

Perceptions of Students in Rigorous Courses of Study

**Perceptions Regarding the Inclusion of Students in Rigorous Courses of Study at
Exeter Township High School**

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Dedication

To Lisa, Joey, and Patrick, who motivate me to be the best version of myself every day.

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Abstract

Rigorous courses of study provide students with a variety of academic benefits in high school and during their post-secondary careers. Understanding this information requires high schools to provide Advanced Placement (AP) and dual enrollment opportunities for students, and assist with enrolling students in these courses. Although Exeter Township High School offers a total of 37 AP and dual enrollment courses, the percentage of students enrolling in rigorous courses of study is less than the county and state averages. This mixed-methods study examined the perspectives of teachers, counselors, and administrators at Exeter Township High School and Exeter Township School District to gain a better understanding of their views on enrollment opportunities for students in rigorous courses of study, student preparedness for success in rigorous courses, and the impact of District-level decision-making on students enrolling in rigorous courses of study. Through the review of relevant literature, the collection of survey data, and semi-structured interviews, this study was able to make the following conclusions, potentially impacting low enrollment in rigorous courses of study at Exeter Township High School: participants do not share the same views on student inclusion in rigorous courses of study at the high school, the high school does not have a plan to identify and recruit students with AP and dual enrollment potential to enroll in these courses, the District lacks a curricular plan in core content areas, and the District is not providing AP and dual enrollment teachers with meaningful professional development opportunities.

CHAPTER I

Introduction

The purpose of this research study is to examine the perceptions of teachers, school counselors, and administrators impacting the enrollment of students in rigorous courses of study at Exeter Township High School. In Pennsylvania, the rigorous courses of study indicator provided by the Pennsylvania Department of Education through the “Future Ready PA Index,” explains “The Rigorous Courses of Study Indicator represents the percentage of 12th graders who participated in at least one Rigorous Course of Study, defined as Advanced Placement (AP)/International Baccalaureate (IB)/dual credit, during grades 7-12, or were concentrators in a CTE program of study” (PA Department of Education, 2023d).

This chapter will provide the necessary background information regarding rigorous courses of study at Exeter Township High School, as well as the rationale behind conducting this research study. Additionally, this chapter will outline the study’s research methodology, expected outcomes, and possible fiscal implications relating to the results of the study.

Background

According to data from “Future Ready PA Index,” only 39.9% of 12th graders in 2021-22 participated in a rigorous course of study while attending Exeter Township High School. The statewide average in 2021-22 was 55.9%, which indicates students at Exeter Township High School are enrolling in Advanced Placement, dual enrollment, or concentrated CTE courses at a lower rate compared to students across the state. This data point has been consistent for at least the past two years of recorded data with only 38.5% of

12th graders in 2020-2021 participating in a rigorous course of study while attending Exeter Township High School (PA Department of Education, 2023c).

Exeter Township School District (ETSD) is a suburban school district in Berks County, PA. In comparison to other districts in the county with similar demographics, ETSD does not enroll the same percentage of students in rigorous courses of study. This has become a major topic of debate within the District, because Exeter Township High School ranks lower than most high schools in the county in various metrics relating to advanced coursework. In this past year, the school board and superintendent have made it a priority to increase enrollment in Advanced Placement (AP) and dual enrollment courses at the high school. A new position was developed to help promote rigorous courses of study called the Supervisor of Academic Enrichment. Additionally, a new 9th grade AP course was approved for this school year, AP Human Geography, to act as a gateway to the advanced level coursework for students at the high school. In my own conversations with many stakeholders, there seems to be a sense of urgency regarding this District initiative, which I was directly involved in as an administrator at the high school. More recently, I have transitioned to another administrative role within the District, but I am still working closely with the Supervisor of Academic Enrichment, high school administrators, high school counselors, and high school teachers to increase enrollment in AP and dual enrollment courses. Some of the activities I am directly involved in include the following: creating and maintaining a professional learning community for AP teachers, creating and presenting information to parents and students regarding AP and dual enrollment programs at the high school, and working with high school teachers to promote AP and dual enrollment culture throughout the high school.

Research Questions

1. What perceptions do secondary teachers, school counselors, and administrators have regarding the inclusion of a higher percentage of students in rigorous courses of study at the senior high school?
2. What perceptions do secondary teachers, school counselors, and administrators have regarding student preparedness for rigorous courses of study at the senior high school?
3. What perceptions do secondary teachers, school counselors, and administrators have regarding District-level organization and planning and its impact on student enrollment in rigorous courses of study at the senior high school?

Expected Outcomes

This study focuses on the perceptions of various stakeholders regarding the enrollment of students in rigorous courses of study. Since the enrollment of students in rigorous courses of study is a significant metric utilized by the state's department of education, as well as other institutions, to rank schools and districts nationwide, there is a need to continually evaluate the academic offerings being provided to students. Surveying relevant stakeholders will provide information, which can inform future decisions revolving around staffing, resources, curriculum, and professional development. Furthermore, information gained from stakeholders will identify areas of strength and concern within the District and the high school relevant to rigorous courses of study. I anticipate this study will provide a blueprint for future discussions and decisions made at the central administrative and building level concerning AP and dual enrollment programs in the District moving forward.

Fiscal Implications

Any costs associated with conducting this research study are indirect. A survey was administered to 28 participants through Google Forms, which is a platform already owned and operated by the District. Follow-up interviews may be conducted with some participants through the use of Google Meet, which is also already owned and operated by the District. Participants volunteered their time to participate in this research study, and I will invest my own time to collect and analyze data from all participants.

The broader fiscal implications of this study will be the decisions made by the District and the high school relating to the offerings of AP and dual enrollment courses to high school students. If more AP and dual enrollment courses are added to the high school curriculum, there will be a need to purchase instructional resources, provide professional development for the teachers of those courses, and compensate teachers for writing curriculum for new courses. Furthermore, if there is an increase in AP and dual enrollment course registration by students, the District and high school will need to consider adding or repurposing staff to accommodate this increase.

There are also fiscal implications for families and students enrolling in AP and dual enrollment courses. On one hand, successful completion of these courses may result in offsetting post-secondary costs for families. However, enrolling in AP and dual enrollment courses comes with a fee for the exam or tuition through participating colleges. Moreover, the District and school may see an increase in students needing assistance with these costs, potentially presenting another fiscal implication to this research study.

Summary

Although the primary focus of this research study centers around the course offerings and course enrollment at the high school, additional students and stakeholders throughout the District may be impacted by this study. Chapter I detailed the background of this study, as well as the rationale for conducting research on AP and dual enrollment programs at Exeter Township High School. Additionally, this chapter presented the research questions to be analyzed through action research with the expected outcomes and fiscal implications of this study. Chapter II will provide a review of relevant literature relating to AP and dual enrollment courses throughout the country.

CHAPTER II

Literature Review

This chapter describes two main programs high schools use to include students in rigorous courses of study: Advanced Placement programs and dual enrollment programs. These are the same two programs Exeter Township School District utilizes to provide students with opportunities to take rigorous courses of study while in high school.

In this literature review, the history of Advanced Placement and dual enrollment programs will be explained, along with a review of research relating to the benefits, concerns, and criticisms of students participating in these programs. Furthermore, this literature review will examine research regarding perspectives from teachers, school counselors, and administrators concerning Advanced Placement and dual enrollment programs.

Historical Overview of the Advanced Placement Program

The Advanced Placement (AP) program is an academic program in which high school students take classes offered at their high schools taught by their high school teachers, with students earning postsecondary credit or placing out of introductory courses if their exam score meets the threshold established by a participant's college of matriculation (Klopfenstein & Lively, 2012). AP exams are scored on a scale from one to five with many colleges and universities awarding introductory course credit for scores of three or higher (College Board, 2022).

As Handwerk et al. (2008) explains:

The AP exam typically includes a series of multiple-choice questions and an essay section, scored electronically and by human readers, respectively. Performance on the assessment may imply eligibility to receive college credit and/or placement from the institution of the student's choice. Students are graded on a five-point scale, in which a score of 5 reflects the highest level of mastery of the AP course content. A grade of 3 on an AP exam often qualifies a student to receive course credit or advanced placement from participating institutions, though the decision to award credit varies across institutions and subjects within institutions. (p. 7)

The AP program was begun shortly after the Second World War as a way of engaging and challenging the highest-achieving students at the best United States high schools. In 1951, the Ford Foundation created the Fund for the Advancement of Education (FAE) to promote rigor in secondary education and provide support for educational work ranging from curriculum reform to teacher training, while focusing primarily on gifted and talented students (Schneider, 2009). Two projects were financed by the FAE in the early 1950s. The first project, which was led by John Kemper at the Andover Academy, focused on the problem of students repeating introductory courses in college after receiving instruction in those subjects in high school. The second project, called the Kenyon Plan, brought together high school teachers, university professors, and representatives from the Educational Testing Service. This group developed tests based on high school course outlines and syllabi, which resembled the rigor of introductory college-level courses (Santoli, 2002). The latter project became known as the Advanced Placement Program in 1955, and Charles Keller became the first director, as the College Board organization took over its administration (Schneider, 2009). AP still operates in a similar manner today. The College Board sets the curriculum for

each course and administers a standardized final exam (Klopfenstein & Lively, 2012). Over the years, AP has grown consistently from 1,229 students taking exams in 1955 to roughly 2.5 million students in 2021 (College Board, 2022; Santoli, 2002). Today, the AP program is one of the most common ways American high schools provide advanced academic content to high-achieving students (Warne, 2017).

Historical Overview of Dual Enrollment Programs

Dual enrollment programs are collaborative efforts between high schools and colleges, in which high school students are permitted to enroll in college courses. Unlike AP courses, which require students to pass an exam to potentially earn college credit, dual enrollment students earn college credit by successful completion of a college course, while simultaneously enrolled in high school (Allen, 2010).

Dual enrollment programs began in a decentralized manner in the 1970s and 1980s to keep talented students challenged academically and to help smooth the transition between high school and college. (Klopfenstein & Lively, 2012). Many states, during this time, started implementing policies allowing high school students to attend community colleges (McCarthy, 1999). Dual enrollment courses vary in structure. Some are offered at high schools, while others provide high school students the chance to take courses at a college with regularly attending college students. Students are typically admitted as non-degree students to the postsecondary institutions offering the dual enrollment courses (Allen, 2010). Dual enrollment programs have proven to be a popular education policy with nearly every state implementing some form of dual enrollment program (Nelson & Waltz, 2019). Dual enrollment is as diverse as the state laws and individual agreements negotiated between colleges and high schools governing the partnerships. Programs are located on college

campuses or in high schools and are taught by college or high school faculty. Students earn college credit from the sponsoring college by fulfilling course requirements (Klopfenstein & Lively, 2012). Today, dual enrollment is on the rise nationally with more than a million students participating in various programs and over 70% of them administered through community colleges (Kurlaender & Rodriguez, 2022).

Advanced Placement Programs

Benefits

Several studies and scholarly articles have presented numerous benefits gained by students who participate in Advanced Placement (AP) programs while in high school. Being exposed to college-level material is one such benefit. Manzo (2010) explains students in AP courses are challenged by rich content, which makes them think at high levels and develop academic discipline. Providing opportunities for students to think critically, while gaining advanced skills, promotes academic rigor, which better replicates post-secondary learning.

It has been suggested having students demonstrate their ability to complete college-level work by increasing AP course participation rates is another way a high school can best prepare their students for post-secondary education (Dougherty et al., 2006). To support this claim, Dougherty et al. (2006) followed a Texas statewide cohort of 8th grade students, who graduated in 1998 from high school and enrolled in a Texas public college or university within 12 months after high school graduation. The researchers concluded the percentage of a high school's students who take and pass AP exams is the best indicator of whether the school is prepping its students to graduate from college.

Dougherty et al. (2006) suggests:

The importance of AP exam results indicates the need for schools and districts to pay close attention not only to the quality of teaching in Advanced Placement courses but also to improving the academic preparation of students prior to their enrollment in those courses. (p. 14)

These conclusions suggest high schools play an important role in preparing students for college by exposing them to AP programs and preparing them for AP exams.

This view is supported by Flowers (2008), who argued students who participated in AP programs were more likely to score higher on college entrance examinations compared to those students who did not participate in AP programs. Data from this study came from the National Education Longitudinal Study of 1988 (NELS: 88/2000). The goal of this study was to measure the impact of individual-level and institutional-level characteristics on academic achievement, social development, post-secondary education experiences and career attainment. In 1988, a baseline sample of approximately 25,000 students was compiled, and this group was resurveyed in 1992, 1994, and 2000. By 2000, the sample had shrunk to approximately 15,000 from the original representative sample in 1988. Even with this decrease in sample size, this study produced significant findings relating to the benefits of AP participation.

Flowers (2008) examined the study for AP program participation, discovering the following:

In the NELS: 88/2000 sample, approximately 28% of the respondents reported that they had participated in AP programs, 50% reported that they did not participate in AP programs. Of the NELS: 88/2000 sample that participated in AP programs during

the period under study, the racial breakdown was as follows: African Americans (13%), Asian or Pacific Islanders (5%), Hispanics (10%), and Whites (72%). (p. 124)

Using descriptive data analysis, Flowers (2008) came to the following conclusions:

respondents who participated in AP programs were more likely to score higher on a college entrance examination than students who did not participate in AP programs, respondents who participated in AP programs reported significantly higher undergraduate grade point averages (GPAs) than students who did not participate in an AP programs, and AP program participation in high school appears to be an important factor in long-term educational attainment and financial success with AP program participants reporting higher annual incomes compared to those who did not participate in AP programs. Although this data seems significant, it is important to note all information was self-reported and the researcher only utilized descriptive analysis to come to these conclusions. Keeping this in mind, other researchers have examined the impact of AP programs preparing students for college-level coursework.

Studies have argued students, who are exposed to college-level content and skill development in high school, will better prepare them for introductory or intermediate college-level courses. A study was conducted by Morgan and Klaric (2007) examining data from 72,457 students of the incoming class of 1994 attending 27 collegiate institutions. This study followed students for five years to examine the amount of course work and performance in subject areas closely related to their taken AP exams, graduation rates, and college majors. Using a variety of statistical analysis models, the researchers concluded the following: students with AP grades of a three or better had higher grade averages in intermediate college courses compared to those non-AP students who first took an

introductory course, course grade averages for students with AP grades of a five were much higher than those for both AP students earning lower grades and students with no AP experience, AP students graduate earlier than non-AP students, and AP students enroll in more course work in the area of their AP exam compared to non-AP students. An important note for this study is to recognize the researchers were only examining students who took AP exams as “AP students.” This can be somewhat misleading, since not all students who enroll in an AP course take the end of the year exam. Even with this consideration, the research does suggest some significant findings related to the benefits of participating in AP programs and taking AP exams for high school students as they transition to college.

Similar research was conducted by Scott et al. (2010), who studied a group of 9,075 participants for two fall semesters in college to determine if students with AP credit and similar ACT and SAT scores earned higher grades compared to those without AP credit, and if students with AP credit and similar high school class rank earned higher grades in their first semester compared to those without AP credit. The researchers found students with similar high school rank or SAT scores with AP credit significantly outperformed their peers with no AP credit in equivalent courses in college. These findings suggest there is a definite advantage to enrolling in AP programs in high school and performing well on the end of year AP exam, especially when students transition to college.

This view is also supported by Patterson et al. (2011), who studied the effects of AP exam participation and performance on college grades in nine subject areas and compared them with non-AP examinees. The sample for this study originally included 195,099 first-time and first-year students who enrolled in college in 2006, but the sample size was reduced to 147,051 students when limited to those with complete data from the SAT, high school

grade point average, high school characteristics, and at least one grade in one course in the nine subjects being examined in this study. After applying descriptive statistical analysis and cross-classified multilevel model results, the researchers were able to come to some interesting conclusions. First, across all nine-subject areas, there was support to claim students who had higher mean scores on AP exams performed better in first-year courses in those disciplines. Second, students with a mean grade of above a three on the exam outperformed non-AP examinees in seven of the nine subject areas. This study was limited to only include AP exam participants, and not those enrolled in an AP courses, but who chose not to take the exam. Even with certain limitations, this study seems to support the claim the AP program prepares students for college-level course work.

Other studies have considered the relationship between AP participation in high school with college graduation and financial benefits. It has been suggested students who have the opportunity to earn college credit prior to enrolling in college can shorten the length of time a student takes to earn a bachelor's degree, thus saving the student money on tuition costs, while not wasting time taking courses they have already mastered (Santoli, 2002).

Smith et al. (2017) conducted research using student-level data from high school graduation cohorts from 2004-2009, College Board data on AP examinees, and National Student Clearinghouse data to study the impact AP exam scores have on college completion and subsequent exam-taking. The researchers implemented a regression discontinuity design using continuous raw AP exam scores for over 4.5 million students. The results of this study suggest students who receive college credit on at least one AP exam are approximately one to two percentage points more likely to receive a bachelor's degree within four years compared to those students who did not receive any college credit through AP exams. This research

seems to support previous research conducted by Morgan and Klaric (2007), who argued AP students within all racial/ethnic and gender groups graduate earlier than non-AP students. The result is less money spent by students on tuition costs and an increase in wage and career financial benefits, because AP credit receiving students will enter the workforce sooner than non-AP credit receiving students.

In addition to these findings, Smith et al. (2017) found higher AP exam scores received during a student's junior year increases the probability of a student taking more AP exams during their senior year of high school. This suggests a cumulative effect to AP exam taking, which may translate into the receipt of more AP credit when matriculating to college, thus potentially saving students additional money in future tuition payments.

The existing research on AP program benefits seems to support several academic and financial benefits to students enrolling in AP courses and taking AP exams while in high school. Students benefit in high school from having the opportunity to receive college credit for high school courses and being academically better prepared for college-level course work (Santoli, 2002). Considering these points, it is no surprise the growth and availability of AP programs over the past 70 years throughout high schools in the United States.

Concerns and Criticisms

Although there are several benefits to students participating in AP programs throughout the United States, numerous studies and scholarly articles have been written to present specific concerns and criticisms of the AP program.

Data from several studies have identified a disparity in AP opportunities among low-income and minority students. Handwerk et al. (2008) merged College Board AP data from

2003-2004 with data from all United States high schools gathered from the United States Department of Education to determine the availability of AP programs in high schools, the proportion of the nation's public high school students who participate in AP programs, and the level of student performance on AP exams among public high school students. The results of this study suggest just five percent of students participate in AP programs at high schools which offer AP courses. Furthermore, only two percent of students who participate in AP programs actually take the AP exam and earn a score of 3 or higher.

Regarding low-income students, Handwerk et al. (2008) assert:

Regardless of the type of school they attend — large or small, urban or rural — very few low-income students are taking AP exams. The picture is even bleaker with regard to their exam performance. Across most levels of AP program intensity, regardless of cluster, the median proportion of low-income students participating in the AP program and earning a grade that will gain them college credit and/or placement is 0 percent. (p. 23)

This information is supported by research completed by Dougherty et al. (2006), who found “only one low-income student in eight who took one or more academic Advanced Placement courses passed any of the corresponding exams” (p. 14).

Additionally, Handwerk et al. (2008) found the median percentage of African American students who participate and perform well on AP exams is nearly zero regardless of program availability and intensity. The data in this report illustrates specific AP program participation and performance gaps exist among students throughout United States high

schools, which can lead to certain student populations lacking the skills necessary to be able to complete college-level course work.

Building on the research of Handwerk et al. (2008) and others, Judson and Hobson (2015) completed analysis of overall AP participation and performance over time. The researchers used data from the years 1992 to 2012, considering each year as a unit of analysis, so regression analysis could be applied to determine if a significant trend of mean scores exist across the years. Over the course of the years in question, although the number of exams taken increased drastically, the percent of students receiving a three or higher on all AP exams decreased from 65.5% in 1992 to 59.2% in 2012. Notably, decreases in pass rates were most apparent in groups typically considered underrepresented (American Indian, Black, and Hispanic), even though these groups saw some of the largest percentage increases in AP participation rates during the time period of this study (Judson & Hobson, 2015). This data suggests many students are enrolling in AP classes, but are unprepared for the level of course work required to receive a passing score on the culminating AP course exam. The low percentage of students passing AP exams is a main criticism of AP programs across the nation.

