised definition, the researcher also wished to study whether or not there were any differences in the above-cited results when looking more closely at the groups of traditional and non-traditional students. Table 11 shows the academic characteristics for the 148 students who were classified as traditional AP Psychology students going into the school year.

Table 11

Academic Characteristics of Traditional AP Psychology Students, Revised Definition

(N=148)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Successful	131	5.00	76.30	29.27	5.68
Unsuccessful	17	4.46	184.47	26.24	8.02

From Table 11, one can see that 88.5% (131/148) of the traditional students who enrolled in AP Psychology received an A or a B in the course and were thus considered successful under the revised definition used in this study. That number can be compared to the 48.3% (56/116) of non-traditional students who received an A or a B in AP Psychology, as calculated from the data in Table 12 below. Using a significance criterion of .05, an independent-samples *t*-test was conducted to determine if the difference in cumulative GPA was statistically significant. The test was significant, $t(146) = 5.18, p = .00$, showing that the successful AP Psychology students ($M = 5.00, SD = .41$) have performed significantly better in their classes than their unsuccessful counterparts ($M = 4.46, SD = .36$). In this cohort, the successful students had a higher class rank ($M = 76.30, SD = 72.08$) than the unsuccessful students ($M = 184.48, SD = 91.40$). The difference in means on the ACT Composite score was significant, $t(146) = 3.90, p = .00$, although the test for absenteeism was not significant, $t(133) = -1.57, p = .12$. In this comparison the sample size of one of the two groups was only 17 students. A sample

size of this magnitude lends itself to the higher probability of a Type II error, and larger sample sizes would increase the statistical power of the study. Additional years of data would be recommended in order to validate any hypotheses from this study.

Table 12

Academic Characteristics of Non-traditional AP Psychology Students, Revised Definition
(N=116)

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
Successful	56	4.48	179.59	26.38	6.54
Unsuccessful	60	3.85	339.73	23.85	10.34

An independent-samples *t*-test was also conducted to determine if the difference in the means of the four variables for the successful and unsuccessful non-traditional students (see Table 12) was statistically significant. The test for all variables was statistically significant (GPA: $t(114) = 6.73$, $p = .00$; ACT Score: $t(114) = 4.90$, $p = .00$, and days absent: $t(109) = -3.05$, $p = .00$, indicating that the differences between the non-traditional students who were successful and those who were not were not due to chance.

One other interesting item of note is that the academic characteristics of a traditional student who was not successful appear to be very similar to those of a non-traditional student who was successful. Table 13 shows these two sets of data side-by-side.

Table 13

Comparison of Traditional, Unsuccessful Students with Non-traditional, Successful Students, Revised Definition

Group	N	Cumulative GPA	Class Rank	ACT Composite	Days Absent
T/US	17	4.46	184.47	26.24	8.02
NT/S	56	4.48	179.59	26.38	6.54

The one variable in which there appears to be a noticeable difference between these two groups of students is in the number of days missed. It appears that despite having very similar patterns of academic success prior to their enrollment in this course, the students who achieved success in AP Psychology were in school more frequently than those students who were not in school. To test whether or not any of these variables were statistically significant, an independent samples *t*-test was conducted. None of the academic barometers were statistically significant (GPA: $t(71) = -.22$, $p = .83$ and ACT Score: $t(71) = -.19$, $p = .85$), and when the *t*-test was conducted on the days of absenteeism it, too, was not significant $t(69) = .98$, $p = .33$. Once again, however, the sample size of the unsuccessful, traditional students was only 17 students, a sample whose small magnitude lends itself to the higher probability of a Type II error. Additional years of data would be recommended in order to validate any hypotheses from this study

What conclusions can be drawn by looking at the data of traditional and non-traditional students and successful and unsuccessful students when comparing the two groups using the revised definitions described above? First, requiring a higher academic performance in order to be classified as traditional and/or successful changed the sample sizes significantly. As noted above, there were 36% fewer traditional students using the new definition and 23% fewer successful students using the new definition. For the purposes of statistical analysis, it is useful to have sample sizes that are large enough to mitigate the likelihood of a Type II error. Some of the calculations above encountered the problem of having a very small sample, an issue partially addressed by defining the variables differently. For example, there were only 21 students who were unsuccessful in AP Psychology when using the standard of earning a C or higher in the class to be considered successful. When that definition was changed to a B or higher there were 77 students who were considered unsuccessful. The problem of sample size could also be lessened by looking at groups of students over multiple school years, as opposed to just the three years in this study.