Considering the concerns some researchers have presented regarding AP programs, other researchers decided to investigate the validity of AP courses by comparing AP courses with honors level courses in the same subject area. In a 2007 research study, Sadler and Tai examined the relationship between the grade earned and type of science course taken in high school. The researchers collected information from 55 randomly chosen colleges and universities to establish the student sample of 7,613 students, who were enrolled in introductory science courses. The researchers created several statistical models to help

account for the variation in college science grades. After analyzing the data, Sadler and Tai (2007) concluded students who took AP or honors science courses in high school perform better compared to those who took regular science courses. However, on average students who received a B or C in their AP science course do worse in their introductory college course compared to those who received an A in their regular science course. This suggests merely enrolling in AP science courses does not assist students in introductory college science courses. Since the researchers did not control for teacher background, it is possible the overall result of students performing better in AP and honors science courses compared to those in regular science courses could be a result of better quality of teaching. This study presents multiple concerns of AP programs, but mainly centers around the impact of performance over mere participation.

Another study to examine this concept of performance over participation in AP programs was conducted by Warne et al. (2015). This study used data from every public high school student in Utah from two cohorts. Both the 2010 and 2011 graduation year cohorts contained over 45,000 students who spent at least part of their high school careers in Utah public schools. Each cohort was divided into four categories: students who did not take an AP course, students who took an AP course but did not take the AP exam, students who took the AP course and the exam but did not pass the exam because they receive a score of one or two, and students who took the AP course and exam and passed the exam because they receive a score of three, four, or five. Data were also collected from multiple files consisting of student demographic data, ACT scores, mathematics and English course enrollment data, and AP scores. After conducting a statistical analysis of the data, the researchers concluded merely enrolling in an AP course is not very beneficial for students. According to the results

of the study, high school students seem to only benefit from AP programs when they take the AP exam and obtain a score of a three, four, or five. With the number of students taking AP courses each year, and not receiving a passing score, this study would suggest those students may benefit from other options in high school.

Regarding this point, Warne et al. (2015) explains:

Therefore, it is likely that many students in American high schools would have little chance of passing an AP exam. For these students, merely enrolling in the course may not be the best use of their and their school's time, money, and resources. (p. 413)

A main limitation of this study is there was only consideration of student variables, so school and teacher variables were not examined. Nonetheless, this study still continues to bring into question if all students should be recommended for AP courses, since the results suggest only those who perform well on the AP exam benefit from the experience.

The existing research regarding concerns and criticisms of AP programs seems to revolve around two central themes: equity and participation versus performance. Some researchers have attempted to establish which groups of students are underserved and underrepresented across the nation in AP programs, while other researchers have examined the relationship between AP course enrollment and AP course and exam performance.

Dual Enrollment Programs

Benefits

Several research studies and scholarly articles have been published enumerating the benefits of dual enrollment programs throughout the United States, and the impact those

programs have had on their participants academically and financially. Some authors have argued dual enrollment can be an introduction to college-level work in high school and encourage future college attendance by showing students they are capable of higher-level work. Additionally, students can benefit from a reduction in the overall cost of college by receiving college credit in high school and potentially shorten their time to earning a degree by participating in dual enrollment programs (Edwards & Hughes, 2011).

These views are supported by Morrison (2007), who argues those students, who participated in North Iowa Area Community College (NIACC) programs while in high school, displayed higher levels of academic achievement compared to students who did not participate in NIACC programs and graduated earlier from NIACC schools with an associate degree than students who did not participate in NIACC programs. Data for this study was obtained from 23,023 student records at NIACC. Specifically, the study found those students who participated in NIACC programs in high school had higher high school and college GPAs and had higher ACT composite scores compared to those students who did not participate in NIACC programs (Morrison, 2007).

Included in the discussion of this study, Morrison (2007) suggests the following:

Early success in college courses for high school students is a powerful motivator and it provides an enhanced self-concept. It is probably these increased expectations, enhanced self-concepts and reinforcing success support systems that yield the incredible outcomes observed in this study. (p.3)

Even though this study only examined NIACC students, the findings suggest supportive arguments for specific academic benefits of dual enrollment programs.

In a similar study conducted by Allen and Dadgar (2012), the researchers examined the impact of dual enrollment on students' college credit accumulation, GPA, and retention. The sample included student data from first-time freshmen who entered one of the 17 City University of New York's (CUNY) colleges in the fall of 2009 and who had graduated within 15 months from a New York City public high school. This resulted in a total sample size of 22,962 students. Furthermore, the researchers linked this data with data from CUNY's College Now dual enrollment program and CUNY's Database, which created a linked dataset for all students who graduated from all New York City high schools and enrolled in a CUNY college (Allen & Dadgar, 2012).

Allen and Dadgar (2012) provide the following description of the College Now program in New York City:

The City University of New York's College Now program is the nation's largest dual enrollment initiative in an urban public school setting. The program, like many dual enrollment programs across the United States, offers high school students the opportunity to enroll in college courses and earn college credit while still in high school. Even though the College Now program models at each of the seventeen CUNY campuses incorporate varying course structures, locations, instructor affiliations, and so on, the programs are all similar in terms of overall administrative structure and goals. The program's stated goals are to improve graduation rates of NYC public school students, increase their level of preparation for college, and enable greater success in college. College Now is considered a comprehensive dual enrollment program because, in addition to college credit courses, it also offers

students opportunities to enroll in zero-credit college preparation courses and workshops that aim to prepare students for college-level work. (p. 12)

The results of this study suggest completing one or more College Now dual enrollment courses is associated with substantial and positive gains, including earning more credits during the first semester of college and a higher GPA (Allen & Dadgar, 2012). Moreover, this study found students who participated in the College Now program were more likely to enroll in a third semester of college, suggesting dual enrollment programs help with college retention (Allen & Dadgar, 2012). Even though the studies of Morrison (2007) and Allen and Dadgar (2012) had certain limitations, such as focusing on localized populations, the academic benefits to dual enrollment programs in both Iowa and New York City are similar in many aspects, including higher college GPAs and increased credit accumulation compared to students who did not participate in dual enrollment programs in high school.

Other studies have considered the relationship between dual enrollment programs and college readiness. In one such study, Grubb et al. (2017) examined the contribution of dual enrollment participation on the need for community college remediation and community college completion rates. The researchers studied first-time, full-time public high school students attending community college between 2008 and 2012. The study found the outcomes of dual enrollment participants to be superior to those of non-participants. Less than 4% of dual enrollment participants were placed in remediation compared to over 11% of non-participants (Grubb et al., 2017). Additionally, the study found dual enrollment participants were 28% more likely to complete an associate's degree within three years of enrollment in a community college, thus underscoring the academic preparedness of dual enrollment students (Grubb et al., 2017). Although this study had a relatively small sample

size of 1,232 students and lacked student data regarding transferring to other institutions, it does contribute to the discussion regarding the academic benefits of dual enrollment programs, specifically relating to college readiness.

A similar study related to college readiness was conducted by An and Taylor (2015), which supports the findings from Grubb et al. (2017). Using existing data from the Wabash National Study of Liberal Arts Education (WNSLAE), An and Taylor (2015) examined survey results from students enrolled in one of 23 four-year post-secondary institutions in 2008. As part of the WNSLAE study, over 4,000 students were surveyed in the fall of 2008 and resurveyed in the spring of 2009 (An & Taylor, 2015).

After analyzing the information in the WNSLAE study, An and Taylor (2015) concluded the following regarding the impact of dual enrollment on college readiness:

The evidence from this study showed that dual enrollment students displayed higher levels of college readiness at the end of the first year of college than non-accelerators. These results support prior research and suggest that dual enrollment contributes to higher levels of students' academic motivation, stronger study habits, clearer college expectations, higher levels of engagement with college faculty, and academic knowledge and skills. (p.17)

Although this data is limited by the oversampling of liberal arts colleges, the results are consistent with prior research conducted on college readiness and dual enrollment programs, which further lends to the argument dual enrollment programs prepare students for college-level coursework.

Though the research to date on dual enrollment programs tends to focus on the academic benefits gained by students for their participation, there is also a financial consideration to earning college credits while still in high school. Findings from multiple studies suggest students who enter college with dual enrollment experience in high school will complete their degree programs in a timelier manner compared to non-dual enrollment students (Allen & Dadgar, 2012; Grubb et al., 2017; Morrison, 2007).

Further contributing to this research, Partridge et al. (2021) analyzed students at a four-year public institution in metro-Atlanta. Researchers examined student records of 1,931 dual enrollees to determine the average number of credit hours attempted and earned from 2015 through 2019. To calculate the averages into potential savings, the researchers used the average per credit hour cost of tuition in the University System of Georgia (Partridge et al., 2021). The findings within this sample suggest the average dual enrolled student attempted 18.58 credit hours and earned 17.84 hours through dual enrollment equating to a savings of \$4,122 per student (Partridge et al., 2021). Furthermore, the researchers concluded the average dual enrolled student should be graduating at least a semester earlier compared to their non-dual enrolled peers potentially allowing them to begin their careers sooner than their peers (Partridge et al., 2021). These findings support previous research relating to degree attainment and provide support for financial benefits of dual enrollment programs.

The existing research on dual enrollment benefits focuses on the impact of providing college-level coursework to high school students examining the academic and financial benefits for the students. Additional research focuses on the impact these programs have on college readiness and degree attainment from a post-secondary institution for students who participated in dual enrollment programs.

Concerns and Criticisms

While numerous research studies and scholarly articles present benefits to dual enrollment programs, other researchers and authors have presented concerns and criticisms based on a lack of significant data to support the impact dual enrollment programs have on degree or certificate attainment, as well as the lack of access to dual enrollment programs for students from lower socioeconomic status and minority groups.

It has been suggested dual enrollment students benefit academically from taking college courses while in high school. However, there is inconsistency with this argument, given research conducted by Speroni (2011), who examined data from the 2001 and 2002 of high school graduating cohorts in certain Florida counties and found no evidence to suggest simply taking dual enrollment increased a students' likelihood to graduate from high school, enroll in college, or complete college.

These findings were supported by Crouse and Allen (2014), who examined data from a much larger sample compared to Speroni (2011). In their study, Crouse and Allen (2014) analyzed a sample of 186,823 students from 14 community colleges in Iowa spanning over five years from 2002-03 through 2006-07. Although dual enrollment students were more likely to enroll at four-year institutions, an examination of the data from course performance showed taking community college courses while in high school was associated with a very small difference in first year course grades at four-year institutions (Crouse & Allen, 2014). Crouse and Allen (2014) also examined student demographic information in their study.

When considering access to dual enrollment courses in high school, Crouse and Allen (2014) found the following within their research:

Another concern highlighted by the results is the fact that fewer racial/ethnic minority students are taking advantage of the DE program. Of the minority high school students who take community college courses, only 33% enroll while in high school, with African-American students having the lowest participation rate (23%). This compares to 46% of nonminority students. (pp. 509-510)

This study was limited to Iowa's high school students and Iowa's community colleges, which does limit its overall impact due to the lack of racial and ethnic minorities in the sample based on Iowa's general demographics.

Even with this consideration in mind, there is evidence dual enrollment programs are not reaching all students equally and may not be having the same academic impacts others have argued in their research. These views are supported by Spencer and Maldonado (2021), as well as Ison (2022).

Spencer and Maldonado (2021) examined an analytic sample of 10,980 students representing over 18,000 public schools throughout the United States of America, and found access to dual enrollment programs to be unevenly attributed amongst public schools. According to their research, schools with a population of 75% or more of students of color are 14 percentage points less likely to offer dual enrollment programs compared to schools with predominately White populations (Spencer & Maldonado, 2021). Additionally, the study found Black and Hispanic/Latino students, students from lower socioeconomic backgrounds, and those with less-educated parents, have a lower probability of participating in dual enrollment programs compared to White students and those from college educated families (Spencer & Maldonado, 2021). This research suggests certain student groups are not

being provided the same access to dual enrollment programs as compared to other student groups throughout the country.

Ison (2022) presents different concerns relating to dual enrollment programs. Using data from a longitudinal study by the National Center for Education Statistics, which collected data from over 18,000 full-time college students from over 2,000 institutions beginning their post-secondary careers during the 2003 to 2004 school year, the researcher was able to analyze a data collection sample of 16,680 students (Ison, 2022). The main question being examined in this study was the impact of dual enrollment programs on post-secondary credential obtainment, which includes a certificate, associate degree, or bachelor's degree. Completion percentages were collected three and five years after students began their postsecondary careers (Ison, 2022). Although students who took dual enrollment courses had a higher likelihood of obtaining a bachelor's degrees, the information was mixed for associate degrees. Students who did not take dual enrollment courses were more likely to obtain an associate degree after five years of beginning their postsecondary career compared to those students who took dual enrollment courses (Ison, 2022). This suggests dual enrollment programs are only beneficial to some students. Furthermore, Ison (2022) was able to demonstrate dual enrollment opportunities do not increase the likelihood of bachelor's degree completion for Black or Hispanic/Latino students, which further contributes to the argument of inequality surrounding dual enrollment programs.

In general, the existing research on the concerns and criticisms of dual enrollment programs includes two primary arguments. First, dual enrollment programs are not accessible to all students, and not all students, specifically lower socioeconomic students and minority students, are participating in dual enrollment programs compared to White students from

higher socioeconomic classes. Second, even with some academic benefits to dual enrollment programs, not all students benefit equally from these programs and the impact is not widespread across all student groups.

Rigorous Courses of Study and Teachers, School Counselors, and Administrators

Although numerous research studies have been conducted over the years to study the benefits and concerns of Advanced Placement (AP) and dual enrollment programs, less research has focused on the impact AP and dual enrollment programs have had on teachers, school counselors, and administrators, along with their views on overall programming.

Advanced Placement and Teachers

Attempting to ascertain the influence of AP programs on teachers and students from the perspective of AP teachers has been a goal of various researchers throughout the years. One such study was conducted by Herr (1991), who gathered information regarding teachers' views on the influence of the AP program on curriculum, instruction, and professional development. This study collected information from AP teachers from two data sources. First, the researcher collected information from interviews with 19 AP biology teachers from Southern California, who represented private, public, urban, suburban, and rural high schools (Herr, 1991). Second, the researcher sent questionnaires to teachers in both California and New York, who taught AP and honors biology, chemistry, and physics, with a total of 847 teachers responding to the survey (Herr, 1991). The findings from this study suggest teaching AP courses increases the amount of time a teacher works on professional development activities related to the subject matter in comparison to teaching honors or college preparatory classes. For instance, teachers reported when teaching AP courses, they are much

more likely to read journals, participate in professional organizations, seek further training, and keep current in their disciplines (Herr, 1991). Moreover, 65% of teachers claimed their AP course environment was more intellectually stimulating compared to their honors course environment, and they felt the AP examination validated their performance as a teacher (Herr, 1991). The main weakness of this study is the timeframe when it was conducted, since AP programs have grown significantly in recent decades. However, other more recent studies have supported and expanded on the findings from this study.

Duffet and Farkas (2009) conducted a research study through the Thomas B. Fordham Institute, which collected data from a national survey of 1,024 public school teachers who are currently teaching at least one AP course, and four focus groups in Maryland, Texas, Utah, and Wisconsin. The study focused on two primary research themes: an explanation for the growth of the AP program and the impact the growth has had on the quality of the program.

Duffet and Farkas (2009) presented six key findings from their study related to these two primary themes:

- The AP Program's tremendous growth is largely driven by student demand. Students appear, however, to be focused on AP for utilitarian or pragmatic reasons, not intellectual aspirations.
- AP's growth is also boosted by district and school policies. High schools seek to burnish their reputations by showcasing AP; they've mostly done away with gatekeeping (the practice whereby school personnel recruited some students into AP and discouraged or ignored others) for the program.

- The overall quality of the AP Program remains strong, despite its growth. Teachers report that course rigor, exam integrity, and student scores have changed little in the last several years.
- But there are warning signs that the quality of the AP program is threatened, mostly because of concerns about declining student aptitude and skills.
- AP teachers regard AP exams as legitimate assessments of learning that safeguard quality — a sharp and intriguing contrast to most K-12 teachers' unenthusiastic attitudes toward standardized tests and assessment-based education quality control in general.
- AP teachers working in the nation's poorest schools report dismal student performance on the AP exam. (Duffet & Farkas, 2009, pp. VI-VII)

Similar to research findings presented by Herr (1991), teachers in this survey considered the AP examination to be a valuable asset to maintain the quality of the program and reflect how they teach. In fact, 78% of survey respondents stated AP exam scores at least partly reflect how well they teach, and 86% of AP teachers surveyed stated AP exams effectively maintain the quality of the coursework (Duffet & Farkas, 2009).

Building on the research by Duffet and Farkas (2009), Judson et al. (2019) examined the goals teachers have for their students in their AP classes, as well as the techniques teachers used to encourage students to enroll in AP courses and take the AP exam. Researchers sent an email request to all publicly available email addresses to every high school math and science teacher in Arizona to complete an online survey, which yielded 143 completed surveys from science and math AP teachers (Judson et al., 2019). The results of the survey indicate the two goals teachers place the highest emphasis on for their AP students

were for them to experience college-level coursework and to build confidence in the subject area (Judson et al., 2019). Furthermore, among the 89 teachers who indicated exam completion was not required in their course, 66% indicated they strongly encourage their students to take the AP exam, and the most likely strategy to motivate students to take the AP exam is to waive their final course exam (Judson et al., 2019). Supporting studies by both Herr (1991) and Duffet and Farkas (2009), the results by Judson et al. (2019) suggests teachers place a high value on students taking the AP exam. According to this study, teachers believe the value of AP courses comes from providing a full college-level experience, including a culminating examination, to their students.

These studies suggest AP teachers see a value in teaching AP courses for themselves and for their students by enriching their own educational practices, and by helping students gain content and skills in high school, thus better preparing the students for college.

Dual Enrollment Programs and Teachers

With the growth of dual enrollment programs across the nation throughout the 1980s and 1990s, questions began to rise regarding the quality of instruction high school teachers were providing students enrolled in their college-level dual enrollment courses. A comparative study was conducted by Hebert (2001), which followed two groups of students enrolled in dual enrollment mathematics courses during a five-year period at a community college in Florida. In this retrospective study, the first group of students were instructed by high school faculty in their dual enrollment mathematics courses, while the second group were instructed by college faculty in similar courses. All students completed high school and their subsequent mathematics coursework at one of Florida's 10 state universities (Hebert, 2001). The student sample in this study included all dual enrollment students at the

participating community college who receive a grade of a “C” or better in their college-level mathematics course during a time period of five years from 1994 to 1999 and all the dual enrollment courses were taught on high school campuses. The total sample studied under these conditions was 1,833 students (Hebert, 2001). The researcher found those students with high school teachers for their mathematics coursework had significantly higher grades in subsequent coursework at the universities in comparison to those students who were taught by college faculty. These findings held firm regardless of the university the students attended, the student’s gender, or the student’s ethnicity (Hebert, 2001).

When comparing high school teachers and college faculty, Hebert (2001) suggests the following advantages for high school teachers instructing students in dual enrollment courses:

Most high school teachers, in addition to the master’s degree in the discipline, have a degree in education. Unlike many college faculty, most high school teachers have a background in such things as learning styles, teaching techniques, developmental stages, and assessment and evaluation. This additional background may prove extremely beneficial in teaching high school students college-level coursework. (p. 34)

This argument is further supported by Mehl et al. (2020), who argued when dual enrollment is located in high schools, and taught by high school teachers, they can better monitor students’ behavior, academic progress, and provide differing levels of support when needed. Mehl et al. (2020) presented this information in a summary report through the Aspen Institute in a guide to accelerating students through dual enrollment programs.

Other studies have considered teachers' perspectives on the benefits of students participating in dual enrollment programs. One such study was conducted by Ferguson et al. (2015), who conducted a qualitative study comparing the perceptions of three faculty groups: qualified high faculty teaching dual enrollment, college faculty teaching dual enrolled students on a college campus, and college faculty teaching community college student on a college campus. The data for this study was based on analysis of course syllabi and semi-structured interviews with 15 participants (Ferguson et al., 2015). Although the study was limited in the small sample size, the findings establish a common theme regarding the academic intensity of dual enrollment courses being taught by high school faculty on high school campuses compared to those students not enrolled in dual enrollment courses. Within the high school faculty subgroup, there was consensus their dual enrollment students achieved at higher levels, exhibited higher critical thinking skills, engaged in more effective learning behaviors, had stronger work ethics, and exhibited better time management skills compared to students enrolled in traditional high school courses (Ferguson et al., 2015). These findings suggest teachers of dual enrollment courses believe their dual enrolled students are better prepared for college level coursework and obtain other skills needed to be successful in their postsecondary careers.