Given the caveat of sample size, the results attained using the two different definitions were very similar. Students who were successful in AP Psychology had displayed success throughout high school (as shown by their cumulative GPA) and had performed significantly higher on the ACT score than did students who were unsuccessful. Furthermore, they missed fewer days of school than did students who were not successful. Also, traditional students were much more likely to be successful in the

course than were their non-traditional peers. This was true regardless of which definition was used for the classification of traditional students. Given this, it would appear that the criterion used to identify traditional students in this study (previous success in a related course) is a good predictor of success in the sequent AP course. Again, the *t*-tests that were run did show statistical significance, with the exception of those cases where sample size had an impact.

The academic profile of successful versus unsuccessful students showed that students who did well in AP Psychology were also those students who had done well throughout high school. Using the original definitions and considering the three-year time period of the quantitative portion of this study, 96% of traditional students were successful in AP Psychology compared to 61% of the non-traditional students. Successful students had significantly higher cumulative GPAs than their unsuccessful counterparts, and they also had significantly higher ACT scores than students who were unsuccessful. Furthermore, it appears that attendance in school makes a difference in terms of the success a student experiences. Successful students missed fewer days of school than unsuccessful students, and this was true even when comparing non-traditional students who got an A, B, or C versus traditional students who got a D or lower. Despite being non-traditional, these students were more successful than traditional students who missed more days of school. While the results of this particular comparison were not statistically significant, it seems likely that if similar studies were conducted using a larger sample size the results would be similar.

Finally, teachers spoke of the challenges that open enrollment presents to them and to the students enrolled in their classes. The greater variety of ability levels in their AP classes has necessitated that teachers slow down the pace of instruction in order to meet the needs of all learners. Teachers cited that they do more review and drill activities to reinforce important concepts, and that they have been forced to spend time teaching skills such as organization and note-taking, time that was formerly devoted to content. Despite having to make accommodations such as these, however, teachers were generally supportive of open enrollment policies because of the benefits that both traditional and non-traditional students derive from AP classes. More than one teacher even went so far as to say that they believed it was important for every student to experience at least one AP course while in high school. Despite the effect on the pacing of their course, teachers did not say that the inclusion of non-traditional students had negatively impacted the performance of the traditional students in the class or on the AP exam, and they even noted that traditional students benefit from the greater intellectual heterogeneity in their classes because of the opportunities to take the role of peer leaders during partner or group work. If there was a theme that was consistent between the teachers and the students it was that those students who struggle in AP courses most likely do so because of a lack of work ethic. These comments suggest that students considering AP enrollment need to be committed to the challenge they are undertaking and schools should have supports in place to help those students who encounter difficulty.

Implications for Educational Leadership and Policy Implementation

The purpose of this study was to explore the experiences of traditional and non-traditional students in Advanced Placement courses, a topic borne out of the push for greater access to rigorous coursework for all students in secondary schools. The Equity Policy Statement (College Board, 2002a) made official the belief of policymakers that schools should consider any student for enrollment to AP classes so long as that student expressed a desire to study college-level coursework. The interviews conducted in this study have shown that both students and teachers agree that a student's motivation plays a large role in whether or not they can experience success, and the academic profile provides additional support that non-traditional students can achieve success in an AP course if they are motivated to work hard and attend school regularly (see Tables 8 and 13). In a period of approximately 50 years, the Advanced Placement program has gone from being a program for the most gifted and elite in the nation's most prestigious secondary schools to one that is offered to nearly two million students in over 18,000 secondary schools (College Board, 2011a). Great strides have been made to offer AP courses to traditionally underserved minority and low-income students, many of whom attend schools located in urban and rural areas.