This view is supported by Hanson et al. (2015), who conducted a study of 150 high school principals, guidance counselors, and dual enrollment teachers from 35 high schools in Iowa. This study used data from an electronic survey sent to teachers, counselors, and principals in May of 2013 to gather these stakeholders' views on the impact dual enrollment had on their schools and students (Hanson et al., 2015). With over 100 responses from teachers, several themes emerged regarding their views on dual enrollment. First, the

findings suggest teachers see dual enrollment as an opportunity for students to earn college credit while in high school and better prepare them for college-level coursework. Second, the findings suggest teachers believe students in higher-level courses will have an increased interest in those subject areas when they transition into their postsecondary careers. Third, the findings suggest teachers view dual enrollment courses as a way for students to develop time management and study skills they believe to be necessary for college (Hanson et al, 2015).

These studies suggest dual enrollment teachers view dual enrollment experiences for their students as academically beneficial, especially when taught by high school teachers on high school campuses. In general, teachers feel dual enrollment programs provide students with the academic skills necessary to be successful in high school and during their post-secondary careers.

Advanced Placement and School Counselors

Several research studies have tried to provide insight into the role school counselors play in providing support for Advanced Placement (AP) programs in their schools, as well as the impact school counselors have on AP students, teachers, and parents. In one study, Cross and Burney (2005) examined the impact of Project Aspire, a federally funded initiative attempting to improve the lives of those in poverty. Project Aspire was broken into two main components: academics and counseling. To provide academic support for rural middle and high schools, Project Aspire provided AP courses to high schools through distance learning, as well as helped developed and implement pre-AP curriculum in the schools (Cross & Burney, 2005).

As described by Cross and Burney (2005), the counseling component of Project Aspire had three main purposes:

(1) to enhance the knowledge of school counselors concerning the value of Advanced Placement courses for low-income enrollees while seeking to raise student and parent expectations as to what the child can accomplish and achieve in the future; (2) to work with students participating in the programs to help them deal with the stress of high academic expectations and to develop study skills and organization needed to succeed; and (3) to provide college and career counseling. (p. 148)

Analysis for this study came from a series of conversations with 21 school counselors working throughout a Midwestern state over the course of three years, yielding over 53 hours of interview data (Cross & Burney, 2005). From this data, researchers discovered the following: counselors had a difficult time convincing students with AP potential from poor backgrounds to enroll in AP courses, counselors felt strongly school climate and attitude toward achievement had a significant impact on AP enrollment, counselors believed students were more concerned with grades than course content, and students from generational poverty would not submit the required forms to receive financial aid (Cross & Burney, 2005). These findings suggest counselors working with specific student groups may struggle to increase AP student enrollment or provide the necessary supports for students to be successful.

In a similar study, Militello et al. (2009) attempted to identify distinguishing characteristics of high school counselors in districts who demonstrated high performance addressing the achievement gap in college placement. In this study, researchers focused on 18 award-winning or honorable mention schools from seven states, which served an average

of 2000 students (Militello et al., 2009). These schools were comprised of traditionally underrepresented students from lower socioeconomic status. However, the schools offered on average 13 AP classes and 83% of their students were accepted to a college or university (Militello et al., 2009). The researchers conducted phone interviews with the principal and the head of the school counseling department at each school site between February and April of 2006 (Militello et al., 2009). The researchers concluded the following significant findings from the data collected: school counselors were active participants and leaders in establishing a climate which conveys high expectations for all students, counselors encouraged the majority of students to take challenging courses, counselors were actively engaged in outreach activities with parents, and school counselors worked with teachers to help with teaching more diverse groups in their AP classes (Militello et al., 2009). Unlike the findings presented by Cross and Burney (2005), these findings suggest counselors have the ability to help promote AP participation and assist students and teachers within the building to be successful in those classrooms.

This view is supported by Davis et al. (2013), who studied African American students' participation and achievement in AP Psychology at a high school in the Southeastern United States with a student population of roughly 2,300. To determine the impact of school counseling on AP access and equity, 35 African American students were recruited to participate in this study, which would require them to attend a summer program and weekly counseling sessions. Out of the 35 students initially recruited, the research group consisted of 13 students who fully participated in the program (Davis et al., 2013). The students of the research group were placed in their own section and received group and individual counseling sessions. The counselor and the teacher collaborated throughout the

year on instructional practices and the learning process (Davis et al., 2013). Even though this study had a relatively small sample size, the students in the research group scored significantly higher on the AP exam than other African American students and were equal to their Caucasian peers. This suggests counseling support with a focus on students' understanding of themselves as learners can have a positive impact on student achievement (Davis et al., 2013).

There are inconsistencies with the research regarding the impact school counselors can have on AP participation and achievement. However, most studies recognized the pivotal role counselors play in the organization of a school and the impact they have on students' social, emotional, and academic needs.

Dual Enrollment Programs and School Counselors

The focus of several research studies on school counselors and dual enrollment programs more recently has been to examine the views counselors have on the impact of these programs on their students, and to examine the influence counselors have on student participation in dual enrollment programs. One study, conducted by Hanson et al. (2015), analyzed a survey of 150 high school principals, guidance counselors, and dual enrollment teachers from 35 high schools in Iowa. This study used data from an electronic survey sent to teachers, counselors, and principals in May of 2013 to gather these stakeholders' views on the impact dual enrollment had on their schools and students. There were 27 counselors who completed the survey resulting in several key findings related to dual enrollment courses at their respective high schools (Hanson et al., 2015).

Describing the impact counselors play on the organization of dual enrollment programs at their high schools, Hanson et al. (2015) suggested the following:

Counselors are not only the central point of contact for students enrolling in concurrent class, but they are also the central point of contact with community college staff. Without the support and legwork of the high school guidance counselors, concurrent enrollment courses would not exist. (p. 73)

Furthermore, the study revealed several benefits counselors believe students gain from taking dual enrollment courses in high school. These benefits include the following: earning college credit in advance of attending college, learning time management and problem-solving skills, building academic and personal confidence, and offsetting some of the cost of college by earning college credit while in high school (Hanson et al., 2015). These findings suggest counselors from this study believe dual enrollment programs prepare students for college both academically, financially, and socially.

These findings are supported by research conducted by Witkowsky and Clayton (2019), who examined the perspectives and roles of high school counselors in Colorado. According to the researchers, Colorado is a state actively seeking to increase postsecondary enrollment and attainment with a state goal of having at least 66% of the entire population obtaining a postsecondary credential by 2025 (Witkowsky & Clayton, 2019). In this qualitative study, the researchers had a sample size of 15 high school counselors from nine school districts along the I-25 corridor, which is where most the state's population lies (Witkowsky & Clayton, 2019). Although this is a small sample size, the 15 counselors had significant responsibilities in the administration and advisement of dual enrollment students within in their schools, and spent countless hours advising those students on course selection

and college planning (Witkowsky & Clayton, 2019). The findings from the research suggest the counselors place a high value on students enrolling in dual enrollment courses. This is supported by the benefits the counselors outlined regarding student participation in dual enrollment, such as the opportunity to earn college credit in high school, expanded learning opportunities compared to regular coursework, gaining confidence in their own academic abilities, and the potential to save money in the future by earning college credits in high school (Witkowsky & Clayton, 2019). Similar to the findings in Hanson et al. (2015), these findings establish a pattern of support for dual enrollment courses by high school counselors. One topic this research does not consider are the views of academic advisors once students matriculate to college.

To examine the views of college academic advisors and compare those to the views of high school counselors regarding dual enrollment students, Witkowsky et al. (2020) conducted a study with 11 advisors from seven four-year, public higher education institutions in Colorado. The perspectives of the college academic advisors differed from those of high school advisors studied in previous research studies. College advisors found there to be frequent gaps in information regarding the transferability of dual enrollment credits, as well as the impact dual enrollment would have on the pathway to graduation for dual enrollment students (Witkowsky et al., 2020). These findings are concerning, because they suggest dual enrollment students may not be transitioning to college with the most accurate information from their high school counselors regarding the impact of dual enrollment programs.

Even with this last concern, most research suggests high school counselors play an important role in supporting dual enrollment programs at their high schools and encouraging

students to take dual enrollment courses due to the numerous academic, social, and financial benefits reported in multiple studies.

Advanced Placement and Administrators

The goal of several researchers has been to try to determine the impact school administrators have on AP programs, as well as their views on students' inclusion in AP courses. In 2013, Cook studied Valley High School in suburban Iowa, which had been slowly growing its AP program for decades, to establish methods the school was using to increase their AP participation rates. After reviewing the efforts at Valley High School, Cook (2013) suggested the following ways to increase AP enrollment as an administrator: offer informational sessions to parents and students about AP course offerings, send home letters using AP potential from testing data to recruit students to take AP courses, have teachers discuss the benefits of AP courses in non-AP classes, provide professional development and training to AP teachers and pre-AP teachers, and look for underrepresented groups in AP courses to target for recruitment (Cook, 2013). Furthermore, Cook (2013) suggests educational leaders need to support the natural expansion of a culture of AP equity by minimizing negative outcomes and inspiring staff to promote inclusion.

These findings were supported by Matthews (2021), who conducted case study research on five high schools throughout the United States, examining strategies used by school leaders to increase enrollment in high-level courses in their schools. The high school, which was highlighted for their efforts in expanding access to AP courses, was Richland Hills High School in North Carolina (Matthews, 2021). To help identify AP capable students, the principal works with middle school guidance counselors and administration to analyze assessment and grading data, as well as working with high school counselors to use multiple

measures of data to identify possible AP students (Matthews, 2021). The principal also works with AP teachers to promote professional growth by ensuring meeting time is designated for AP teachers each week to work on instructional practices, and the principal promotes educator training outside of the building (Matthews, 2021). To increase enrollment in AP courses, the principal holds AP recruitment nights for counselors, parents, teachers, and students, uses the master schedule to create gatekeeping courses to increase interest in AP courses, and has students share their AP experiences with their peers (Matthews, 2021). The findings at both Valley High School and Richland Hills High School suggest principals play an important role in the recruitment of students into AP courses, the establishment of a school culture revolving around AP coursework availability for all students, and supporting teachers through professional development and training.

Expanding on these findings, Cartegena and Slater (2022) conducted a study to explore the case of SoCal Unified School District, which serves roughly 15,000 students and consists of 12 elementary schools, three middle schools, and three high schools and was named the 2017 National AP District of the year. For this study, the researchers examined Shang Ri-La High School and Metropolis High School, both of which offer 14 AP classes and have comparable demographics, to determine how educational leaders were promoting inclusion of students of color in AP and fostering a culture which allows for student success (Cartegena & Slater, 2022). It is important to note AP programs receive 100% financial backing at both high schools, which means anything pertaining to AP is fully funded within the schools (Cartegena & Slater, 2022). The findings from this case study suggest the administrators believe AP courses need to be open to all students communicating this belief to staff on a regular basis. Additionally, administrators work with staff to support and

encourage them to embrace the challenge of students with all educational backgrounds enrolling in their AP courses (Cartegena & Slater, 2022). Moreover, the researchers found the AP culture in both high schools was created through transformative leadership promoting an increase in the inclusion of all students taking AP courses (Cartegena & Slater, 2022). This study supports the findings in previous case studies relating to the impact educational leadership can have on AP access, enrollment, and success.

Dual Enrollment Programs and Administrators

In an attempt to determine the impact administrators have on dual enrollment programs, as well as their views on students participating in dual enrollment programs, several studies have been conducted by various researchers. One such study conducted by Hanson et al. (2015), analyzed a survey of 150 high school principals, guidance counselors, and dual enrollment teachers from 35 high schools in Iowa. This study used data from an electronic survey sent to teachers, counselors, and principals in May of 2013 to gather these stakeholders' views on the impact dual enrollment had on their schools and students. Twenty principals completed the survey resulting in several findings related to dual enrollment courses at their respective high schools (Hanson et al., 2015). Collectively, the principals saw dual enrollment courses as a way for students to experience college-level courses and to earn college credit while in high school, potentially benefitting families by saving them money in tuition expenses (Hanson et al., 2015). Furthermore, the principals tended to focus on patterns of enrollment and recruitment efforts, as well as other administrative tasks related to dual enrollment courses (Hanson et al., 2015).

To further understand the impact school administrators may have on establishing new dual enrollment opportunities, Martinez et al. (2015) examined the experiences of 41 school

leaders in the Rio Grande Valley in South Texas representing 13 school districts within the region. The researchers found the school administrators saw dual enrollment programs as both socially and economically transformational for the students and families in their communities, because students were given the opportunity to experience college-level courses in high school, which would inspire them to further their education after high school (Martinez et al., 2015). Moreover, researchers found school administrators were strategic with their selection of staffing dual enrollment courses to make certain the teachers, who shared the same vision of expanding opportunities to all students, and taught those accelerated classes. Additionally, school administrators provided and organized professional development and continuing educational opportunities for their dual enrollment teachers to better support them in the classroom (Martinez et al., 2015).

These findings are supported by Mehl et al. (2020), who determined educational leaders now see themselves as not just getting students ready for graduation, but preparing students for their postsecondary careers. This information was presented in a study sponsored by the Aspen Institute, which provided a guidebook for districts to increase equitable acceleration opportunities within their schools (Mehl et al., 2020). Within their findings, Mehl et al. (2020) also discovered successful leaders instilled high expectations for all students, promoted their vision of equity and expanded dual enrollment to the entire community, and allocated all necessary resources towards these endeavors. These findings support information from previous studies, suggesting school administrators can impact dual enrollment opportunities for students, while supporting teachers and the community at large, by making certain decisions and using specific leadership techniques.

Summary

Over the last few decades, AP and dual enrollment programs have become increasingly more popular throughout the United States. School districts have allocated an incalculable amount of resources across the nation to promote these two forms of rigorous courses of study within their jurisdictions. Due to the amount of resources and the increase in demand for both AP and dual enrollment experiences by students and parents, several researchers have studied the benefits and concerns of these programs, while offering suggestions for further research studies. Furthermore, numerous researchers have studied the perspectives of teachers, counselors, and administrators on AP and dual enrollment programs, and the impact these stakeholder groups have on participation in rigorous courses of study. The goal of this literature review was to present the history of AP and dual enrollment programs, as well as the main findings of the researchers, who have conducted the several studies on AP and dual enrollment programs. The next chapter will explain the research methodology of this action research project, including the purpose of the research, a description of the setting and participants, the research plan and design, and methods of data collection.

CHAPTER III

Methodology

The literature review establishes specific benefits regarding students enrolling in rigorous courses of study during their high school career. According to the literature on Advanced Placement (AP) and dual enrollment courses, students benefit academically and financially from taking these courses in high school, but the literature also suggests certain student groups have limited access to these courses when examining their race, ethnicity, or socioeconomic status. Furthermore, the literature illustrates teachers, counselors, and administrators support the inclusion of high school students in AP and dual enrollment courses. Additionally, the literature suggests, teachers, counselors, and administrators have an impact on the enrollment of students in rigorous courses of study by engaging in various actions inside their school communities.

This research study seeks to expand on the already established research on topics relating to teacher, counselor, and administrator perceptions regarding the inclusion of students in rigorous courses of study by examining the perceptions of teachers, counselors and administrators at Exeter Township High School (ETHS) and Exeter Township School District (ETSD). To accomplish this task, this research study applied a mixed-methods approach, including both quantitative and qualitative data. Quantitative data were collected through a survey utilizing Likert-style questions to ascertain the perspectives of teachers, counselors, and administrators from ETSD regarding the inclusion of students in AP and dual enrollment courses with an emphasis on student preparedness and District-level organization and planning. Qualitative data were collected from a smaller sample of teachers, counselors, and administrators through semi-structured interviews to expand on the data derived from the

survey. The research study participants included all high school AP and dual enrollment teachers, all high school counselors, all high school administrators, as well as four District administrators.

The organization of this chapter includes the purpose of the study, a description of the setting and participants, the research plan, the research and data collection methods, and the validity of the study.

Purpose

The literature establishes clear benefits to the inclusion of students enrolling in AP and dual enrollment courses while in high school, and the impact teachers, counselors, and administrators can have on the inclusion of students in rigorous courses of study. This study focuses on the perceptions of teachers, counselors, and administrators at Exeter Township High School (ETHS) and Exeter Township School District (ETSD) regarding the inclusion of students in rigorous courses of study.

According to the literature, teachers, counselors, and administrators can impact enrollment of students in AP and dual enrollment courses, which makes it imperative to examine their views at ETHS to determine any underlying, or prevailing perceptions of students enrolling in rigorous courses of study, and their views on the impact District planning and organization has on student enrollment in AP and dual enrollment courses.

As previously established in this paper, ETHS enrolls less students in rigorous courses of study than demographically-similar school districts in the county and across the state. With the established research presented in the literature review on the benefits of students enrolling in AP and dual enrollment courses, ETHS must make specific and targeted

changes to increase the enrollment of students in these rigorous courses of study. To accomplish this task, this research study will provide information and recommendations to be considered by the District to help increase student enrollment in AP and dual enrollment courses.

This research study used a mixed-methods approach, including the collection of both quantitative and qualitative data. The study focuses on the following research questions:

1. What perceptions do secondary teachers, school counselors, and administrators have regarding the inclusion of a higher percentage of students in rigorous courses of study at the senior high school?
2. What perceptions do secondary teachers, school counselors, and administrators have regarding student preparedness for rigorous courses of study at the senior high school?
3. What perceptions do secondary teachers, school counselors, and administrators have regarding District-level organization and planning and its impact on student enrollment in rigorous courses of study at the senior high school?

The focus of these questions is to discover similarities and differences between teachers, counselors, and administrators regarding their perceptions on student enrollment in rigorous courses of study at ETHS to determine if there is any consistency or inconsistency in these stakeholders' beliefs, which could be a contributing factor in the low student enrollment numbers in rigorous courses of study at ETHS. The quantitative and qualitative data procured from this study will be combined with the already established research and

literature on this topic to make specific determinations, recommendations, and conclusions regarding the enrollment of students in AP and dual enrollment courses at ETHS.

Setting

The setting for this research study is the Exeter Township High School (ETHS) inside the Exeter Township School District (ETSD). ETSD is a suburban school district east of the city of Reading located in Berks County, Pennsylvania. ETSD has a geographic footprint of 25.46 square miles in eastern Berks County, which is located in southeastern Pennsylvania. Over 10,000 households make-up the District community, which accounts for over 27,000 people. Roughly 3,900 students attending ETSD schools each day (PA Department of Education, 2023a; U.S. Department of Education, 2022b).

ETSD serves two municipalities in Berks County: Exeter Township and the Borough of St. Lawrence. The District community is 82% White, 9% Hispanic or Latino, 3% Black, 3% Asian, and 3% two or more races. The overall median household income is higher than both state and national averages. The median household income for parents of children in public schools is \$101,940, which is about \$15,000 higher than the overall median household income of all adults in the community. Nearly 90% of the adults in the community are in the labor force with roughly 45% of those in the labor force being employed in management-level jobs. Furthermore, nearly 40% of the adults in the community have at least a bachelor's degree or higher (U.S. Department of Education, 2022a).

ETSD is a point of pride in the community boasting a tradition of excellence in its musical programming, athletics, and community partnerships. The District is also one of the largest employers in the community, providing jobs to over 500 people each day. As

previously noted, the district serves nearly 3,900 students in grades Kindergarten through 12th grade with an annual operating budget of roughly \$80 million (U.S. Department of Education, 2022b). The District student population is 70.6% White, 18.8% Hispanic, 4.5% Black, 4.3% two or more races, and 1.9% Asian. Furthermore, 29.6% of students are classified as economically disadvantaged, while 1.8% are considered homeless. Additionally, the District special education population is 20.5%, whereas the gifted student population is 3.3% (PA Department of Education, 2023a).

There are six school buildings, an administration building, and a transportation depot in ETSD, which are located throughout the community. There are three K-4 elementary schools in the District: Jacksonwald Elementary School, Lorane Elementary School, and Owatin Creek Elementary School. With an enrollment of roughly 500 students, Owatin Creek Elementary School is largest of the three K-4 buildings. After fourth grade, all students transition to Reiffon School, which is a fifth and sixth grade intermediate school with an enrollment of roughly 600 students. Reiffon School is on the same campus as the junior high school and high school. All students transition to the junior high school for seventh and eighth grade, which also has an enrollment of roughly 600 students.

Understanding how the District is organized prior to students transitioning to the high school is significant to this research study, because the literature suggests decisions being made in lower grades can impact the enrollment of students in rigorous courses study during their high school careers. To examine this impact at ETSD, the third research question focuses on district-level organization and planning.