However, as has been discussed throughout this study, removing barriers to AP enrollment also presents challenges to students, teachers, educational leaders, and policymakers. Many of the very students who were the targeted beneficiaries of open enrollment policies are also the ones who struggle the most after being placed into a class

for which they may lack the necessary skills and/or work ethic. Teachers are placed in the uncomfortable position of adhering to a tightly-prescribed curriculum while striving to meet the needs of their most academically-challenged students. School administrators must provide answers for parents who demand the rigorous courses that give their children the best chances for admission to college while also hearing the pleas of their teachers regarding students who are inappropriately placed and community members who demand they hold the line on tax increases. And policymakers, in their quest to provide accountability to taxpayers, look for curriculum grounded in research that will raise student test scores and help prepare students to compete in a global society.

Recommendations for Future Research

There are several recommendations the researcher would make for follow-up studies related to this topic. The first recommendation would be to replicate the study design but include a larger number of students in the sample. This study included the views of ten students, and while clear themes of Advanced Placement emerged during the interview transcription, this is a small number of individuals from which to draw conclusions on a program that has nearly two million student participants. Interviews with additional students would likely reinforce several of the themes identified in this study but would also help to identify other views that were not necessarily expressed by this group of ten students.

Similarly, this study consisted of interviews with five teachers, a small number of people from which to draw conclusions on the Advanced Placement program. The

researcher made an effort to find a mix of teachers with regard to their gender, content area, and experience as AP teachers, but replicating this study using a wider variety of teachers would make the findings more useful to school stakeholders in other research settings. This study included one teacher who was in her first year teaching AP and other teachers who had more than ten years of experience, but a larger number of teacher participants would facilitate the inclusion of teachers with a moderate number of years teaching AP. It would also allow for the selection of teachers from several more content areas than the four that were represented in this study. Interviews with teachers of differing levels of experience and subject areas would likely lead to themes that not only build upon those identified in this study but also delve into other areas as well.

The academic profile that was created was done so using students from three consecutive school years who were enrolled in Advanced Placement Psychology. Students from those school years were classified as traditional or non-traditional based on the research definitions identified in this study. Using those definitions, 88% of the students were traditional students and 12% were non-traditional. The small number of non-traditional students created issues when calculating the statistical significance of differences in means for variables such as GPA, ACT score, and number of days absent. It is recommended that a larger sample of AP students be used in order to validate any findings regarding statistical significance.

The school used in this study is located in the suburbs of a large Midwestern city and has a total student enrollment of nearly 3,000 students. The student body is

approximately 70% white and has a free and reduced rate of 14%, well below the state average. It is probable that students who attend schools located in other areas, including urban and rural areas, would have different feelings toward education in general and AP in particular. Also, there is no question that socioeconomic status is one variable that strongly impacts student achievement, so it would be recommended to interview students who come from more impoverished areas to see how their views differ from those expressed in this study.

Finally, it is recommended that this study be duplicated using different parameters to identify students as traditional or non-traditional as well as successful or unsuccessful. This study defined a traditional student as one who received a C or better in an AP course thought to be a logical precursor to the course being studied. It also defined a traditional student as one who received a B or higher in an Honors course or an A in a Regular level course thought to be a logical precursor to the course being studied. Those research constructs were created with the thought that there were four different levels of courses from which a student could choose: Basic, Regular, Honors, or AP. However, at the school in question there were only three different levels available to students: Regular, Advanced, and Honors or AP (if AP is offered it replaced the Honors course). At the research site a great majority of students were enrolled in either the Advanced or Honors/AP level, so the probability of having a student jump two levels (from Regular to AP) was very low. Using the definitions of a traditional student as defined above, 88% of the students were traditional while only 12% were non-traditional. To show how

changing the definition of traditional and non-traditional students would affect the results of the academic profile the researcher utilized a revised definition and compared the results to those from the original study (see pages 150-158). It is recommended that future studies craft a definition of traditional and non-traditional that best meets the structure of the research site as it relates to the levels of courses offered and to use those definitions to best capture the experiences of students new to AP. For example, had a traditional student been defined as one who had received a B or better in the precursor AP course (instead of a C or better) or an A or better in the Honors course (instead of a B or better), then 56% of the students in this study would have been classified as traditional and 44% would have been non-traditional. Sample sizes of this magnitude are more likely to accurately reveal the experiences of students enrolling in AP for the first time.

In addition, this study defined a successful experience as one in which a student receives a C or better in the class. Using that definition, 92% of students were successful in AP Psychology. Had a successful experience been defined as one in which the student receives a B or better, the number of students experiencing success would have fallen to 71%. The purpose of this study was to explore the experiences of students enrolled in AP courses and to distinguish between those students thought to be typical AP students versus those who are newer to the rigors of AP. The definition of a successful experience is clearly one that is subjective, and it is impossible to create a definition of success that applies to all students. For a non-traditional student, receiving a C in an AP class might very well be an accomplishment deemed to be successful, while to other students a C

would be considered an unsuccessful experience. It is recommended that further research be conducted that utilizes differing definitions of success in order to best articulate the experiences of both traditional and non-traditional students. Studies more qualitative in nature could capture the experiences of students in other subject matters and other school settings and would complement the findings found in this study that are unique to this particular research site. Quantitative studies could also build upon the research design utilized in this study but could use a much larger sample size and introduce new variables not included in this study. Quantitative studies could also address the lack of existing research that shows the relationship between the grade a student receives in an AP course and the score they receive on the AP exam, data that would be useful when working to establish future definitions of success.

Summary

This chapter presented a brief overview of the rationale for the study as well as a description of the data collection procedures used in the study. Conclusions drawn from the study were reviewed and suggestions to school policymakers were articulated in order to make the AP experience more beneficial to both traditional and non-traditional students. Suggestions for related research were proposed as well.

APPENDIX A

PARENT CONSENT TO PARTICIPATE IN RESEARCH

PARENT CONSENT TO PARTICIPATE IN RESEARCH

Project Title: Open Enrollment in Advanced Placement Courses: Experiences of Traditional and Non-traditional Students

Researcher: Scott McAlister

Faculty Sponsor: Dr. Ann Marie Ryan, Curriculum and Instruction Program, Loyola University Chicago

Your son/daughter is being asked to take part in a research study being conducted by Scott McAlister for a dissertation project under the supervision of Dr. Ann Marie Ryan in the Curriculum and Instruction Program in the School of Education at Loyola University Chicago.

Your son/daughter is being asked to participate because (s)he is a junior or senior who is enrolled in an Advanced Placement class at a high school that utilizes an open enrollment policy for Advanced Placement courses. Your son/daughter will be one of approximately ten students who will participate in this study.

Please read this form carefully and ask any questions you may have before deciding whether to have your son/daughter participate in the study. You may contact the researcher by telephone at (219) 902-6047 or by e-mail at smcalister@luc.edu.

Purpose:

The purpose of this study is to better understand the experiences of traditional and non-traditional students in Advanced Placement courses

Procedures:

If you agree to your child's participation in the study, (s)he will be asked to participate in a one-to-one interview with the researcher that will take place at their high school. The questions will relate to their experiences as an AP student and will include the reason(s) they took an AP course, how their AP course experience was different from non-AP courses they've taken, and the reason(s) they persisted in the course rather than drop the course. The interview will be recorded by digital audio recorder and will last approximately 20-30 minutes. Your son/daughter will also be asked to participate in a follow-up session in which (s)he will be given the opportunity to review his/her responses to the interview questions in order to ensure the researcher has accurately recorded their responses. This will take approximately 15-20 minutes.

Risks/Benefits:

There are no foreseeable risks involved in participating in this research beyond those experienced in everyday life. There are no direct benefits to your child from their participation, but their input will be helpful to future Advanced Placement students, their families, and school personnel who are considering Advanced Placement courses as part of their course of study.

Compensation:

Upon completion of the interview and the follow-up session, participants will receive a \$15 gift card to their choice of Panera, Starbucks, or iTunes. The researcher will give these directly to the participant at the conclusion of the follow-up session.

Confidentiality:

Only the researcher will have access to the raw data. The identity of all participants, as well as the high school, will be kept strictly confidential. All references to the school and research participants will be done using pseudonyms. The consent forms, audio recordings, and transcripts of the recordings will be stored in a locked cabinet in the researcher's home office. These documents and recordings will be destroyed one year following the final defense and approval of the dissertation.