The primary setting for this research study is ETHS, which includes students in grades nine through 12. The total student population is roughly 1260. The high school has

three building administrators: a principal and two assistant principals. One assistant principal manages students in grades nine and 11, while the other assistant principal oversees students in grades 10 and 12. The high school staff consists of over 90 full-time teachers and over 20 instructional aides. There are five school counselors serving students in all grade levels, and their caseloads are separated by the alphabet.

According to the “Future Ready PA Index,” ETHS has similar demographics to the District. The student population is 71.2% White, 18.2% Hispanic, 5.2% Black, 3.2% two or more races, and 2.1% Asian. Moreover, 29.1% of students classify as economically disadvantaged, while 2.0% are considered homeless. In addition, the high school’s special education population is 20.3%, and the gifted education student population is 3.2% (PA Department of Education, 2023b). The high school offers many core subject and elective course offerings with an emphasis on student choice. Concerning rigorous courses of study, ETHS currently offers students the opportunity to enroll in 20 AP courses and 17 dual enrollment courses. In regards to dual enrollment courses, the high school has a partnership with Reading Area Community College (RACC), which allows for students to enroll in RACC certified courses taught by ETHS teachers on the high school campus. This partnership comes with a reduced cost to the students for RACC tuition to earn college credits.

An important consideration in this study, as mentioned in Chapter I, is the number of students graduating from ETHS with the experience of taking at least one AP or dual enrollment course during their four years enrolled at the high school. According to the most recent data, only 39.9% of students graduating in 2022 enrolled in at least one rigorous course of study during their time at ETHS. This is significantly lower than the statewide

average of 55.9% (PA Department of Education, 2023c). Furthermore, according to information from “U.S. News and World Report,” ETHS ranks 222nd out of all Pennsylvania high schools in the most recent rankings of the best high schools in Pennsylvania, and ranks 10th out of the 18 high schools in Berks County (“Exeter Township Senior High School,” 2023). Considering the amount of pride the community takes in the District, these statistics are causing significant consternation among many community stakeholders. Administrators, teachers, counselors, board members, and others are discussing reasons why students are not enrolling in the rigorous courses being offered at the high school at rates equivalent to others throughout the county and the state, particularly since an increase in students enrolling in rigorous courses of study would also increase the high school’s rankings both locally and state-wide. This study will help to shed some light on those conversations and provide some clarity to these stakeholders.

Participants

The participants of this research study are teachers, counselors, and administrators from Exeter Township School District (ETSD). Prior to beginning the study, District policy required the approval of the Board of Directors. This approval occurred on August 16, 2022 during a voting meeting of the Board of Directors. Furthermore, the superintendent was required to provide written support for this research study to be conducted with employees of the District by another employee of the District. This letter of support was obtained in September of 2022 (Appendix A). After all permissions were granted, participants were identified to partake in this study based on certain job characteristics. The study’s participation is voluntary, and those recruited to participate were sent a brief description of the research study via email, as well as a Permission to Participate Agreement (Appendix B)

to be signed and returned before they could participate in the study. All participants approached to participate in the study voluntarily agreed to participate and returned the signed permission form with their signatures. All 16 AP and dual enrollment teachers at Exeter Township High School (ETHS) participated in the research study, as well as all five high school counselors and all three high school building administrators. In addition to participants at ETHS, four district administrators participated in the research study.

The first step in participation required those asked to take part in the research study to complete an online Google Forms survey (Appendix C). There was a 100% completion rate with all 28 participants asked to take part in the research study completing the Google Forms survey. In the last section of the Google Forms survey, each participant was asked if they would be willing to participate in a follow-up interview (Appendix D). Twenty-three out of 28 participants indicated they would be willing to participate in a follow-up interview to provide more information regarding the research topic for this study. With the use of purposive sampling, five individuals were selected to participate in the additional semi-structured interviews. This group included: two teachers, one counselor, one building administrator, and one district administrator.

As shown in Table 1, the study has participants from various backgrounds and occupations within the District.

Table 1*Participants in the Study*

Participants	Job Description
Teacher A	Business Teacher – Dual Enrollment
Teacher B	Science Teacher – AP and Dual Enrollment
Teacher C	Science Teacher – AP and Dual Enrollment
Teacher D	Science Teacher – AP and Dual Enrollment
Teacher E	Social Studies Teacher – AP
Teacher F	Social Studies Teacher – AP
Teacher G	Social Studies Teacher – AP
Teacher H	Social Studies Teacher – AP and Dual Enrollment
Teacher I	Social Studies Teacher – AP and Dual Enrollment
Teacher J	English Teacher – AP
Teacher K	English Teacher – AP and Dual Enrollment
Teacher L	Math Teacher – AP and Dual Enrollment
Teacher M	Math Teacher – AP and Dual Enrollment
Teacher N	Art Teacher – AP and Dual Enrollment
Teacher O	Music Teacher – AP
Teacher P	Computer Teacher – AP
Counselor A	Grades 9-12: A – Dough
Counselor B	Grades 9-12: Doughl – Hun
Counselor C	Grades 9-12: Hu – Mo
Counselor D	Grades 9-12: Mu – She
Counselor E	Grades 9-12: Shi – Z
Building Administrator A	Head High School Principal
Building Administrator B	Assistant High School Principal Grades 9 & 11
Building Administrator C	Assistant High School Principal Grades 10 & 12
District Administrator A	Assistant Superintendent of Schools
District Administrator B	Director of Teaching and Learning
District Administrator C	Supervisor of Academic Enrichment
District Administrator D	Special Education Supervisor Grades 9-12

Note. AP = this individual teaches at least one AP course; Dual Enrollment = this individual teaches at least one dual enrollment course; AP and Dual Enrollment = this individual teaches at least one AP and at least one dual enrollment course.

As a group, 50% of the participants have spent more than 15 years employed by ETSD (Figure 1). Furthermore, 50% of the participants have only been employed by ETSD, while working in public education (Figure 2).

Figure 1

Participants Years of Employment at ETSD

How long have you been employed at Exeter Township School District?
28 responses

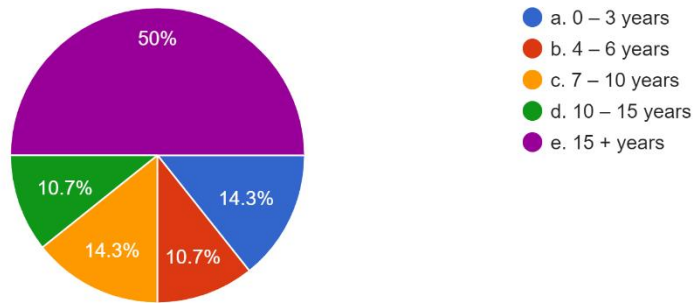
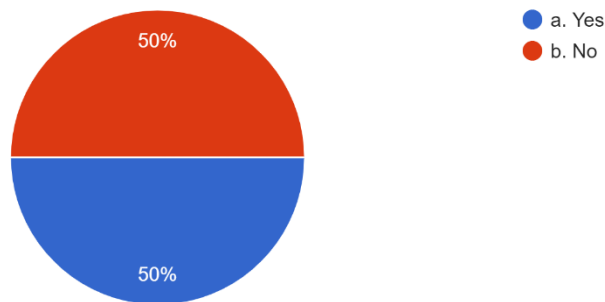


Figure 2

Participants Work Experience

Other than substitute teaching or other temporary placement, have you ever been employed by another School District and/or private school?
28 responses



These characteristics suggest many of the participants of this study may have an in-depth knowledge of the inner-workings of ETSD and ETHS, but their views may be limited by a lack of experience working in other work environments. Moreover, there is a significant difference between the participant groups regarding their work experience at ETSD. Only one district or building administrator indicated they have been employed by ETSD for 15 or more years, while 57% of the district and building administrators indicated they have been employed at ETSD for zero to three years. In comparison, 13 of the 21 classroom teachers and school counselors who participated in this study indicated working in ETSD for 15 or more years.

Additionally, all district and building administrators indicated having worked somewhere other than ETSD during their careers, whereas 67% of the classroom teachers and school counselors stated they have only worked at ETSD during their careers. This difference in participants' work experience within the District may influence their responses to the survey questions and their perspectives on the topics of the research study. Furthermore, these differences in work experience may impact the role these individuals play in the decision-making process surrounding the inclusion of students in rigorous courses of study at ETHS.

Research Plan

Prior to the collection of any data from the participants in the research study, a review of relevant literature was conducted to provide a clearer context to the research topic and the research questions. The literature review examines the history of AP and dual enrollment programs in the United States of America, as well as the major benefits, concerns, and criticisms of these programs. To further examine this study's research questions, the

literature review focuses on relevant research relating to the perspectives of teachers, counselors, and administrators on the inclusion of students in rigorous courses of study.

It is evident in the review of literature there are many academic benefits to students being enrolled in AP or dual enrollment courses while attending high school. According to the research, some of the major academic benefits of students participating in AP or dual enrollment courses include: increases in high school and college GPAs, scoring higher on standardized exams, scoring higher on college entrance exams, preparing students for the academic rigors of college courses, higher grades in introductory courses in college, and earlier college graduation rates compared to similar cohorts (Allen & Dadger, 2012; An & Taylor, 2015; Dougherty et al., 2006; Flowers, 2008; Morgan & Klaric, 2007; Morrison, 2007; Scott et al., 2010). Understanding these academic benefits, it is not surprising to see the growth in both AP and dual enrollment programs throughout high schools across the country over the past few decades (College Board, 2022; Kurlaender & Rodriguez, 2022; Santoli, 2002).

Furthermore, the literature review assists in providing information relevant to the views of teachers, counselors, and administrators regarding the inclusion of students in rigorous courses of study. Regarding teachers' perspectives on AP and dual enrollment programs, the research tends to focus on professional development, course rigor, student demand, quality of instruction, exam participation, student skill development, and college preparation (Duffet & Farkas, 2009; Ferguson et al., 2015; Hanson et al., 2015; Herr, 1991; Judson et al., 2019; Mehl et al., 2020).

In contrast, the literature relating to counselors' perspectives on the inclusion of students in rigorous courses of study focuses more on the impact school culture and school

counselors have on students enrolling in AP and dual enrollment classes, as well as the impact AP and dual enrollment courses have on students post-secondary planning (Cross & Burney, 2005; Davis et al., 2013; Hanson et al., 2015; Militello et al., 2009; Witkowsky & Clayton, 2019).

Finally, the literature review reveals insight into the perspectives of administrators and their views on students enrolling in AP and dual enrollment courses on their campuses. In general, administrators support the expansion of rigorous courses of study and believe high-level courses should be open to all students. Furthermore, the research suggests administrators have the ability to make strategic decisions on their campuses, or within their districts, which can promote the inclusion of students in AP and dual enrollment courses (Cartegena & Slater, 2022; Cook, 2013; Matthews, 2021; Martinez et al., 2015; Mehl et al., 2020).

The literature review provides a detailed evolution of rigorous courses of study throughout the country, and an in-depth overview of the benefits, criticisms, and concerns to AP and dual enrollment programs. Additionally, the review delivers an encapsulation of the research studies examining the perspectives of teachers, counselors, and administrators on the inclusion of students in rigorous courses of study.

This research study plans to evaluate the current perspectives of teachers, counselors, and administrators at ETSD. First, the participants completed a Google Forms online survey to collect information regarding their perspectives on students enrolling in rigorous courses of study. In addition to the survey, five participants were chosen to participate in a semi-structured interview to provide additional information for the research study. All information gathered from the literature review and participants focuses on the three research questions

for this study with the primary goal of uncovering common themes among the three participant groups.

As noted in Chapter I, the research study's fiscal implications will be mainly indirect. The online survey administered to the 28 participants was conducted through Google Forms, which is a free online program owned and operated by the District. Follow-up semi-structured interviews were conducted in-person with the utilization of the Rev Recorder App on my iPhone. Although the application is free to download, there is a transcription fee for all interviews, which totaled approximately \$126. Additional fiscal implications may exist for the District depending on decisions made regarding professional development, purchasing of instructional resources, curriculum writing costs, or District aid to families or students for AP exam fees or dual enrollment tuition reimbursement. At this point, it is not possible to quantify the potential fiscal implications of this study to the District, but noting these potential fiscal areas is important for consideration.

Research Methods and Data Collection

This action research study uses a mixed-methods approach with the collection of both quantitative and qualitative data. There are several reasons to select a mixed-methods approach for action research. One reason to utilize a mixed-methods research is when quantitative or qualitative research alone will not produce sufficient data for the research study.

Regarding this point, Mertler (2022) explains:

As you know, qualitative data provide understanding through greater depth, whereas quantitative data provide broader, more general understanding. Each approach has its

advantages and limitations. Qualitative data may provide a deep examination of a phenomenon of interest, but only with respect to a handful of participants. On the other hand, quantitative data can provide information across a much broader sampling of participants, but the depth of that information is certainly limited. Depending on the goals of a research study—as well as its guiding research—one type of data alone may not tell the complete picture or adequately answer the research questions. (p. 141)

Furthermore, this research study uses a convergent parallel design to collect both data strands. In this type of design, the quantitative and qualitative data collection is prioritized in an equal manner, collected and analyzed independently of one another, and mixed to achieve an overall interpretation (Mertler, 2022).

The research plan was submitted to the Institution Review Board (IRB) on August 10, 2022. The IRB reviewed the proposal and submitted feedback with revisions on September 19, 2022 (Appendix E). The research study was resubmitted and received approval on October 4, 2022 (Appendix F).

As shown in Table 2, a data collection plan was created to collect all necessary data for the research study.

Table 2

Data Collection Plan and Timeline

RESEARCH QUESTIONS	TYPES OF DATA TO COLLECT	DATA SOURCES	TIMELINE FOR COLLECTING DATA
<p>1. What perceptions do secondary teachers, school counselors, and administrators have regarding the inclusion of a higher percentage of students in rigorous courses of study at the senior high school?</p>	<p>Quantitative</p>	<p>Data from survey of various stakeholders, including teachers, counselors, and administrators. Survey has demographic questions, as well as Likert-style questions targeting perceptions of stakeholders.</p>	<p>October- November 2022</p>
<p>2. What perceptions do secondary teachers, school counselors, and administrators have regarding student preparedness for rigorous courses of study at the senior high school?</p>	<p>Qualitative</p>	<p>Data from semi-structured interviews with specific participants who have been selected using purposive sampling techniques.</p>	<p>January- February 2023</p>
<p>3. What perceptions do secondary teachers, school counselors, and administrators have regarding District-level organization and planning and its impact on student enrollment in rigorous courses of study at the senior high school?</p>	<p>Qualitative</p>	<p>Questions will expand on Likert-style questions from survey to provide more in-depth analysis of stakeholder perceptions.</p>	<p>January- February 2023</p>

Quantitative data were collected through a Google Forms survey distributed via email to the 28 participants described in Table 1. As shown in Appendix C, the survey consists of 21 questions. The first five questions were designed to capture the participants demographic information. The next 13 questions present statements to the participants regarding AP and dual enrollment programming at Exeter Township High School (ETHS) and ETSD.

Participants were asked to use a five-point Likert scale to give their opinion on each statement. The survey uses the same scale for each statement: 1 – “Strongly Agree”; 2 – “Agree”; 3 – “No Opinion”; 4 – “Disagree”; 5 – “Strongly Disagree.” The remaining questions ask each participant about their willingness to participate in an in-person or virtual 15-20 minute follow-up interview. Surveys were collected from October 27, 2022 through November 30, 2022, at which point all 28 participants had completed the survey.

Qualitative data were collected through five in-person semi-structured interviews. As shown in Appendix D, the participants were asked eight questions with the ability to expand on information provided in the survey and on topics in the interview. The participants were chosen through the use of purposive sampling and their affirmative responses to the final questions on the survey regarding participation in a follow-up interview. Purposive sampling, or judgement sampling, is a nonrandom sampling technique, which targets specific participants due to their characteristics (Mertler, 2022). This resulted in interviews being conducted with two teachers, one counselor, one building administrator, and one district administrator, which allows for each participant group to be represented in the qualitative portion of the data collection process. Interviews took place in various locations throughout the school district from January 26, 2023 until February 3, 2023.

To maintain the focus of this research study, the design of the survey and the interview connects each question to one of the main research questions of the study. Concerning the first research question regarding the inclusion of students in rigorous courses of study at ETHS, survey questions six through 10 asks participants their views on the enrollment process for AP and dual enrollment courses, as well as qualifying and disqualifying factors for students attempting to enroll in an AP or dual enrollment course. To expand further on this information for the first research question, the interview asks participants the following questions:

- Do you believe all students are afforded the same opportunities to take AP and Dual Enrollment courses at Exeter Senior High School? Why or why not?
- What suggestions do you have to increase enrollment in rigorous course of study at Exeter Senior High School?

For the second research question relating to student preparedness for rigorous courses of study at ETHS, survey questions 11 through 14 asks participants their views on the adequacy of students' writing skills, study skills, math skills, and communication skills at ETHS in relation to student success in AP and dual enrollment courses. Moreover, the interview expands on this information by asking participants the following questions:

- Do you believe students are “ready” to take AP and Dual Enrollment courses when they enter Exeter Senior High School? Why or why not?
- What suggestions do you have to increase students' skills to better prepare them for AP and Dual Enrollment courses at Exeter Senior High School?

Finally, for the last research question regarding district-level organization and planning and its impact on the inclusion of students in rigorous courses of study, survey questions 15 through 18 asks participants their views on professional development for teachers of AP and dual enrollment courses, curriculum mapping leading to the inclusion of students in rigorous courses of study, instructional resources for teachers and students teaching or enrolled in rigorous courses, and the District promotion of rigorous course of study. Additionally, the interview sought to expand on this information by asking the participants the following questions:

- How does the District's organization help enrollment in rigorous courses of study? Explain.
- How does the District's organization hinder enrollment in rigorous courses of study? Explain.
- How does the District's planning help enrollment in rigorous courses of study? Explain.
- How does the District's planning hinder enrollment in rigorous courses of study? Explain.

After all participants submitted their responses to the Google Forms survey, the responses were exported into Google Sheets. Once in the Google Sheet, the responses were separated into four sheets within the workbook. Sheet one has all participant's data and responses located within it, while sheets two through four were separated by occupation. For example, sheet two has the information for teachers who participated in the survey, while sheet three has the information from the counselors and sheet four has information from the administrators. Additionally, frequency distribution analysis was utilized for all the Likert

scale responses on all four sheets, as well as the creation of frequency distribution tables. By utilizing frequency distribution tables, comparison analysis was easier to conduct during the next phase of this research study, when looking for similarities and differences among stakeholder groups, and comparing data from certain groups to the overall group of participants.

After all interviews were conducted, transcripts were ordered through the Rev Recorder App. Interview transcripts were sent via email to my personal email account and downloaded onto my computer. Inductive analysis was utilized to reduce the volume of information collected through the five interviews. A coding scheme was created to group similar types of information and categorize responses related to the research questions of the study. The information from the interviews is utilized to help interpret and expand on the information provided in the survey.

As noted earlier in this chapter, there are minimal financial implications to this study, specifically as it relates to the research method and the data collection. Google Forms and Google Sheets were chosen, because they are free to use and participants could complete the survey on any internet compatible device, including their own personal devices. Likewise, the Rev Recorder App is free to use with the only expense being the purchasing of transcripts from the company after interviews were conducted. The main indirect cost during this portion of the study was the time participants took to complete the surveys or participate in the follow-up interviews. I also spent time conducting the interviews and compiling the data from both the surveys and the interviews.

Validity and Reliability

This action research study is intended for use at Exeter Township High School (ETHS) to examine the perceptions of teachers, counselors, and administrators regarding the inclusion of students in rigorous courses of study. While the data from the study are unique to ETHS, the outcome of this study, combined with the research in the literature, is intended to be applicable to other educational entities with similar demographics facing comparable challenges as ETHS regarding the research topic.

To ensure validity and reliability for this research study, multiple strategies are employed to increase the trustworthiness of the results. According to Hendricks (2017), the trustworthiness of a study relies on Lincoln and Guba's criteria, which has four main parts:

- Credibility – The plausibility of the research findings for the context that was studied
- Transferability – The extent to which results of a study are applicable to other contexts and other individuals
- Dependability – The degree to which research results would replicate with same or similar participants and/or contexts
- Confirmability – Showing that results are an accurate representation of what occurred rather than the result of the researcher's bias, motivation, or interest (p. 64)

Accurately recording and maintaining data during a research study is critical to its validity. To accurately record all participant responses to the survey, a Google Forms survey was used to record all the respondent's answers digitally. Additionally, the survey settings

were setup to require participants to review their responses before a final submission was collected. This action is used as an embedded member check, thus ensuring the accuracy of the information being submitted. All information gathered from the Google Forms survey was collected and is housed on a secure Google Sheet. To ensure the accuracy of the data collected during the semi-structured interviews, each participant was asked the same series of questions in the same order, and each interview was recorded by way of the Rev Recorder App. At the conclusion of each interview, I transmitted the recording to the Rev Recorder company for an employee to review and create a transcript of the interview. After receiving the transcript from the company via email, I reviewed the information to ensure accuracy and downloaded the transcript onto a secure server.

Throughout the study, reflective planning and peer debriefing were utilized to guarantee the study kept its focus on the research topic. During the review of literature, themes emerged which were not initially considered as components to this study; however, some issues were included after reflection and conversation with colleagues familiar with this research study. Furthermore, the study's progress has been communicated to multiple stakeholders within the District, including the superintendent of schools.

Another method employed to increase the validity of a study is through the triangulation of data, which is the process of collecting and analyzing multiple forms of data (Hendricks, 2017). Multiple sets of data were included in this study to verify accuracy and add credibility to the findings. In this research study, quantitative data were collected through the use of a Google Forms survey, while qualitative data were collected through the use of semi-structured interviews. By collecting multiple forms of data and triangulating them, there was an increase in the credibility and the validity of the study.

Summary

This mixed-methods research study is designed to gain a valuable insight into the perception of teachers, counselors, and administrators regarding the inclusion of students in rigorous courses of study at Exeter Township High School (ETHS). To accomplish this task, 28 participants from Exeter Township School District completed a Google Forms survey with demographic questions, as well as Likert-style questions obtaining their opinions on the following: student inclusion in AP and dual enrollment courses at ETHS, student preparedness for AP and dual enrollment courses at ETHS, and the impact the District organization and planning plays on student inclusion in AP and dual enrollment courses at ETHS. Moreover, using purposive sampling, five individuals were selected and participated in the qualitative portion of this mixed-methods research study by taking part in a semi-structured interview. By applying information from this study to existing research provided in the literature review, the data collected will help guide further research, design professional development within the district, or establish additional school or district-wide interventions regarding AP and dual enrollment courses.

The goal of this chapter was to present and explain the research design, the setting and participants for the research study, the data collection timeline, the data collection tools, and the validity of the study. The next chapter will explain the data analysis process and the results of the study for each of the research questions.

CHAPTER IV

Data Analysis and Results

Already established in this study, Exeter Township High School (ETHS) enrolls less students in rigorous courses of study compared to demographically-similar high schools in the county and across the state, yet the prevailing literature on this topic espouses the many benefits of students enrolling in these courses while in high school. The purpose of this research study is to explore the perceptions of teachers, counselors, and administrators within the Exeter Township School District (ETSD) and ETHS regarding the inclusion of students in rigorous courses of study. To understand this information requires the examination of the factors, which may be contributing to the low enrollment at ETHS of students in Advanced Placement (AP) and dual enrollment courses. To assist with this endeavor, the study focuses on the following research questions:

1. What perceptions do secondary teachers, school counselors, and administrators have regarding the inclusion of a higher percentage of students in rigorous courses of study at the senior high school?
2. What perceptions do secondary teachers, school counselors, and administrators have regarding student preparedness for rigorous courses of study at the senior high school?
3. What perceptions do secondary teachers, school counselors, and administrators have regarding District-level organization and planning and its impact on student enrollment in rigorous courses of study at the senior high school?

By analyzing quantitative and qualitative data, this research study is designed to discover consistencies and inconsistencies among key stakeholders, which may be a contributing factor to low enrollment in rigorous courses of study at the high school. Quantitative data were collected through the surveys of 28 teachers, counselors, and administrators. Qualitative data were collected through semi-structured interviews of two teachers, one school counselor, one building administrator, and one district administrator. By studying the views of stakeholders at ETHS and ETSD, this study may lead to changes in course offerings, instructional practices, enrollment requirements, and other internal practices at the high school. Additionally, this research study may lead to larger-scale decisions relating to the District curriculum, resources, staffing, and professional development plan.

This study will provide valuable information for teachers, counselors, administrators, and other stakeholders throughout the ETSD to assist with future decision-making on increasing enrollment in rigorous courses of the study at ETHS. The survey and semi-structured interview results, as well as key findings, are outlined in this chapter. The chapter is organized into the following sections: Data Analysis, Results, Discussion, and Summary.

Data Analysis

This research study used a convergent parallel design to prioritize, collect, and analyze quantitative and qualitative data strands with the intention of combining the data for overall interpretation. As described in Chapter III, quantitative data were collected through a 21 question Google Forms survey (Appendix C) distributed via email to 28 participants, including all AP and dual enrollment teachers at ETHS, all school counselors at ETHS, all building administrators at ETHS, and four ETSD administrators. Questions one through five were designed to capture each participant's demographic details, used to further classify the

responses to assist with comparison analysis. After the demographic questions, participants were presented with 13 agreement statements and were asked to provide their opinion for each statement utilizing the same five-point Likert scale for each question. Participants were asked to respond with one of the following options for each of the agreement statements: Strongly Agree, Agree, No Opinion, Disagree, or Strongly Disagree. Survey results were exported into Google Sheets, and data were disaggregated into occupational groups to assist with comparison analysis. Additionally, frequency tables were created within all occupational groups to further assist with comparison analysis between the overall sample and each occupational group, as well as a comparison between occupational groups themselves. By using frequency tables to conduct a comparison analysis of Likert scale responses, consistencies and inconsistencies within quantitative data were identified among participant groups.

To expand on information ascertained from the quantitative surveys, five participants took part in semi-structured interviews, providing a more in-depth understanding of their perceptions of students enrolling in rigorous courses of study at ETHS. The qualitative data from these interviews were analyzed individually and coded for themes. The themes and information procured from the interviews were examined for similarities and differences among participants and examined for consistencies and inconsistencies with quantitative data relating to parallel research questions. As noted earlier in this study, using multiple data sets through the process of triangulation helps to increase the validity of this study. Results from both quantitative and qualitative data analysis will assist in guiding recommendations from this research study at ETHS regarding the inclusion of students in rigorous courses of study.

Results

As described earlier in this chapter and in Chapter III, the participants of this study completed a 21 question Google Forms survey distributed via email. The first five questions were designed to capture the participants' demographic information and the following 13 questions presented agreement statements to the participants regarding AP and dual enrollment programming at ETHS and ETSD. These 13 questions were broken into categories, corresponding to one of the three research questions for this study. Furthermore, select participants were included in a follow-up semi-structured interview to expand on the information provided on the survey data. All interview questions correspond to one of the three research questions guiding this study. This section will identify the quantitative and qualitative data associated with each research question for this study by examining the results of the survey questions, as well as the information provided during the semi-structured interviews.

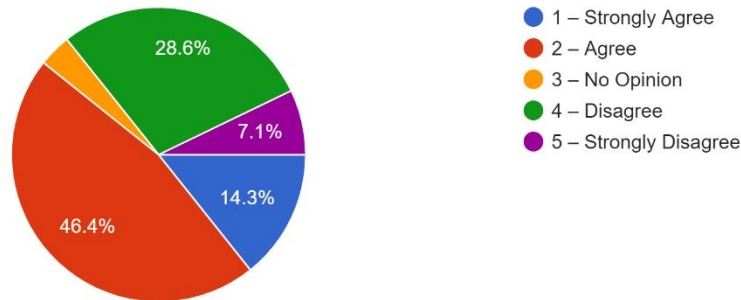
Results for First Research Question

To obtain quantitative data for the first research question, the first category of Likert scale questions included five agreement statements specifically designed to gauge the perspectives of teachers, counselors, and administrators on the inclusion of students in rigorous courses of study at ETHS.

Figure 3

Agreement Statement #1 - AP and Dual Enrollment courses should be open to all students

AP and Dual Enrollment courses should be open to all students
28 responses

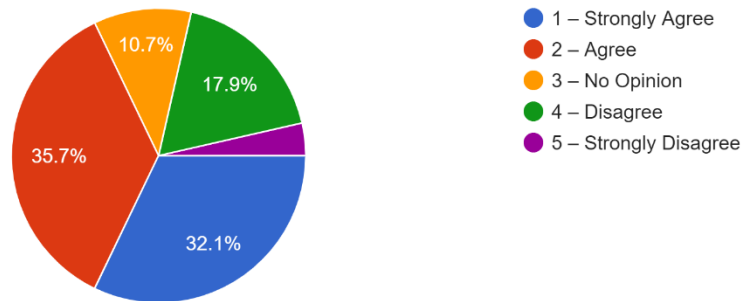


According to the data, there is general agreement with the inclusion of students in rigorous courses of study at ETHS. As shown in Figure 3, a majority of participants either strongly agree (14.3%) or agree (46.4%) AP and dual enrollment courses should be open to all students. Out of the three participant groups, teachers and administrators were both divided on this topic. Although a majority of teachers and administrators either strongly agreed or agreed on this on this topic, 37.5% of teachers either disagreed or strongly disagreed on this topic, while 42.86% of administrators disagreed on this topic. Conversely, counselors had the highest rate of agreement with four of the five counselors (80%) either agreeing or strongly agreeing AP and dual enrollment course should be open to all students.

Figure 4

Agreement Statement #2 - There should be pre-requisite courses for AP and Dual Enrollment courses

There should be pre-requisite courses for AP and Dual Enrollment courses
28 responses

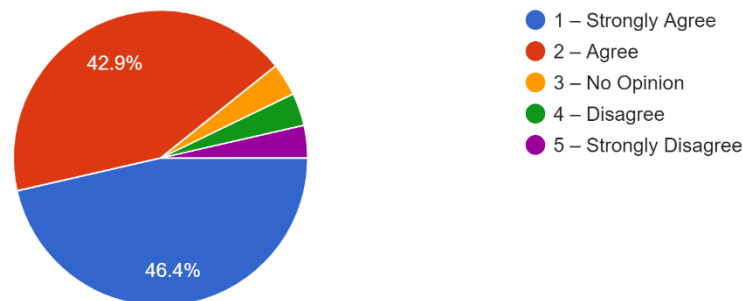


Though 19 of the 28 participants (67.85%) either agreed or strongly agreed there should be pre-requisite courses for AP and dual enrollment courses (Figure 4), the strongest levels of agreement are derived from the teacher and counselor participant groups. Over 80% of teachers either agreed or strongly agreed in pre-requisite courses for AP and dual enrollment courses, while 60% of counselors agreed with this topic. On the other hand, four of the seven administrators (57.14%) disagreed with pre-requisite courses for AP and dual enrollment courses.

Figure 5

Agreement Statement #3 - Teacher recommendations should be a factor in the enrollment of students in AP and Dual Enrollment courses

Teacher recommendations should be a factor in the enrollment of students in AP and Dual Enrollment courses
28 responses

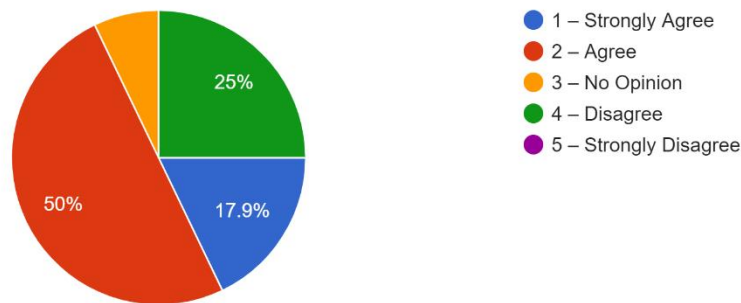


Almost 90% of survey participants, 25 of 28 respondents, either agreed or strongly agreed teacher recommendations should be a factor in the enrollment of students in AP and dual enrollment courses (Figure 5). This topic had the highest level of agreement amongst all survey participants, as well as individual participant groups in regards to questions relating to the first research question of this study. Only one teacher strongly disagreed with teacher recommendations being a factor in enrolling students in AP and dual enrollment courses. Similarly, only one administrator disagreed with teacher recommendations being a factor in enrolling students in AP and dual enrollment courses. The remaining response was from one counselor who provided a response of no opinion on this topic.

Figure 6

Agreement Statement #4 - Parent choice should be a factor in the enrollment of students in AP and Dual Enrollment courses

Parent choice should be a factor in the enrollment of students in AP and Dual Enrollment courses
28 responses

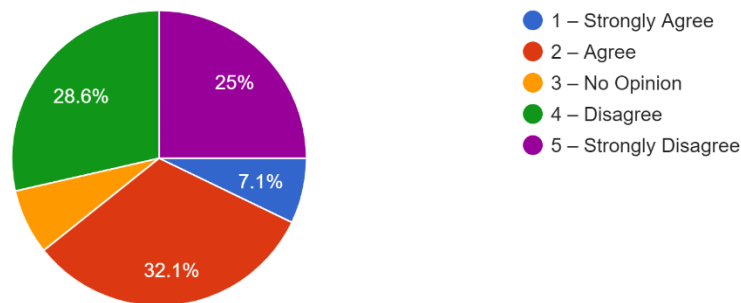


Even though 67.86% of survey participants either agreed or strongly agreed with parent choice being a factor in the enrollment of students in AP and dual enrollment courses (Figure 6), the participant groups varied in their levels of agreement on this topic. For instance, 100% of counselors either agreed or strongly agreed with parent choice being a factor in the enrollment of students in AP and dual enrollment courses, while barely half of teachers (56.25%) agreed or strongly agreed with this topic. Furthermore, 37.5% of teachers disagreed with parent choice being a factor in the enrollment of students in AP and dual enrollment courses. A majority of administrators (71.43%) agreed or strongly agreed with parent choice being a factor in the enrollment of students in AP and dual enrollment courses.

Figure 7

Agreement Statement #5 - A student's discipline record should be a factor in the enrollment in AP and Dual Enrollment courses

A student's discipline record should be a factor in the enrollment in AP and Dual Enrollment courses
28 responses



The final question in this category of Likert scale inquiries, which relates to the first research question, is the only topic to produce a majority response either disagreeing or strongly disagreeing with the agreement statement. As shown in Figure 7, 53.57% of participants either disagree or strongly disagree with a student's discipline record being a factor in the enrollment in AP and dual enrollment courses. However, there is disagreement amongst the participant groups, and within participant groups, revolving around this topic. A slight majority of teachers (56.25%) agreed or strongly agreed with a student's discipline record being a factor in the enrollment of students in AP and dual enrollment courses, while 37.5% either disagreed or strongly disagree with this topic. Administrators were also somewhat divided on this topic with a majority (57.15%) either disagreeing or strongly disagreeing with the inclusion of a student's discipline record as a factor in the enrollment in AP and dual enrollment courses, and 28.57% agreeing with the inclusion of a student's

discipline as a factor for enrollment in rigorous courses of study. Conversely, 100% of counselors either disagreed or strongly disagreed with a student's discipline record being a factor in the enrollment in AP and dual enrollment courses.

To acquire qualitative data for the first research question, the five participants interviewed for this study were asked the following questions relating to the inclusion of students in AP and dual enrollment courses at ETHS:

- Do you believe all students are afforded the same opportunities to take AP and Dual Enrollment courses at Exeter Senior High School? Why or why not?
- What suggestions do you have to increase enrollment in rigorous course of study at Exeter Senior High School? Have you expressed these opinions with your supervisors? If so, what was their reaction? If not, why not?

When examining the responses to the first interview question in this category, several themes emerged amongst the various participants. All participants interviewed indicated in their responses the District has taken steps over recent years to remove barriers, which may have once existed preventing some students from enrolling in rigorous courses of study. However, some participants feel not all students are taking advantage of those opportunities, because the District is not identifying all students capable of taking higher-level courses, or there is a communication breakdown between the District and families.

The following comments are significant to support these themes derived from the first interview question:

Teacher 1: I think that there used to be a requirement of having a 92% or higher in an honors course in order to get in. I think they've gotten rid of that. So, because of that,

I believe that more students are given the opportunity to take AP courses or dual enrollment courses that wouldn't have in the past.

Teacher 2: So, I do think that students are afforded the same opportunities to take AP classes. I think over the last, I'd say five years, that message has been pushed more than it has been previously.

Counselor: In general, I do believe all students are afforded the same opportunities to take AP and dual enrollment courses. However, I don't believe that all students are as well educated as they could be of those opportunities. I think they're available, but they may not be aware that they have that opportunity.

Building Administrator: I believe we do a good job in providing the opportunities for our higher-end students. I think we need to do a better job at identifying students that could potentially benefit from taking AP and dual-enrollment courses.

District Administrator: So, I believe that the district strives to have that occur, that the guidance counselors would like to make sure that all students have the same opportunities. But I would have to say that it doesn't occur for all, and it's probably not just here at Exeter. So, I think the reason it would not occur is part of this is based on staff and guidance counselors knowing their students and the sharing of communication, knowing the families. And I think maybe the pandemic contributed to some of the problems, but I think that they don't have enough time to fully invest in knowing their students well enough to have those conversations with them.

After reviewing the responses to the second question in this category, the participants' revealed numerous suggestions for increasing enrollment in rigorous courses of

study at the high school. Some of the suggestions included the following: eliminate non-AP and dual enrollment elective courses, promote AP and dual enrollment courses within each department, promote student confidence, educate students on the benefits on taking AP and dual enrollment courses, earlier identification of AP and dual enrollment students at the junior high level, and engaging parents in the process of course selection.

The following comments are noteworthy to support these suggestions from the second interview question:

Teacher 1: I would get rid of some of the elective courses in the main content areas so that there's less selection for students. Almost direct them that they have to almost funnel them into those kind of courses.

Teacher 2: I think it's really important for whatever program you're in, the teachers, before they get to you, to really encourage. And I'm assuming in all the other programs, if it's math or history, your prerequisite teachers from the previous years, if they push their stuff, I think you get more kids in.

Counselor: Sometimes students lack the confidence in their ability to be successful and their definition of success might be different from my definition of success or a teacher's. For example, a student might opt to take a college prep course because they feel it's more important or beneficial to get that A. Whereas, if they would take a more rigorous course and get a B, or even now, maybe even a C+, they might not understand the benefits from having taken that challenging course. I think educating students to understand all the benefits of taking those more rigorous courses.

Building Administrator: I think it should start at the junior high level, really identifying the students that would potentially benefit from these rigorous courses and also doing more interviewing and talking to the families and teachers to determine who would benefit from rigorous courses that are the outliers, that aren't necessarily your high-flying academic students because I think we are missing the mark of trying to get more students in these kind of courses.

District Administrator: So, I think that one of the things that we need to do is look at this systemically and holistically, that the students need to be prepared in junior high to be able to take the courses they need to have. So, we need to look at the curriculum. We need to, again, look at engaging the students and the parents in these conversations earlier. We need to make sure that the secondary teachers of these rigorous classes have the opportunity to communicate not just what their needs are, what they're finding or not finding with the students, but ways in which to resolve some of that. And yeah, it's constant ongoing. There's no end game in this.

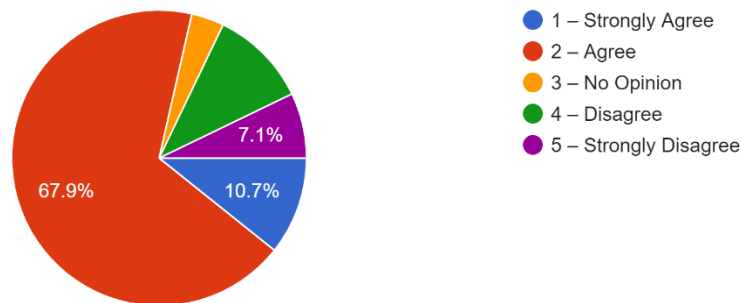
Results for Second Research Question

To obtain quantitative data for the second research question, the second category of Likert scale questions included four agreement statements specifically designed to measure the perspectives of teachers, counselors, and administrators on student preparedness for participation in rigorous course of study at ETHS.