Voluntary Participation:

Your son/daughter's participation in this study is completely voluntary. If you do not want him/her to be in this study, they do not have to participate. Even if you give consent for them to participate, they are free not to answer any question or to withdraw from participation at any time without penalty.

Contacts and Questions:

If you have questions about this research study, please feel free to contact Scott McAlister at (219) 902-6047 or by e-mail at smcalister@luc.edu. You may also contact Dr. Ann Marie Ryan at aryan3@luc.edu. If you have questions about your child's rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree for your son/daughter to participate in this research study. You will be given a copy of this form to keep for your records.

Parent/Guardian Signature

Date

Son or Daughter's Name (Please Print)

Researcher's Signature

Date

APPENDIX B
STUDENT ASSENT TO PARTICIPATE IN RESEARCH

STUDENT ASSENT TO PARTICIPATE IN RESEARCH

Project Title: Open Enrollment in Advanced Placement Courses: Experiences of Traditional and Non-traditional Students

Researcher: Scott McAlister

Faculty Sponsor: Dr. Ann Marie Ryan, Curriculum and Instruction Program, Loyola University Chicago

You are being asked to take part in a research study being conducted by Scott McAlister for a dissertation project under the supervision of Dr. Ann Marie Ryan in the Curriculum and Instruction Program in the School of Education at Loyola University Chicago. You are being asked to participate because you are a junior or senior who is enrolled in an Advanced Placement class at a high school that utilizes an open enrollment policy for Advanced Placement courses. You will be one of approximately ten students who will participate in this study.

Please read this form carefully and ask any questions you may have before deciding whether to participate in the study. You may contact the researcher via telephone at (219) 902-6047 or by e-mail at smcalister@luc.edu.

Purpose:

The purpose of this study is to better understand the experiences of traditional and non-traditional students in Advanced Placement courses

Procedures:

If you agree to be in the study, you will be asked to participate in a one-to-one interview with the researcher that will take place at your high school. The questions will relate to your experiences as an AP student and will include the reason(s) you took an AP course, how your AP course experience was different from non-AP courses you've taken, and the reason(s) you persisted in the course rather than drop the course. The interview will be recorded by digital audio recorder and will last approximately 30 minutes. You will also be asked to participate in a follow-up session in which you will be given the opportunity to review your responses to the interview questions in order to ensure the researcher has accurately recorded your responses. This will take approximately 15-20 minutes.

Risks/Benefits:

There are no foreseeable risks involved in participating in this research beyond those experienced in everyday life. There are no direct benefits to you from participation, but your input will be helpful to future Advanced Placement students, their families, and

school personnel who are considering Advanced Placement courses as part of their course of study.

Compensation:

Upon completion of the interview and the follow-up session, participants will receive a \$15 gift card to their choice of Panera, Starbucks, or iTunes. The researcher will give these directly to the participant at the conclusion of the follow-up session.

Confidentiality:

Only the researcher will have access to the raw data. The identity of all participants, as well as the high school, will be kept strictly confidential. All references to the school and research participants will be done using pseudonyms. The consent forms, audio recordings, and transcripts of the recordings will be stored in a locked cabinet in the researcher's home office. These documents and recordings will be destroyed one year following the final defense and approval of the dissertation.

Voluntary Participation:

Your participation in this study is completely voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.

Contacts and Questions:

If you have questions about this research study, please feel free to contact Scott McAlister at (219) 902-6047 or by e-mail at smcalister@luc.edu. You may also contact Dr. Ann Marie Ryan at aryan3@luc.edu. If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. You will be given a copy of this form to keep for your records.

Participant's Signature

Date

Researcher's Signature

Date

APPENDIX C
STUDENT INTERVIEW PROTOCOL

Each of the following questions will be asked during the approximately 30-minute structured interview. The interview will be conducted by the researcher in an isolated room with the participant. The main question to be asked appears in bold, while follow-up questions appear afterwards. Follow-up questions will be used as prompts if the student appears to have difficulty expounding upon an idea. The interview will be recorded using a digital audio recorder and will be transcribed at a later time. At a follow-up session, the research participant will be given the opportunity to read their responses to the questions and will be given the opportunity to revise their answers if they so desire.