Figure 8

Agreement Statement #6 - Students at Exeter Senior High School have adequate reading and writing skills to be successful in AP and Dual Enrollment courses

Students at Exeter Senior High School have adequate reading and writing skills to be successful in AP and Dual Enrollment courses
28 responses

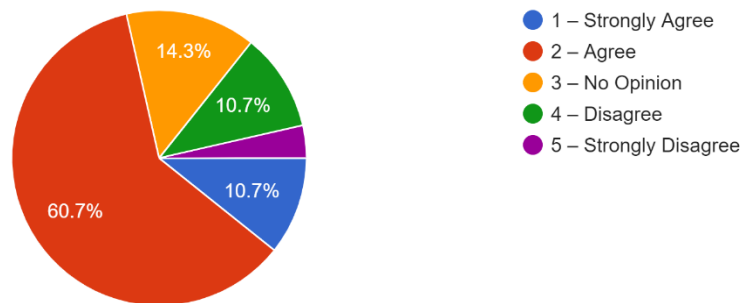


Nearly 80% of survey participants (78.57%) either agreed or strongly agreed students at ETHS have adequate reading and writing skills to be successful in AP and dual enrollment courses (Figure 8). In comparison to the other participant groups, teachers had the lowest agreement percentage with 68.75% indicating either agree or strongly agree. Counselors had the highest agreement percentage with all five (100%) of the counselors either agreeing or strongly agreeing with this topic. Administrators also had a high agreement percentage with six of the seven administrators (85.71%) surveyed agreeing students at ETHS have adequate reading and writing skills to be successful in AP and dual enrollment courses.

Figure 9

Agreement Statement # 7 - Students at Exeter Senior High School have adequate math skills to be successful in AP and Dual Enrollment courses

Students at Exeter Senior High School have adequate math skills to be successful in AP and Dual Enrollment courses
28 responses

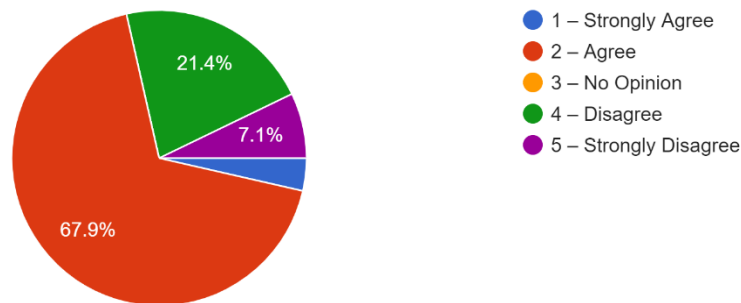


Similar to the previous question, a large majority of participants (71.42%) either agree or strongly agree students at ETHS have adequate math skills to be successful in AP and dual enrollment courses (Figure 9). Additionally, all five counselors (100%) either agreed or strongly agreed with this topic. Administrators also had a high agreement percentage of 85.71% with six of the seven administrators agreeing students at ETHS have adequate math skills to be successful in AP and dual enrollment courses. In comparison to counselors and administrators, teachers had a much lower agreement percentage with 56.25% either agreeing or strongly agreeing with this topic.

Figure 10

Agreement Statement #8 - Students at Exeter Senior High School have adequate study skills to be successful in AP and Dual Enrollment courses

Students at Exeter Senior High School have adequate study skills to be successful in AP and Dual Enrollment courses
28 responses



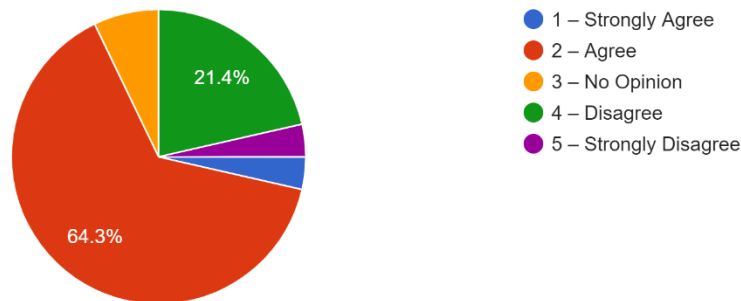
Like the two previous questions, a sizable majority of participants (71.43%) either agree or strongly agree students at ETHS have adequate study skills to be successful in AP and dual enrollment courses (Figure 10). Similar to the last question, teachers had the lowest agreement percentage with 56.25% either agreeing or strongly agreeing with this topic. On the other hand, all five counselors (100%) agreed students at ETHS have adequate study skills to be successful in AP and dual enrollment courses. Administrators also had a high agreement percentage with this topic. Six of the seven administrators (85.71%) agreed students at ETHS have adequate study skills to be successful in AP and dual enrollment courses.

Figure 11

Agreement Statement #9 - Students at Exeter Senior High School have adequate communication skills to be successful in AP and Dual Enrollment courses

Students at Exeter Senior High School have adequate communication skills to be successful in AP and Dual Enrollment courses

28 responses



This was the final question in this series of Likert scale inquiries relating to the second research question. Consistent with previous results in this category of questions, a majority of participants either agreed or strongly agreed (67.86%) students at ETHS have adequate communication skills to be successful in AP and dual enrollment courses (Figure 11). However, this topic had the largest discrepancy amongst the participant groups regarding agreement percentage. For instance, 50% of teachers either agreed or strongly agreed students at ETHS have adequate communication skills to be successful in AP and dual enrollment courses, while 37.5% of teachers either disagreed or strongly disagreed with this topic. Conversely, 100% of counselors and 85.71% of administrators agreed students at ETHS have adequate communication skills to be successful in AP and dual enrollment courses.

To obtain qualitative data for the second research question, the five participants interviewed for this study were asked the following questions regarding student preparedness when enrolling in AP and dual enrollment courses at ETHS:

- Do you believe students are “ready” to take AP and Dual Enrollment courses when they enter Exeter Senior High School? Why or why not?
- What suggestions do you have to increase students’ skills to better prepare them for AP and Dual Enrollment courses at Exeter Senior High School? Have you expressed these opinions with your supervisors? If so, what was their reaction? If not, why not?

When reviewing the responses to the first question in this category, one central theme emerged from the participants. There is a definitive belief some students entering ETHS have the necessary skills to be successful in rigorous courses of study, while other students are not prepared to handle the coursework or content in either AP or dual enrollment courses. Furthermore, participants appear divided on reasons why some students are or are not prepared for higher-level courses at the high school. Some participants indicated the need to teach specific skills at the lower-grade levels, while others discuss the need for a more systematic approach to addressing this gap in student preparedness.

The following comments are significant to support these themes derived from the first interview question in this category:

Teacher 1: No, I don't. In the past they were. I've said this numerous times to numerous supervisors. There used to be a writing class in the junior high school where a teacher would literally teach them how to write. They'd be paired with the

English department and with the social studies department, and they'd go over their five-paragraph essays, and they'd teach them proper writing techniques. They'd teach them APA and all this information. And that class has been taken away and been replaced with just a reading class where students just read almost like in a study hall. So, I've seen, since that class being removed, a drop in my AP scores and the writing skill is no longer there like it used to be.

Teacher 2: I think they are. I think as a teacher you want to have that confidence that you can take any kid and mold them into learning your content. If you can't do that, why are we here? So, I think in a course like physics where it's the first experience and you're already in the AP, I have to be able to teach anyone who walks into the classroom.

Counselor: I think some students are, not all students are. Some are ready sooner than others. I think we have to work with the student and meet them where they're at. Some students might be ready to tackle those challenging courses earlier on. Others, I might have seniors that it's not until senior year that they're taking some honors courses.

Building Administrator: But I do think we do have students, of course, that are ready to take these higher-end courses, but creating more rigorous content at the lower grade levels, I think, would make them even more ready to take these AP and dual-enrollment courses.

District Administrator: I think that some of them are ready, but I think that many of them could be better prepared for them. So, as you know, this year we offered the

human geography to any ninth-grade student who had received proficient or advanced on the PSSA. And I know that a lot of those students were not ready and the teachers that were teaching it for the first time were not ready to take on that larger load of students. But one of the things that we've done then is put that off for years and next year we're not going to offer it. So, I think that there needs to be a greater awareness of our students for the AP and dual enrollment. So yeah, it's one of those, some are ready and some are not.

After examining the responses to the second question in this category, the participants' revealed several suggestions for increasing students' skills to better prepare them for AP and dual enrollment courses at the high school. Some of the suggestions included the following: incorporating writing into junior high classes, tracking students by placing them into advanced classes earlier in their academic careers, including high-order thinking questions into the curriculum in the grades leading to the high school, aligning core content courses of study to ensure appropriate skills are being taught at all grade levels, and professional development for educators on research based instructional practices.

The following comments are noteworthy to support these suggestions from the second interview question in this category:

Teacher 1: 110% bring that [writing] class back.

Teacher 2: Well, this is a tricky one because I think when we force kids in into tracks early on, I know it eliminates kids, but those tracked kids are so well prepared, and I don't know what the solution is to get more kids early on, but any of the kids you start out with like Honors [course], those are your kids that are more well prepared for AP

[course] and then more well prepared for AP [course] and more well prepared for AP [course]. It just seems like the kids that do all three of those are ridiculously prepared.

Counselor: I think the teachers are going to be able to identify what skills students need to be successful in their courses. I just look purely from their academic history and can tell based on transcript students who've performed at a certain level, historically, can be successful in those higher-level classes. I don't think I can speak to specific skills. I think that's more a teacher question.

Building Administrator: I think any educator would say higher-order thinking questions earlier on in the elementary levels, and really having students gauge their own understanding and giving them opportunities to really delve into the topic deeper, rather than just surface level. I think also, obviously, working on reading comprehension skills and making sure students are on grade level. There's a lot of research out there of how important it is to have students at grade level by third grade. I'm sure we're working towards that, but more resources could absolutely promote that. It goes back to we haven't really dug into this conversation deeply because there's so many other things going on, but I think it was definitely evident that we need to prepare our teachers to be able to teach higher rigor courses and then have our students meet that bar.

District Administrator: So, aligning the course studies in the secondary junior high to high school. I think one of the things that we do right is that in the fourth, fifth and sixth, we no longer fully, really don't differentiate a lot with math, which means we don't differentiate as much with English. It's very minimal because I think that that sets it up so that not every student has that opportunity to go on a higher academic

track. It tracks them too early before they've matured enough. But I think once we get to the junior high, looking at the data, communicating with students and having the teachers that are prepared. Some teachers are still working very much in a silo. And I think that's something that they're not prepared.

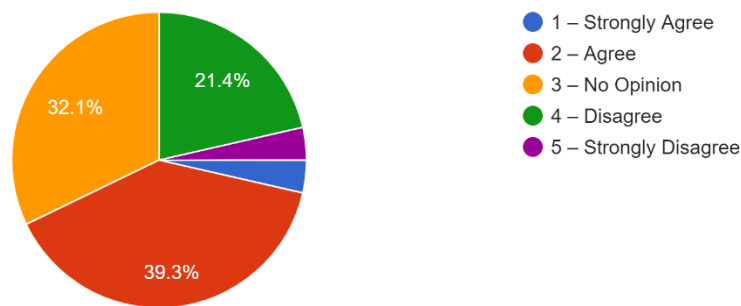
Results for Third Research Question

To collect quantitative data for the third research question, the third category of Likert scale questions included four agreement statements specifically designed to determine the perspectives of teachers, counselors, and administrators on the impact District-level planning and organization has on the enrollment of students in rigorous courses of study at ETHS.

Figure 12

Agreement Statement #10 - The School District has sufficiently trained and prepared AP and Dual Enrollment teachers to provide quality instruction to students enrolled in their courses

The School District has sufficiently trained and prepared AP and Dual Enrollment teachers to provide quality instruction to students enrolled in their courses
28 responses



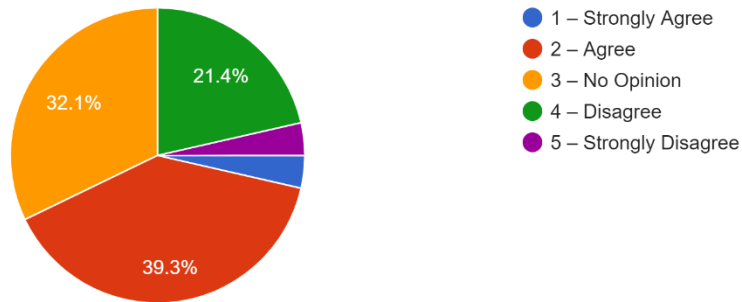
As shown in Figure 12, the perspectives of participants are quite inconsistent regarding the District training and preparing of teachers to provide quality instruction to the

students enrolled in AP and dual enrollment courses at ETHS. Teachers had the highest agreement percentage with 56.25% either agreeing or strongly agreeing with this topic. On the other hand, a majority of administrators (57.14%) disagreed with the training and preparation of AP and dual enrollment teachers by the District. Most counselors (60%) indicated having no opinion on this topic, while 40% agreed the District sufficiently prepares teachers to provide quality instruction in AP and dual enrollment courses.

Figure 13

Agreement Statement #11 - The School District has a well-defined curriculum map for all core subject areas, which promotes enrollment in rigorous courses of study at Exeter Township Senior High School

The School District has a well-defined curriculum map for all core subject areas, which promotes enrollment in rigorous courses of study at Exeter Township Senior High School
28 responses



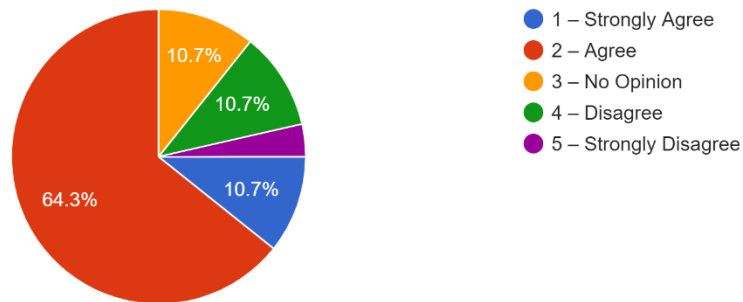
Similar to the last question, there is much discrepancy among participant groups regarding their perspectives on the District possession of a well-defined curriculum map and its impact on enrollment in AP and dual enrollment courses (Figure 13). Counselors had the highest agreement percentage by far with 80% of those surveyed agreeing with the topic. In

comparison, only 43.75% of teachers and one administrator (14.29%) either strongly agreed or agreed with the District possessing a well-defined curriculum map promoting enrollment in rigorous courses of study. Furthermore, 42.86% of administrators and 37.5% of teachers had no opinion on this topic.

Figure 14

Agreement Statement #12 - The School District has adequately promoted the benefits of AP and Dual Enrollment courses

The School District has adequately promoted the benefits of AP and Dual Enrollment courses
28 responses



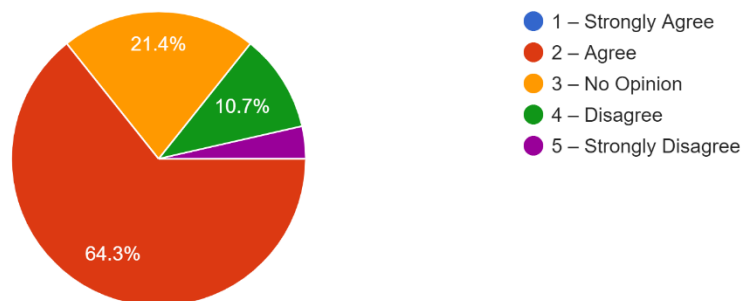
Unlike the previous two questions in this category, there is much more agreement among participants regarding the District promotion of the benefits of AP and dual enrollment courses with 75% of the participants either agreeing or strongly agreeing with this topic (Figure 14). However, there is still some discrepancy among the participant groups with 100% of counselors agreeing with the topic, as well as 81.25% of teachers either agreeing or strongly agreeing the District has adequately promoted the benefits of AP and dual enrollment courses. Conversely, a majority of administrators (51.15%) either disagreed or strongly disagreed with the District promotion of rigorous courses of study at ETHS.

Figure 15

Agreement Statement #13 - The School District has adequately provided the most up to date resources for teachers and students enrolled in AP and Dual Enrollment courses

The School District has adequately provided the most up to date resources for teachers and students enrolled in AP and Dual Enrollment courses

28 responses



In the last Likert scale question in this category, a majority of participants (64.29%) agree the District has provided teachers and students with the most up to date resources in AP and dual enrollment courses (Figure 15). Similar to the previous question, there is still some discrepancy among participant groups. A large majority of teachers surveyed (81.25%) agree the District has adequately provided the most up to date resources for teachers and students enrolled in rigorous courses of study. Additionally, 60% of counselors agree with this topic, while only 28.57% of administrators agree the District is providing students and teachers with the most up to date resources in rigorous courses of study. In fact, a majority of administrators (57.15%) either disagree or strongly disagree with this topic.

To acquire qualitative data for the third research question, the five participants interviewed for this study were asked the following questions regarding District-level

organization and planning and the impact of this on student enrollment in rigorous courses of study at ETHS:

- How does the District's organization help enrollment in rigorous courses of study? Explain.
- How does the District's organization hinder enrollment in rigorous courses of study? Explain.
- How does the District's planning help enrollment in rigorous courses of study? Explain.
- How does the District's planning hinder enrollment in rigorous courses of study? Explain.

When reviewing responses to the first two questions regarding the District organization, and the participants' views on the impact it has on the enrollment of students in rigorous courses of study at the ETHS, multiple themes arose from the data. Some participants believe the District has broken down many of the institutional barriers that once existed preventing students from enrolling in AP and dual enrollment courses, such as specific pre-requisite courses. Others believe the District has not done enough to get all teachers fully on board with this new philosophy at the high school where the District is encouraging more students to take rigorous courses of study. Additionally, some participants feel the District has adequately communicated the academic opportunities and benefits of AP and dual enrollment courses to the community, while others believe the District has not had an organized communication strategy to help promote enrollment in rigorous courses of study. Moreover, some participants believe the organization of the District curriculum and

curriculum department is both a help and a hinderance to the enrollment of students in rigorous courses of study at the high school.

The following statements are significant to support the themes derived from the first two interview questions in this category:

Teacher 1: I think with how they have it aligned. At least, how they used to have it aligned. They used to have it specifically in my course where you would take [course] in eighth grade, you'd take [course] in ninth grade, and then you could take AP [course] in 10th grade. So, it was almost like a feeder program where if you did well in the two, you could take AP [course] in 10th grade. It would be like a refresher course of everything you learned, and it would make it a lot easier. So, I think that was, specifically in my course, I think that was a very nice way for kids to get into AP because 10th grade is usually the first year they're taking AP and not be overburdened with so much new information. It was more of a refresher of eighth and ninth grade. Since then, though, they've taken that away. And now, that's going to be all new learning for them in that class. And I'm concerned, could that slow my class down? Will I get to everything I need to get to? And how will the scores be on the test?

Teacher 2: I think that our administration's focus is to break down barriers, because that's what I hear in the meetings, and then I hear it again from my department chair of how do we increase enrollment and promoting our own courses is important. But I just think having the mentality that you don't want prerequisites and you want to increase enrollment, I think, is a great step. I think students sometimes just don't want to take those courses, and I guess it's not necessarily our job to force them into it, even if we think we know it's best for them. So, I think guidance tries to look out kind

of what's best for the kid, but also what the kid wants. And I would say that there are kids that belong in the AP classes that aren't in them, and they probably need some sort of, maybe, a mentoring type of a situation. But there's kids that definitely belong in our AP classes that are slipping through the cracks because I'm finding them in my academic [course] and my Honors [course] and they definitely belong. I guess the other thing would be just schedule. These kids do take a lot of APs and maybe they just can't fit them in their schedule.

Counselor: I think there's definitely good marketing, if you will, and advertising of the opportunities of rigorous courses. I think that's been increasing over the years, which is a good thing. A large portion of the staff, I think, is supportive and they'll try to advertise within their departments and try to make students aware of the offerings in their departments and the more challenging offerings. I think that's probably how we prune it. We do parent workshops. We have evening information sessions, things like that, to try to get that information out to families. Students really could not take a more rigorous course without teacher recommendation or parents really advocating strongly. Now, we're shifting. I think teachers are getting on board. But, I can't say that all teachers are fully on board with that. Sometimes I have concerns about students being in classes that are rigorous and how's that going to impact the environment in the class. I do think we still have some room to grow in that area. But, I've seen the successes of those students, who even struggled in a regular college prep course, who wanted to challenge themselves in an area of interest. They did okay. I don't know it. I think we're still working on that.

Building Administrator: Our organization having block classes helps with students taking more of these courses, but, overall, I'm not sure that it helps our enrollment per se, because I don't think that we are doing a big enough net of trying to get more and more students involved in these kind of courses. I think lack of communication. We have a curriculum night which is not well-attended. I think there are other ways through social media, through really advertising what Exeter can really discuss what is available, and I think we could do a much better job of the PR end of our organization.