Question 1

Please tell me a little bit about yourself. What types of activities do you participate in and out of school? What are your most and least favorite classes in school? What type of student do you consider yourself to be?

Question 2

What AP classes have you taken in high school? Why did you enroll in an AP class? Who/what encouraged you to do so? Is there an AP class that you would consider to be your most or least favorite? If so, why does this class stand out?

Question 3

How would you describe your experience in AP classes? Have you been sufficiently challenged? How are your AP classes different from non-AP classes? How would you describe your peers in AP classes with those in non-AP classes? How would you

describe your teachers in AP classes with those in non-AP classes? If you could do it again, would you enroll in your AP course(s)?

Question 4

How would you describe your performance in your AP class? Are you satisfied with your performance? If so, what factors have led to your success? If not, why have you not done as well as you thought you would? Do you believe the grade you have (or will) received reflects your ability?

Question 5

How would you define success in an AP class? Is it by the grade you receive in the class? Or is it through the grade you receive on the AP exam? Or are there other factors not yet mentioned? Is success in an AP class different from being successful in a non-AP class?

Question 6

If you have not done as well as you thought you would, what factors led you to remain in the class? Despite a lower-than expected grade, what benefits are you receiving by staying in this class? Was dropping the course a consideration? Why or why not?

APPENDIX D
SCRIPT FOR INITIAL STUDENT CONTACT

Hello _____,

Thank you for meeting with me. My name is Scott McAlister, and I am currently completing my Doctorate in the Curriculum and Instruction Program in the School of Education at Loyola University Chicago.

My dissertation is entitled “Open Enrollment in Advanced Placement Courses: Experiences of Traditional and Non-traditional Students.”

The purpose of my research is to gain an understanding of the reasons you enrolled in an AP courses and the experiences you had while in those courses. I also want to investigate how you view success in the course. For example, is it through the grade you receive in the class or on the score on the AP exam, is it the preparation it provides you for college, or is it something else altogether? Finally, if you did not receive as high of a grade as you wanted, I am interested in discussing why you chose to stay enrolled in the class. What were you getting out of the class aside from your grade?

Do you understand the purpose of my study?

Your participation in this research will require approximately 30 minutes of your time during the initial interview. During this interview, I will ask you a series of questions about your experiences in AP classes. I would also like to meet with you again after I have typed up my notes so I can share them with you. I will do this to make sure I have accurately captured your answers. This second meeting will take approximately 15-20 minutes.

Please understand that I will keep all of your personal information and all school data strictly confidential. I will be the only person with access to your responses from the interview and your name and the school's name will not be identified at all. A pseudonym (that is, a made-up name) will be used to identify you and the school in my final dissertation.

Also, please understand that your participation in this research is completely voluntary. There is no penalty for choosing not to participate, and you can withdraw from participation at any time during the research, for any reason, with no penalties whatsoever.

Do you understand everything I have said? Do you have any questions for me?

Again, thank you for agreeing to meet with me today. I look forward to working with you.

APPENDIX E
TEACHER INTERVIEW PROTOCOL

Each of the following questions will be asked during an approximately 30 minute structured interview. The interview will be conducted by the researcher in a location chosen by the participant. The main question to be asked appears in bold, while follow-up questions appear afterwards. Follow-up questions will be used as prompts if the teacher appears to have difficulty expounding upon an idea. The interview will be recorded using a digital audio recorder and will be transcribed at a later time. At a follow-up session, the respondent will be given the opportunity to read their responses to the questions and will be given the opportunity to revise their answers if they so desire.

Question 1

Please tell me a little bit about your teaching background. For how long have you been teaching? What subjects have you taught/do you teach? For how long have you taught AP courses?

Question 2

Are you familiar with the Equity Policy Statement of The College Board? Please take a moment to read the statement (I will hand them a copy at this time). What are your opinions of the Equity Policy Statement of The College Board?

Question 3

Are you in favor of allowing any student who expresses the desire to enroll in AP classes (i.e., there are no barriers or pre-requisites for enrollment)?

3A. If yes, what do you see as the benefits? Despite being a proponent of the policy, what challenges have you experienced as a result of open enrollment?

3B. If not, why not? Do you see any benefits to the policy? What challenges have you experienced as a result of open enrollment?

Question 4

My research is exploring the experiences of traditional and non-traditional students in AP courses. (Note: I will hand the participant a copy of the definitions I've used for traditional and non-traditional students in this study and ask them to read it). In your experience, what seem to be the differences and similarities between traditional and non-traditional students in your AP classes?

Question 5

How has the inclusion of non-traditional students affected your teaching of the AP curriculum? How has open enrollment affected the strategies you employ in the classroom? How do classes in which non-traditional students comprise a larger proportion of the overall enrollment differ from those in which the proportion of non-traditional students is smaller?

Question 6

If a student is underperforming in an AP class, why do you believe they choose to remain in the class? Despite a lower-than expected grade, what benefits do they receive by staying in the class? Do you encourage poorly-performing students to remain in the class?

APPENDIX F
SCRIPT FOR INITIAL TEACHER CONTACT

Hello _____,

Thank you for meeting with me. My name is Scott McAlister, and I am currently completing my Doctorate in the Curriculum and Instruction Program in the School of Education at Loyola University Chicago.

My dissertation is entitled “Open Enrollment in Advanced Placement Courses: Experiences of Traditional and Non-traditional Students.”

The purpose of my research is to gain an understanding of your perceptions of the similarities and differences between traditional and non-traditional students’ experiences and contributions in your AP class. In general, a traditional AP student is one who has taken an AP course before and received a C or better. A non-traditional AP student is one who has not taken an AP course before, or one who took an AP course but received a D or even an F.

Do you understand the purpose of my study?

Your participation in this research will require approximately 30 minutes of your time during the initial interview. During this interview, I will ask you a series of questions about your AP class(es). I would also like to meet with you again after I have typed up my notes so I can share them with you. I will do this to make sure I have accurately captured your answers. This second meeting will take approximately 15-20 minutes.

Please understand that I will keep all of your personal information and all school data strictly confidential. I will be the only person with access to your responses from the interview and your name and the school’s name will not be identified at all. A pseudonym will be used to identify you and the school in my final dissertation.

Also, please understand that your participation in this research is completely voluntary. There is no penalty for choosing not to participate, and you can withdraw from participation at any time during the research, for any reason, with no penalties whatsoever.

Do you understand everything I have said? Do you have any questions for me?

Again, thank you for agreeing to meet with me today. I look forward to working with you.

APPENDIX G

TEACHER CONSENT TO PARTICIPATE IN RESEARCH

TEACHER CONSENT TO PARTICIPATE IN RESEARCH

Project Title: Open Enrollment in Advanced Placement Courses: Experiences of Traditional and Non-traditional Students

Researcher: Scott McAlister

Faculty Sponsor: Dr. Ann Marie Ryan, Curriculum and Instruction Program, Loyola University Chicago

You are being asked to take part in a research study being conducted by Scott McAlister for a dissertation project under the supervision of Dr. Ann Marie Ryan in the Curriculum and Instruction Program in the School of Education at Loyola University Chicago. You are being asked to participate because you teach an Advanced Placement class at a high school that utilizes an open enrollment policy for Advanced Placement courses. You will be one of approximately three teachers who will participate in this study. Please read this form carefully and ask any questions you may have before deciding whether to participate in the study. You may contact the researcher by telephone at (219) 902-6047 or by e-mail at smcalister@luc.edu.

Purpose:

The purpose of this study is to better understand the experiences of traditional and non-traditional students in Advanced Placement courses

Procedures:

If you agree to be in the study, you will be asked to participate in a one-to-one interview with the researcher that will take place at your high school. The questions will relate to the experiences of the students in your AP classes and will include your observations of the differences between the traditional and non-traditional students in your classes and how the inclusion of non-traditional students has affected your AP courses. The interview will be recorded by digital audio recorder and will last approximately 30 minutes. You will also be asked to participate in a follow-up session in which you will be given the opportunity to review your responses to the interview questions in order to ensure the researcher has accurately recorded your responses. This will take approximately 15-20 minutes.

Risks/Benefits:

There are no foreseeable risks involved in participating in this research beyond those experienced in everyday life. There are no direct benefits to you from participation, but your input will be helpful to future Advanced Placement students, their families, and school personnel who are considering Advanced Placement courses as part of their course of study.