District Administrator: So, I'm not sure that it does the emphasis on rigorous courses of study that what it falls on to the shoulders of the high school guidance counselors. Until I came into the role of [district administrator], there was really no one who was at the district level who was putting any attention toward this, which is in many ways is understandable or not unusual because a lot of our attention always goes to the students that are most at risk. During the pandemic and at that time, [the former superintendent] who put me in this position said, this is one of the things that kept her up at night. Exeter money was there for addressing kids who were not meeting the goals that we're struggling. And she just felt that nobody was paying attention to the gifted students or to the enrichment of students. So, part of what I've been doing is looking into bringing more of an awareness and looking more at the AP classes in the dual enrollment. So, it was only just beginning. And as you know, I have been pulled many directions and the district has had a new superintendent since then, and so slowly. But I don't think that we have enough curriculum people at the district level either. And I would say very much that if you look currently at our organization,

we're very heavy on the pupil services side, which tends to go towards the students benefit, the students that have either IEPs or English language learners or other concerns and not students that are excelling. Not only we not have a fully formed curriculum branch to our organization, but the people that are in that are newer to that role or to the position. And so that they have not had that continuity or that opportunity to really dig in and establish some protocol that can be followed year after year. It's like, seems like we've had a lot of building administrators turnover also, and its always kind of starting all over again.

When studying responses to the second two questions regarding the District planning, and the participants views on the impact it has on the enrollment of students in rigorous courses of study at the ETHS, one central theme emerged from the data. The participants believe the District does not truly have a plan relating to increasing enrollment in rigorous courses of study at the high school. Although participants believe increasing enrollment in AP and dual enrollment courses is a District goal, the participants do not feel confident there is a clear path forward regarding the decisions being made at the building or District level to attain this goal. A second theme emerging from the data is the use, or lack of use, of certain resources, including staff, to assist in the enrollment and recruitment of students into rigorous course of study.

The following comments are important to support these themes derived from the second two interview questions in this category:

Teacher 1: I think the planning of it, I'm not sure if the planning does help it for that reason I just stated. There was this whole plan of almost like, with the former principal, it was like a minor league system. He was really into baseball, and he said

that eighth grade, ninth grader in the minor leagues, and AP was the majors. And it's almost like I'm my own farm system. And there was a plan. This is the way. Now, I don't know if there really is a plan. It's more of almost anyone can take AP, and I'm not sure if we're putting the thought into the requirements of getting them to be able to take AP, or what they should go through in order to be successful in AP. I think that's what hinders it. I don't think we've thought things out to the fullest extent.

Students should be able to do this, this, this, and this in order to take an AP class and be successful. I know there's different levels of success. But I mean, most AP classes you have to be able to read, and you have to be able to analyze, and you have to be able to write, especially in my class. And I'm not sure, at the lower levels, if we're putting the prerequisites in or the learning aspect into those things for all students to be successful at that rigorous type of course.

Teacher 2: I think just the mentality that there's definitely some directive being pushed down to the department chairs about getting kids in, and I think that that's got to be helping to increase the enrollment. Maybe just with scheduling. I know there's kids that say every year, "Oh, I have to take this course and I can't take that course." So maybe having a more balanced schedule, which isn't the easiest thing I'm sure. But that's the answer that I can think of, somehow allowing them to take the courses that they're looking for. I guess it's probably our block schedule that potentially because we have fall and spring and you can't really offer an AP class in the spring. So, I guess our schedule would probably be the biggest hinder to it, maybe.

Counselor: My sense is that it's definitely a goal of the district to provide those kinds of opportunities for students. Of course, if we're going to provide those opportunities,

we want students to take advantage of them and have them well utilized. I think seeing a little bit of expansion when we had some expansion this year. I sense that they're open to expanding that. I brought up the idea of adding another dual enrollment course for consideration. Seems like they're open to that. Again, that's just more opportunities to benefit students. I think sometimes the district doesn't utilize all of the resources that they have in making some of the decisions that are made at the highest levels. I think that it would be nice to get input from more people involved and people that have expertise in certain areas. I think sometimes assumptions are made. I think it could be helpful if, when possible, just they would seek more input from the people that are working daily with students.

Building Administrator: I think lack of planning is an ongoing theme here. I know that we are not providing AP courses for ninth grade because we recognize our teachers aren't ready. So, in planning in hindsight, I've seen how well things went and what we need to do better at is where we're at right now in the process. I think lack of planning hinders the overall enrollment, so we need to do a better job of making this a priority within our district.

District Administrator: I think it's very much left to what happens at the high school. So again, we're kind of rebuilding our team of the teaching and learning. And so, courses that are offered don't necessarily align with interest in other courses. Adding dual enrollment or having the AP teachers maybe go for other enrichment or things like that has only ever been whatever they bring to the table or the building principal, the high school will listen and make a decision. It hasn't been a whole team approach to that. So, the courses have not really changed much. And the only accountability

that the teachers have really is to look at the data and how they're doing. And even then, I think right now we're lacking that at a district level where the whole team is looking at that data, so left to the individual teacher. Yes, so it's really, a lot of it has to do with what the high school guidance counselors, what they share with students, their encouragement, some of the teachers of those classes. So, if you have a student that was not initially in an honors class then even though they may excel, they've never occurred them to take honors or they miss that opportunity, they probably will never have anybody telling them that they should take an AP class or dual enrollment.

Discussion

The purpose of this study is to explore the perspectives of teachers, counselors, and administrators at ETSD regarding the inclusion of students in rigorous courses of study at ETHS. By using a mixed-methods approach, both quantitative and qualitative data were gathered through online surveys and semi-structured interviews. As previously mentioned, each survey question and interview question link to one of the three research questions guiding this study and were organized by category. The first category of survey and interview questions was designed to determine the perceptions of the participants on the overall inclusion of students in AP and dual enrollment courses at ETHS. The second category of survey and interview questions was created to reveal the perceptions of the participants on the ability of students at ETHS to be successful in rigorous courses of study. The third category of survey and interview questions focused on the participants' perceptions of the role the District organization and planning has on enrollment in AP and dual enrollment courses at ETHS.

To assist with quantitative analysis, the use of frequency tables for each survey question provided quantitative data for all 28 survey participants with the use of a five-point Likert scale for each response. Additionally, the quantitative data for each survey question was disaggregated into frequency tables for all participant groups (teachers, counselors, and administrators) for comparison analysis. Qualitative analysis occurred through the examination of participant responses to the interview questions to identify themes and trends amongst the various participants. Furthermore, to increase the validity of this study's results, the triangulation of multiple data sets was used to analyze and evaluate the combination of the quantitative and qualitative data.

The first research question focuses on the perceptions of teachers, counselors, and administrators regarding the inclusion of students in rigorous courses of study at ETHS. According to the data, participants are divided on opening AP and dual enrollment courses up to a larger percentage of students at the high school. Although participants claim barriers have been removed over the past few years to provide more students with opportunities to take higher-level courses, participants still place a high value on the need for teacher recommendations and pre-requisite courses prior to enrolling in an AP or dual enrollment course at the high school. Moreover, participants value the role parents play in course selection, but some believe there is a lack of communication between the high school and the home regarding the benefits of AP and dual enrollment courses. Based on the data, counselors are most likely to support the inclusion of more students in AP and dual enrollment courses at the high school, while teachers are the participant group least likely to support this effort.

The second research question focuses on the perceptions of teachers, counselors, and administrators regarding student preparedness for enrollment in rigorous courses of study at ETHS. Based on the data, participants believe most students have adequate reading, writing, math, communication, and study skills to be successful in AP and dual enrollment courses. However, teachers were less likely to agree students possess the necessary skills to be successful in these rigorous courses at the high school compared to counselors and administrators. Furthermore, participants were divided on ways to improve student skills to better prepare them for AP and dual enrollment courses at ETHS.

The final research question focuses on the perceptions of teachers, counselors, and administrators on the District organization and planning and its impact on enrollment in rigorous courses of study at ETHS. According to the data, there is inconsistency among the participants regarding the District organization and planning surrounding AP and dual enrollment courses at the high school. In general, participants believe the District has adequately promoted the benefits of students enrolling in rigorous courses of study, and has provided the students enrolled in those courses, as well as the teachers instructing those courses, with the most up to date resources. However, participants do not feel the District has a plan to align core content curriculum at the high school and lower-grade levels, and the District is not providing adequate training for teachers instructing AP and dual enrollment courses at ETHS.

Summary

A significant amount of quantitative and qualitative data were collected and analyzed for this study to better understand key stakeholders' perceptions of the inclusion of students in rigorous courses of study at ETHS. The results indicate inconsistencies among participant

groups. Nevertheless, most participants do believe students at ETHS have more opportunities to enroll in AP and dual enrollment courses currently compared to previous years, and the District is providing necessary resources for students and teachers to be successful in those courses. Furthermore, most participants agree students enrolling in AP and dual enrollment courses at ETHS possess the necessary skills to be successful in those courses, and both students and parents are aware of the benefits students receive by enrolling in these courses. However, most participants believe the District lacks an overall plan to adequately train AP and dual enrollment teachers and establish a clear curriculum map to help promote enrollment in rigorous courses of study.

The results from Chapter IV will be used in the next chapter to provide conclusions and recommendations regarding the research questions driving this study. Additionally, the next chapter will outline limitations to this study, as well as recommendations for future research originating from this study's research questions.

CHAPTER V

Conclusions and Recommendations

According to the data from “Future Ready PA Index,” only 39.9% of 12th graders in 2021-22 school year participated in a rigorous course of study while attending Exeter Township High School (ETHS). The statewide average in 2021-22 was 55.9%, indicating students at ETHS are enrolling in Advanced Placement (AP), dual enrollment or concentrated CTE courses at a lower rate compared to students across the state (PA Department of Education, 2023c). Furthermore, according to information from “U.S. News and World Report,” ETHS ranks 222nd out of all Pennsylvania high schools in the most recent rankings of the best high schools in Pennsylvania, and ranks 10th out of the 18 high schools in Berks County. One of the main components to this report is a “College Readiness Index,” which takes into consideration the proportions of 12th graders who took and passed at least one AP or IB exam (“Exeter Township Senior High School,” 2023). Moreover, the research suggests many benefits for students enrolling in rigorous courses of study while in high school. Some of the major academic benefits of students participating in AP or dual enrollment courses include the following: increases in high school and college GPAs, scoring higher on standardized exams, scoring higher on college entrance exams, preparing students for the academic rigors of college courses, higher grades in introductory courses in college, and earlier college graduation rates compared to similar cohorts (Allen & Dadger, 2012; An & Taylor, 2015; Dougherty et al., 2006; Flowers, 2008; Morgan & Klaric, 2007; Morrison, 2007; Scott et al., 2010).

Considering the aforementioned information, the purpose of this research study was to examine the perspectives of teachers, counselors, and administrators at Exeter Township

School District (ETSD) to determine any underlying, or prevailing insights of students enrolling in rigorous courses of study at ETHS, and the participants' views on the impact District planning and organization has on student enrollment in AP and dual enrollment courses at ETHS. Three main research questions were developed to help focus the analysis of the relevant research on this topic and a mixed-methods approach to data collection. This chapter will present the conclusions and recommendations of this study, as well as the fiscal implications of this study, limitations to this study, and recommendations for future research.

Conclusions

A considerable amount of information was gathered for this study to assist with the conclusions and recommendations for use at ETHS and ETSD to help inform the decision-making processes revolving around the following: student enrollment in rigorous courses of study, staffing and professional development for AP and dual enrollment courses, and curriculum alignment in content areas with a focus on student preparation for rigorous courses of study. As previous stated, the following are the three questions guiding this study:

1. What perceptions do secondary teachers, school counselors, and administrators have regarding the inclusion of a higher percentage of students in rigorous courses of study at the senior high school?
2. What perceptions do secondary teachers, school counselors, and administrators have regarding student preparedness for rigorous courses of study at the senior high school?

3. What perceptions do secondary teachers, school counselors, and administrators have regarding District-level organization and planning and its impact on student enrollment in rigorous courses of study at the senior high school?

The review of literature provided a contextual background to assist with the analysis of the quantitative and qualitative data regarding the research questions, while the three research questions formed a framework to examine the data and develop specific interventions for consideration at ETHS and ETSD regarding the research topic.

After analyzing the data for this study, the first conclusion is the inconsistency among the perceptions of teachers, counselors, and administrators regarding their views on the enrollment of students in rigorous courses of study at ETHS. When reviewing the data relating to the first research question, counselors were much more likely to open AP and dual enrollment courses to a larger number of students at the high school compared to teachers and administrators. In fact, 80% of counselors either agreed or strongly agreed AP and dual enrollment courses should be open to all students. In comparison, only a slight majority of teachers and administrators (56.5%) either agreed or strongly agreed with this statement. Counselors tend to place a high value on students enrolling in rigorous courses of study due to the many academic and financial benefits provided by participation in AP and dual enrollment courses while in high school (Hanson et al., 2015; Militello et al., 2009; Witkowsky & Clayton, 2019). Furthermore, teachers were the most restrictive participant group regarding the enrollment of students in rigorous courses of study. For instance, 81.25% of teachers agreed or strongly agreed with pre-requisite courses for AP and dual enrollment courses, and a majority of teachers (56.25%) agreed or strongly agreed with including a student's discipline record as factor in student enrollment in AP and dual enrollment courses.

This information coincides with a study conducted by Duffet and Farkas (2009) finding teachers to be apprehensive about the expansion of AP programs at the expense of the quality of instruction and student performance within their courses. This inconsistency among participant groups regarding their perceptions of students enrolling in rigorous courses of study may be a contributing factor to the below average enrollment numbers ETHS exhibits for AP and dual enrollment course offerings.

Although all participants acknowledge the removal of institutional barriers to students electing to enroll in rigorous courses of study at ETHS, the data suggests a lack of consistency amongst all participant groups regarding their perspectives on the inclusion of students in rigorous courses of study. In order to address these variations in views among teachers, counselors, and administrators, steps must be taken by the District to ensure a consistent message is being conveyed to these stakeholders to increase participation in AP and dual enrollment courses at the high school. Initially, the Director of Teaching and Learning should work with the Supervisor of Academic Enrichment to develop a district philosophy around AP and dual enrollment programming at ETHS. While examining the data, there appears to be confusion surrounding the philosophy of the District has on students enrolling in AP and dual enrollment courses. Some participants acknowledge this to be a goal of the District, while others feel it is not a top priority. Having a specific, well-defined District philosophy on the inclusion of students in rigorous courses of study will help to alleviate this confusion.

After a district-wide philosophy is established regarding AP and dual enrollment programming, this message needs to be conveyed to the administration at the high school, so the administration can disseminate this philosophy to the teachers and counselors at ETHS.

The high school administration works much closer with the high school teachers and high school counselors compared to the district-level administrators, so it is imperative to ensure the District philosophy on rigorous courses of study is being conveyed by those inside the building to others in the building. Moreover, school counselors and teachers have the most contact with students and their parents regarding coursework and course selection, so the District needs to make certain all counselors and teachers are relaying the same philosophical message regarding the inclusion of students in AP and dual enrollment courses. Establishing a clearly communicated message among all stakeholders should provide more consistency among the views of teachers, counselors, and administrators regarding the inclusion of students in rigorous courses of study thus increasing student enrollment in rigorous courses of study at ETHS.

While having a district-wide philosophy will undoubtedly assist in the enrollment of students in rigorous courses of study at ETHS, this is only the first step in increasing admission in AP and dual enrollment courses. When looking at the data relating to both the first and second research questions, a second conclusion to this study is ETHS is lacking in identification and recruitment of students with AP and dual enrollment potential and encouraging them to enroll in these courses. Overwhelmingly, participants agree students at ETHS have adequate reading, writing, math, study, and communication skills to be successful in AP and dual enrollment courses. Furthermore, a majority of all participant groups (teachers, counselors, and administrators) either agree or strongly agree with these same conclusions. However, a majority of students in each graduating class are not enrolling in at least one AP or dual enrollment class by their 12th grade year based on data provided by “Future Ready PA Index” (PA Department of Education, 2023c).

The District has made some efforts to increase enrollment in rigorous courses of study over the past few years. For example, twice a year the high school hosts a curriculum overview night, featuring a presentation by the counseling department, as well as the Supervisor of Academic Enrichment, regarding AP and dual enrollment programming at the high school. The presentations provide a basic overview of both AP and dual enrollment courses, the costs associated with enrolling in AP and dual enrollment courses, the benefits of taking these courses while in high school and post-graduation benefits, and an opportunity for parents and students to ask questions. At one presentation, a representative from Reading Area Community College (RACC), with whom the District has a partnership with for dual enrollment credits, attends to discuss how the college views dual enrollment and offers advice to parents and students about taking college-level courses while in high school. Although the presentations are well-organized and presented in a clear fashion, they are poorly attended. These sessions are offered in the evenings and only a small percentage of parents and students attend each presentation. Another student recruitment effort is made during the time for course selection at the high school. An AP student fair is organized by the Supervisor of Academic Enrichment, and AP students are expected to setup tables during lunch periods to represent specific AP courses and answer any questions potential students may have regarding those classes. Unfortunately, not all teachers place as much effort into this as others, and not all students are the best promoters of certain courses. This effort has had mixed reviews over the past couple of years due to the inconsistencies from its application, not the concept.

When it comes to identification efforts of students with AP and dual enrollment potential at the high school, this process comes from school counselors and their

conversations with students and the use of teacher recommendations during course selection time at the high school. In general, student assessment data has not been traditionally used as an identification factor at ETHS to help identify students with AP and dual enrollment potential.

In comparison to the recruitment and student identification efforts at ETHS for enrollment in AP and dual enrollment courses, the research for this study provided various strategies utilized in other districts, as well as specific suggestions from participants to increase enrollment in rigorous courses of study at ETHS. Some additional strategies from the relevant research include the following: send letters home using AP potential from testing data to recruit students to take AP courses, have teachers discuss the benefits of AP courses in non-AP classes, look at data for underrepresented groups in AP courses to target for recruitment, work with middle school counselors and administration to analyze assessment and grading data to identify students with AP and dual enrollment potential, and fully fund all AP and dual enrollment programs and resources (Cartegena & Slater, 2022; Cook, 2013; Hanson et al., 2015; Matthews, 2021; Mehl et al., 2020). Many of these suggestions correspond with participant responses from the qualitative data collected in this study to help identify and recruit students with AP and dual enrollment potential at the high school, including the use of student data to help identify students with AP or dual enrollment potential, collaborating with the junior high school administration, counselors, and teachers to promote the benefits of rigorous courses of study at earlier grade levels, using a marketing or public relations strategy to better advertise the benefits of taking higher-level courses while in high school, and the utilization of additional parent workshops to help promote the financial benefits of students enrolling in AP and dual enrollment courses while at ETHS.

Considering all the above-mentioned data ascertained from this study on identification and recruitment strategies for AP and dual enrollment courses, certain steps should be taken at ETHS to help increase enrollment in rigorous courses of study. First, this process needs to begin at the junior high level. The Supervisor of Academic Enrichment should work with the teachers, counselors, and administrators at the junior high school to begin identifying students with AP and dual enrollment potential prior to their enrollment at the ETHS. This process should include the examination of assessment data, teacher recommendations, and parental input. Additionally, students and parents at the junior high school should be invited to attend informational sessions regarding AP and dual enrollment programming at the high school. Having information about the upcoming programming at the high school will hopefully inspire more students to elect to enroll in more rigorous courses of study when they arrive in ninth grade. Second, the Supervisor of Academic Enrichment should work with the high school counselors, teachers, and high school administrators to better identify students with AP and dual enrollment potential through the use of student data. This should include the use of PSAT and SAT data, benchmark testing data, course grades, state standardized testing data, and teacher input. Finally, the Supervisor of Academic Enrichment, high school administrators, teachers, counselors, the Director of Public Relations, and RACC should work on a marketing strategy for AP and dual enrollment courses at the high school. This strategy should include the following: informational sessions for students and parents, direct mailings to students with AP and dual enrollment potential, AP and dual enrollment fairs, social media postings, and RACC meet and greet sessions with academic advisors. By having specific identification and recruitment

strategies in place, the number of students enrolling in AP and dual enrollment courses should increase in future years at ETHS.

While examining data relating to the third research question concerning District planning and organization, a third conclusion to this research study is participants believe ETSD is missing an overall District plan for curriculum alignment in core content areas, as a means of increasing enrollment in rigorous courses of study at ETHS. Less than a majority of participants surveyed for this study indicated the District has a well-defined curriculum map for core subject areas promoting enrollment in rigorous courses of study at ETHS. Moreover, multiple interview participants stated the District has no plan for curriculum planning, specifically at the lower grade levels leading to the high school. Additionally, some interview participants mentioned the high school schedule and course offerings as potential roadblocks for enrollment in AP or dual enrollment courses for some students. The high school currently operates on a hybrid-block schedule with some courses running each day for one period for an entire year, while other courses run half a year for two periods. This type of schedule impacts the courses offered during the year, as well as staffing considerations and availability for all courses. To increase AP and dual enrollment in other districts, administrators have modified the master schedule to make rigorous courses of study more accessible to students, and administrators have selected specific staff members to instruct AP and dual enrollment courses to help promote student enrollment and retention in those programs (Martinez et al., 2015; Matthews, 2021).

In view of this information involving curriculum alignment, scheduling, and staffing, specific steps should be taken at ETHS and ETSD to help with District organization and planning, which will assist with students enrolling in rigorous courses of study at the high

school. First, the Director of Teaching and Learning should conduct a curriculum audit with their department members to determine areas of deficiency in all core content areas, specifically in grades five through 12. After analyzing curricular needs, a plan should be put in place to create a scope and sequence for all core content areas, including pathways at the high school allowing students to funnel into AP and dual enrollment courses within each of the core content areas. Furthermore, the Director of Teaching and Learning should establish a curriculum review cycle allowing for an internal review process every three to five years for each department to analyze their own curriculum to maintain the most up to date instructional strategies, skills, and content aligned to state and national standards. The Director of Teaching and Learning should utilize the junior high school and high school department chairpersons, as well as the counselors at the junior high school and high school to assist with these processes. Once a curriculum plan is in place and curriculum alignment has begun throughout the District, the Director of Teaching and Learning, the Supervisor of Academic Enrichment, the high school administration, high school department chairpersons, and the high school counselors should work on the high school schedule and course offerings to make certain there are no internal barriers preventing students from enrolling in AP and dual enrollment courses at ETHS. This may include the following: changing the master schedule, evaluating elective course offerings, reviewing staffing of courses, studying enrollment trends in courses, eliminating courses or programs, or a combination of these recommendations. Having an organized curriculum for all core content areas, eliminates any internal obstacles contributing to students not enrolling in AP and dual enrollment courses. As a result, there should be an increase in the enrollment of students in rigorous courses of study at ETHS.

The final conclusion of this research study directly relates to the third research question surrounding the District organization and planning. As mentioned previously, participants indicated a lack of curricular planning within the District, potentially contributing to low enrollment numbers in AP and dual enrollment courses. Similarly, participants believe the District is not sufficiently training and preparing AP and dual enrollment teachers to provide quality instruction to students enrolled in their courses. If teachers do not feel supported, or are not being provided with adequate professional development, students may not be receiving a quality experience while enrolled in rigorous courses of study at ETHS. According to the research on this topic, districts with successful AP and dual enrollment programs have counselors work with teachers to promote inclusion and provide strategies for working with all types of learners, provide professional development to AP and dual enrollment teachers and pre-AP and pre-dual enrollment teachers, establish specific meeting times to discuss instructional strategies in rigorous courses of study, promote professional development from outside organizations, and connect staff members with community resources to assist with professional growth (Cook, 2013; Martinez et al., 2015; Matthews, 2021; Mehl et al., 2020; Militello et al., 2009).

At ETHS, there have been some attempts at professional development surrounding AP and dual enrollment teachers. For instance, this past school year, the Supervisor of Academic Enrichment and I met with all AP teachers on a monthly basis to discuss instructional practices and resources, and to create an internal AP community. Additionally, the building and district administration supports teachers' requests to attend professional development trainings and conferences relating to either AP or dual enrollment courses. However, based on the data from this study and the relevant research, teachers, counselors,

and administrators do not believe these endeavors are sufficient for those individuals teaching AP and dual enrollment courses at ETHS. Taking this into consideration, the Director of Teaching and Learning should work with the Supervisor of Academic Enrichment, the high school administration, and the high school staff to develop a professional development plan for all AP and dual enrollment teachers at ETHS. This plan should include all or some of the following: the creation of AP and dual enrollment professional learning communities at the high school, support to attend trainings offered by outside organizations regarding AP and dual enrollment, peer mentoring for new AP and dual enrollment teachers, in-service time dedicated to working with junior high school and elementary teachers to discuss skill and content development in all curricular areas, and creating connections with RACC and other school districts to promote teacher networking across the county. Through a more robust professional development plan, teachers will feel more comfortable teaching AP and dual enrollment courses, which will translate into a better learning experience for students. If students have a quality learning experience in one rigorous course of study, they may be more likely to enroll in another rigorous course and promote AP and dual enrollment courses to their peers. This should lead to an increase in student enrollment in these courses at ETHS.

When evaluating the impact of this research study's fiscal implications, there are a few concerns which must be addressed. For example, the recommendations presented in this chapter will require a significant amount of time and planning by many members of the District. Although this is an indirect cost for some members of the administrative team, time in meetings and planning still equates to resources being diverted from other tasks. Additionally, there will be direct costs associated with many of the recommendations in this

chapter. Since curriculum writing is done by teachers, and they are paid at a rate pre-determined in their contract, this will be a direct cost. Taken into consideration must also be any time spent working on the planning and organizing outside the contracted day for teachers and counselors, which will also require payment per their contract. Furthermore, there will be a cost associated with marketing and advertising AP and dual enrollment programming. The District will need to pay for any mailings, flyers, or any printing helping to promote AP and dual enrollment programs, fairs, or informational sessions. Moreover, if more students enroll in AP and dual enrollment courses, resources will need to be purchased for those courses, as well as financial assistance given to families who are unable to pay for the associated costs with enrolling in those courses. Finally, professional development will come at a cost to the District, especially if more teachers are attending conferences during the school year. Not only will the District need to pay for the conferences and the fees associated with them, but the District may also need to pay for substitute teachers to be in the classrooms of the teachers attending the conferences during the school year.

Limitations

When considering the conclusions and recommendations associated with this study, a few limiting factors should be acknowledged. Although the participation rate for the quantitative survey was 100%, only 28 individuals were approached to partake in this portion of the mixed-methods study. Within this grouping of 28 individuals, 16 participants were teachers, seven were administrators, and five were counselors. With over half the participants of the quantitative survey from the teacher group, this may have skewed the results of the survey. Furthermore, not all district administrators were asked to participate in this survey, and only AP and dual enrollment teachers from the high school were asked to participate.

This may also have skewed the results to the survey, especially considering some of these individuals are no longer employed at ETSD. Finally, only five individuals participated in the qualitative portion of this mixed-methods study. The limiting of the sample size may have impacted the results to the semi-structured interviews.

Another limitation to this study is the lack of student input and data. Students were not included in this study, so this study is unable to make any conclusions or recommendations relating to student perspectives on AP and dual enrollment programming at ETHS. Additionally, this study did not examine any demographic student data to disaggregate groups into race, ethnicity, or gender. Consequently, this study is unable to make any determinations regarding the groups of students enrolling in rigorous courses of study at ETHS. Finally, student performance data was not examined for this study. Therefore, this study is not able to compare enrollment data versus performance data for individual students or student groups enrolled in AP and dual enrollment courses at ETHS.

Recommendations for Future Research

After conducting this research study, additional questions have arisen leading to more topics to be considered for further research at ETHS and ETSD. As noted in the limitations section of this chapter, this study did not include student participation or student demographic data. A consideration for an additional study would include surveying students enrolled in AP and dual enrollment courses at ETHS to try and decipher why they chose to take those courses at the high school. On the other hand, research could be conducted with all students at ETHS not enrolled in AP and dual enrollment courses to attempt to discern why these students are choosing not to enroll in rigorous courses at the high school. Having this data to compare would be highly beneficial for the District, and would be a helpful extension

to this research study. Additionally, students could be interviewed or placed in focus groups and asked a series of open-ended questions targeting their perceptions of AP and dual enrollment courses at ETHS. This could also lead to the discovery of more reasons why some students are choosing to enroll in rigorous courses while others are not.

Another consideration for future research regarding student enrollment in rigorous courses of study at ETHS would be to analyze student group data. This would help determine which groups of students are underrepresented in AP and dual enrollment classes at ETHS. Through this study, the research suggests racial and ethnic minorities, as well as students from lower socioeconomic backgrounds are less likely to enroll in AP and dual enrollment courses (Judson & Hobson, 2015; Spencer & Maldonado, 2021). By combining student group data and student achievement data, the District would be able to target specific groups of students for recruitment into rigorous courses of study at ETHS.

Other consideration for future research would revolve around student performance on AP examinations and in dual enrollment courses. As noted in the limitations section of this chapter, student performance data was not analyzed for this research study. However, a future study may consider examining student performance data and comparing student success rates to teacher professional development participation rates. Having this information would allow the District to better understand what professional development is most effective in helping prepare teachers to support students in either AP or dual enrollment courses.

Finally, since this study only focused on participants from the high school and certain members of the district administration, future research could incorporate more stakeholders, such as, district administrators, junior high school teachers, junior high school counselors, and building administrators. Many of the responses in this survey, and some of the

recommendations, included involving the junior high school staff. However, this study did not examine their perspectives on this research topic. A future study focusing on the views of additional administrators, as well as members of the junior high school staff, would provide the District with a stronger picture of the organizational and planning needs relating to students' skill development, specifically as it relates to student preparation for enrollment in rigorous courses of study at the ETHS.

Summary

The goal of this research study was to provide a blueprint for future discussions and decisions at ETSD concerning student enrollment in rigorous courses of study at ETHS. As the research asserts, there are many academic and financial benefits to students when enrolling in AP and dual enrollment courses while in high school. Additionally, the number of students enrolling in rigorous courses of study is a significant metric utilized by the state's department of education and other organizations to rank schools and districts when comparing them to one another across the county, the state, and the nation ("Exeter Township Senior High School," 2023; PA Department of Education, 2023c).

Considering the low percentage of students enrolling in AP and dual enrollment courses at ETHS compared to other districts in the county and the state, a study was necessary to attempt to provide some insight into possible contributing factors. The focus of this study was to ascertain the perspectives of teachers, counselors, and administrators on overall student enrollment in rigorous courses of study at the high school, student preparedness for enrollment in rigorous courses of study at the high school, and the impact the District planning and organization may have on the enrollment of students in rigorous courses of study at the high school.

In summation, the data analysis for this study led to multiple conclusions, which may all be contributing to low enrollment numbers in rigorous courses of study at ETHS. First, there is inconsistency among participant groups' perspectives regarding the District philosophy surrounding the inclusion of students in AP and dual enrollment courses. Second, the District and the high school leadership have not done enough to use student data to identify students with AP and dual enrollment potential, and have not done enough to recruit students into AP and dual enrollment courses at the high school through a strategic marketing plan. Third, the District lacks curricular alignment in core content areas with no decipherable plan to create a scope and sequence from lower grades through the high school. Finally, the District is not providing substantial professional development for AP and dual enrollment teachers and is missing a professional development plan to address the needs of these teachers throughout the school year. Hopefully, this study will initiate the development of district-wide interventions to address these conclusions, leading to the enrollment of more students in rigorous courses of study at ETHS.

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Appendix A

Superintendent Letter of Support



Superintendent
Christy M. Haller, Ed.D.

200 Elm Street
Reading, PA 19606-2839
Phone 610.898.9569
Fax 610.779.7104

September 20, 2022

Joseph Alcaro
1503 Girard Avenue
Reading, PA 19610

Dear Mr. Joseph Alcaro:

I am pleased to write a letter in support of your doctoral capstone project entitled, "Perceptions Regarding the Inclusion of Students in Rigorous Courses of Study at Exeter Township High School." The proposed research has significant value to the District to help us determine how teachers perceptions may impact the enrollment of students in Advanced Placement and Dual Enrollment courses.

I have reviewed the project proposal and understand the following related to participation:

Teacher Survey:

survey will be available via an online survey tool (Google Forms) using a secure website.

Teacher Interview:

will occur in the teacher's classrooms, counselor's offices, administrator's offices, researcher's office, conference room, or virtually through a Google Meet.

Please accept this letter as my formal consent and support of the district's participation in the proposed research project.

Sincerely,

A handwritten signature in black ink that reads "Christy M. Haller". The signature is written in a cursive style.

Christy M. Haller, Ed.D.

Appendix B

Permission to Participate Form

Dear Faculty Member,

As an educational professional at Exeter Township School District, you are being asked to participate in a research study to investigate the perception regarding the inclusion of students in rigorous courses of study at Exeter Township High School. Your participation in this study will help the researcher learn more about your perceptions impacting the enrollment of students in Advanced Placement and Dual Enrollment courses.

What will I be asked to do if I take part in this study?

If you agree to participate in this study, you will be asked to (1) complete one Google Form electronic survey questionnaire and (2) participate in one interview.

The survey will ask you questions about your background in education and questions regarding your perceptions about rigorous courses of study at Exeter Township High School. The interview will only be conducted with select participants utilizing a purposeful sampling technique.

Where will this study take place?

The survey will be available via an online survey tool (Google Forms) using a secure website.

Interviews

will occur in the teacher's classrooms, counselor's offices, administrator's offices, researcher's office, conference room, or virtually through a Google Meet.

How long will the study last?

The study is projected to last approximately 16 weeks. Total participation time will vary. Surveys should be completed in 15-20 minutes. Each interview is expected to take 20-30 minutes.

What happens if I don't want to participate?

Your participation is voluntary; you can choose whether you want to participate in the study or not. There will be no penalty if you choose not to participate.

Can I quit the study before it ends?

You can withdraw from the study at any point by notifying the researcher. There will be no penalty should you choose to withdraw. The researcher will not ask you why you opted to withdraw.

What are the risks?

There are minimal risks to this study. You will not be asked questions of a sensitive nature. The survey

and interview questions may make you feel uncomfortable as some people do not like to volunteer information/feedback that could be perceived as negative or complaining. However, participants are reminded that they are not required to answer any questions of which they choose. Participants can also stop their participation at any time without question.

How will I benefit from participating?

If you decide to be in this study, you will assist the researcher in better understanding the current perceptions of professional educators at Exeter Township School District regarding the inclusion of students in rigorous courses of study.

Will my responses be kept confidential and private?

Yes, the survey data and interview responses collected from you will be kept confidential, which means only the researcher will see or have access to it. Your survey responses will be anonymous. No names will be reported in the report of the findings. Data will be stored on a secure server and password-protected and/or stored in a locked office.

Who do I contact if I have questions about this study?

If you have questions about this study, please contact the researcher, Joseph Alcaro, at alc8966@pennwest.edu or at 484-269-4374. If you would like to speak with someone other than the researcher, please contact Dr. Peter Aiken, Adjunct Professor at California University of Pennsylvania, at aiken@pennwest.edu.

I have read this form. Any questions I have about participating in this study have been answered. I agree to take part in this study, and I understand that taking part is voluntary. I do not have to take part if I do not wish to do so. I can stop at any time for any reason. If I choose to stop, no one will ask me why. By signing below, I agree to participate in this study. By doing so, I am indicating that I have read this form and had my questions answered. I understand that it is my choice to participate and I can stop at any time.

Signature: _____

Date: _____

Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective 10/04/22 and expires 10/03/23.

Appendix C**Participant Survey**

1. What is your gender?
 - a. Male
 - b. Female
 - c. Transgender
 - d. Non-binary/Non-conforming
 - e. Prefer not to answer
2. Which best describes your current role at Exeter Township School District?
 - a. District administrator
 - b. Building administrator
 - c. Classroom teacher
 - d. School counselor
3. Which best describes the educational level you have attained?
 - a. BA or BS
 - b. MA or MS
 - c. Specialist
 - d. EdD or PhD
4. How long have you been employed at Exeter Township School District?
 - a. 0 – 3 years
 - b. 4 – 6 years
 - c. 7 – 10 years
 - d. 10 – 15 years
 - e. 15 + years
5. Other than substitute teaching or other temporary placement, have you ever been employed by another School District and/or private school?
 - a. Yes
 - b. No

For the following statements please indicate either:

1 – Strongly Agree

2 – Agree

3 – No Opinion

4 – Disagree

5 – Strongly Disagree

6. AP and Dual Enrollment courses should be open to all students

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

7. There should be pre-requisite courses for AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

8. Teacher recommendations should be a factor in the enrollment of students in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

9. Parent choice should be a factor in the enrollment of students in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

10. A student's discipline record should be a factor in the enrollment in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

11. Students at Exeter Senior High School have adequate reading and writing skills to be successful in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

12. Students at Exeter Senior High School have adequate math skills to be successful in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

13. Students at Exeter Senior High School have adequate study skills to be successful in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

14. Students at Exeter Senior High School have adequate communication skills to be successful in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

15. The School District has sufficiently trained and prepared AP and Dual Enrollment teachers to provide quality instruction to students enrolled in their courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

16. The School District has a well-defined curriculum map for all core subject areas, which promotes enrollment in rigorous courses of study at Exeter Township Senior High School

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

17. The School District has adequately promoted the benefits of AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

18. The School District has adequately provided the most up to date resources for teachers and students enrolled in AP and Dual Enrollment courses

1 – Strongly Agree 2 – Agree 3 – No Opinion 4 – Disagree 5 – Strongly Disagree

Follow-up In-Person Interview

You ONLY need to complete the last 2 questions if you answer “YES” to the first question. Thank you for your consideration.

19. Would you like to be considered for a brief 15-20 minute interview for this study?

a. Yes

b. No

20. If you answered “yes” to the previous question, please provide your name to the researcher (Joe Alcaro), so he can contact you.

21. If you would like to be interviewed, would you prefer it to be done in-person or virtually?

a. In-person

b. Virtual

Appendix D

Participant Semi-Structured Interview Questions

Semi-Structure Interview Questions for Select Participants

- Do you believe all students are afforded the same opportunities to take AP and Dual Enrollment courses at Exeter Senior High School? Why or why not?
- What suggestions do you have to increase enrollment in rigorous course of study at Exeter Senior High School?
 - Have you expressed these opinions with your supervisors? If so, what was their reaction? If not, why not?
- Do you believe students are “ready” to take AP and Dual Enrollment courses when they enter Exeter Senior High School? Why or why not?
- What suggestions do you have to increase students’ skills to better prepare them for AP and Dual Enrollment courses at Exeter Senior High School?
 - Have you expressed this opinion with your supervisors? If so, what was their reaction? If not, why not?
- How does the District’s organization help enrollment in rigorous courses of study? Explain.
- How does the District’s organization hinder enrollment in rigorous courses of study? Explain.
- How does the District’s planning help enrollment in rigorous courses of study? Explain.
- How does the District’s planning hinder enrollment in rigorous courses of study? Explain.

Appendix E

IRB Resubmission Letter

**Institutional Review Board
Pennsylvania Western University
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.**

Dear Joseph,

The IRB is in the process of reviewing your proposal titled “Perceptions Regarding the Inclusion of Students in Rigorous Courses of Study at Exeter Township High School” (Proposal #22-025) the following issues have arisen:

Please resubmit the following:

Researcher provide survey in its final form (are the survey and interview questions those found in the Appendix?)

How will the survey be distributed? Directly by researcher/ department heads, principal, etc? Purposeful sampling? A set number or goal or just your own judgement?

Researcher will need consent on letterhead from District Admin to allow the research to take place at Exeter Township High School and district level.

Please respond to these issues so the Board may continue its review. Email responses (with attachments as needed) are preferred. If hard copies are submitted in response, they must be sent to Campus Box #109.

If you have any questions or comments, do not hesitate to contact me.

**Melissa Sovak, Ph.D.
Chair, Institutional Review Board**

Appendix F

IRB Approval Letter



**Institutional Review Board
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Melissa Sovak, Ph.D.**

Dear Joseph,

Please consider this email as official notification that your proposal titled "Perceptions Regarding the Inclusion of Students in Rigorous Courses of Study at Exeter Township High School" (Proposal #PW22-025) has been approved by the Pennsylvania Western University Institutional Review Board as submitted.

The effective date of approval is 10/04/2022 and the expiration date is 10/03/2023. These dates must appear on the consent form.

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
- (2) Any events that affect the safety or well-being of subjects
- (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
- (4) To continue your research beyond the approval expiration date of 10/03/2023, you must file additional information to be considered for continuing review. Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Melissa Sovak, PhD.
Chair, Institutional Review Board