Compensation:

Upon completion of the interview and the follow-up session, participants will receive a \$15 gift card to their choice of Panera, Starbucks, or iTunes. The researcher will give these directly to the participant at the conclusion of the follow-up session.

Confidentiality:

Only the researcher will have access to the raw data. The identity of all participants, as well as the high school, will be kept strictly confidential. All references to the school and research participants will be done using pseudonyms. The consent forms, audio recordings, and transcripts of the recordings will be stored in a locked cabinet in the researcher's home office. These documents and recordings will be destroyed one year following the final defense and approval of the dissertation.

Voluntary Participation:

Your participation in this study is completely voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.

Contacts and Questions:

If you have questions about this research study, please feel free to contact Scott McAlister at (219) 902-6047 or by e-mail at smcalister@luc.edu. You may also contact Dr. Ann Marie Ryan at aryan3@luc.edu. If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. You will be given a copy of this form to keep for your records.

Participant's Signature

Date

Researcher's Signature

Date

APPENDIX H
SCRIPT FOR INITIAL PARENT CONTACT

Hello _____,

Thank you for speaking with me. My name is Scott McAlister, and I am currently completing my Doctorate in the Curriculum and Instruction Program in the School of Education at Loyola University Chicago.

My dissertation is entitled “Open Enrollment in Advanced Placement Courses: Experiences of Traditional and Non-traditional Students.”

The purpose of my research is to gain an understanding of the reasons your son/daughter enrolled in an AP course and the experience they had while in that course. I also want to investigate how they view success in the course. For example, is it through the grade they receive in the class or on the score on the AP exam, is it the preparation it provides them for college, or is it something else altogether? Finally, if they did not receive as high of a grade as they wanted, I am interested in discussing why they chose to stay enrolled in the class. What were they getting out of the class aside from their grade?

Do you understand the purpose of my study?

Your child’s participation in this research will require approximately 30 minutes of their time during the initial interview. During this interview, I will ask them a series of questions about their experiences in AP classes. I would also like to meet with them again after I have typed up my notes so I can share them with your son/daughter. I will do this to make sure I have accurately captured their answers. This second meeting will take approximately 15-20 minutes.

Please understand that I will keep all of their personal information and all school data strictly confidential. I will be the only person with access to their responses from the interview and their name and the school’s name will not be identified at all. A pseudonym (that is, a made-up name) will be used to identify them and the school in my final dissertation.

Also, please understand that their participation in this research is completely voluntary. There is no penalty for choosing not to participate, and they can withdraw from participation at any time during the research, for any reason, with no penalties whatsoever.

Do you understand everything I have said? Do you have any questions for me?

Again, thank you for agreeing to speak with me today. I look forward to working with your son/daughter.

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VITA

Scott McAlister was born in Lynwood, California, on March 21, 1970. He moved to West Lafayette, Indiana, where he attended K-12 schools and graduated from William Henry Harrison High School in 1988. After graduating from high school, Scott attended Purdue University in West Lafayette and graduated in 1992 with a B.A. in Secondary Education. Scott received a M.S. in Educational Administration from Purdue University Calumet in Hammond, Indiana, in 2000.

Upon graduating from Purdue University in 1992, Scott began his teaching career at Munster High School in Munster, Indiana. Scott taught American History, American Government, and Economics for ten years at Munster, and he also coached football and girls' track. In the fall of 2002, Scott assumed a new teaching position as a member of the Social Science Department at Homewood-Flossmoor Community High School in Flossmoor, Illinois. In the fall of 2008 Scott was named Interim Assistant Principal at Homewood-Flossmoor, and he was named an Assistant Principal in the fall of 2009, a position he still holds.

DISSERTATION COMMITTEE

The dissertation submitted by Scott E. McAlister has been read and approved by the following committee:

Ann Marie Ryan, Ph.D., Director
Associate Professor, School of Education
Loyola University Chicago

James Breunlin, Ed.D.
Clinical Assistant Professor, School of Education
Loyola University Chicago

Paige Dague, Ed.D.
Principal, Reavis High School
Burbank, IL