

ABSTRACT

A Collective Multiple Case Study Regarding Mandatory Advising and Degree Mapping for Early College High School Students

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Early College High Schools (ECHS) began in 2002 in response to the underrepresentation of ethnic minorities, lower socioeconomic status, and first-time college students in higher education. Credit-bearing college courses replace students' traditional high school classes, so the students earn an associate degree upon graduation from high school. The goal for ECHS participants is to continue their education at a university to complete their four-year degrees.

This qualitative multiple case study rooted in the practitioner inquiry tradition explored why ECHS students do not complete their bachelor's degree, along with possible solutions to the existing problem. Specifically, this study examined if mandatory advising and degree mapping helped ECHS students feel more confident about their transfer to a four-year institution. The study employed Schlossberg's Transition theory (Schlossberg, 2011), focusing on situation, self, support, and strategies. The framework helped to understand how mandatory advising and degree mapping influenced ECHS students' confidence and preparedness to transfer to a four-year institution.

Data collection involved using a questionnaire regarding the student's perception of preparedness for transfer and possible barriers and issues that could inhibit them from completing their bachelor's degree. Themes emerged from the data, with the first theme being the need for a college advisor to complete advising and degree mapping sessions. The second theme included increasing the ECHS student's sense of preparedness for transfer to a four-year institution. Next, a discussion around potential barriers that could impede their completion of bachelor's degrees emerged. Lastly, financial literacy is needed to help ECHS students understand various forms of available aids to help finance their education.

This research is vital as more ECHSs open every year across the country. For example, in 2002, when ECHS launched, there were three ECHS programs (Berger et al., 2014). As of 2020, there were 170 ECHSs in Texas, 100 in North Carolina, 100 in Michigan, and many more across the United States (Arshavsky, 2020). Thus, the ECHS program is expanding across the country exponentially, and the findings from this research can help more ECHS students have a successful transition to higher education and complete their bachelor's degrees.

A Collective Multiple Case Study Regarding Mandatory Advising and Degree Mapping
for Early College High School Students

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LIST OF ABBREVIATIONS

ECHS: Early College High School

ECHSI: Early College High School Initiative

FAFSA: Free Application for Federal Student Aid

MEU: Memorandum for Understanding

P-TECH: Pathways in Technology ECHS

TEA: Texas Education Agency

THECB: Texas Higher Education Coordinating Board

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DEDICATION

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CHAPTER ONE

Introduction to the Problem of Practice

Introduction

In 2002, the Bill and Melinda Gates Foundation funded the Early College High School Initiative (ECHSI) to help underrepresented students complete their college credentials (Berger et al., 2014). The purpose of the ECHS program is to help first-year high school students start their higher education journey with college-level courses during their freshman and sophomore years of high school that prepare them for a full schedule of college-level classes during their junior and senior years of high school. Students spend their freshman and sophomore years half-time in regular high school courses with a college emphasis, while the other half is spent in college credit courses. Once they enter their junior year of high school, students spend their day at the locally designated ECHS college (ECHS) campus at the partnered community college. A complete immersion into college courses takes place from that point forward (Schwinn, 2017).

The design of ECHS embeds support services throughout the program to help with student success. The support services include advising, tutoring, and study sessions. Students are actively engaged in their courses, and teachers dedicate themselves to helping students succeed in the ECHS program. To ensure student success and the completion of the college credential, teachers and administrators conduct multiple checkpoints throughout the program. Since its inception, nearly 240 ECHSs have formed

across the country in twelve different states (Berger et al., 2014). By 2022, thirteen other states plan to implement the program (Schwinn, 2017).

Initial research looked promising for this high school model (Bensimon, 2005). Students who were most likely not to attend college were now on their way to earning a college credential by high school graduation. Upon high school completion, the students who participated and completed ECHS had a college credential that helped prepare them to enter the workforce or continue their education. Early data showed that approximately 78% of the students intended to complete their four-year degrees (Berger et al., 2014). Arshavsky (2020) followed a study on North Carolina ECHS campuses and found ECHS students were three times more likely to earn a bachelor's degree versus a high school student who did not participate in ECHS. However, in Texas, the statistics are not anywhere near this percentage. Song and Zeiser (2019) conducted a longitudinal study on students in ECHS and found 84.2% of students enrolled in college. However, within six years of graduating from high school, only 25.0% of the same students completed their bachelor's degree (Song & Zeiser, 2019). When this cohort of students was interviewed during their senior year of high school, only 51% stated they planned on continuing their education after high school (Song & Zeiser, 2019). As with the Song and Zeiser study, the continuation rates to complete a bachelor's degree are dismal at the research institution for this study. Only two students from the initial cohort completed their four-year degree; they were supposed to graduate in May 2018 with their bachelor's degree. Many of them had an almost fully-funded, if not fully-funded, scholarship for their remaining two years of higher education and did not take advantage of this cost-saving initiative.

The question remained, why are so many ECHS students not completing a four-year degree? A qualitative, multiple case study research design examined how mandatory advising and degree mapping sessions helped ECHS graduates successfully transfer to a four-year institution to complete their bachelor's degrees. The research involved semi-structured interviews with students regarding their background planned transfer institution, and course of study. The interview also included advising sessions on preparing for transfer, the role of a college student, and creating their degree map to their transfer institution. This study is critical because many local districts are moving to this model without realizing the long-term effect of the program. More guidance and interventions are needed to ensure that students finish their bachelor's degrees.

Statement of the Problem

Many students have been inadequately prepared to enter college after high school graduation, particularly first-generation students. There is a gap between high school English and college-level English for many first-year students (Schwinn, 2017). The same deficits occur in math, as well. The Early College High School student's senior year of high school does not necessarily require English and math to be taken, depending on their endorsement (Texas Education Agency, 2020d). However, once they enroll in college, due to HB2223 in Texas, they are enrolled in math and English their first semester in college due to student success rates in higher education (Texas Education Agency, 2020a). In higher education, English and math are considered "gatekeeper courses" due to students dropping out of college at an alarming rate, with less than half of all college students finishing a degree or certificate (Daugherty et al., 2016). HB2223 was implemented by the Texas Higher Education Coordinating Board (THECB) to help

students complete a degree. Colleges across the state of Texas are now required to have all students complete their first level of math and English during their freshman year of college (Texas Higher Education Coordinating Board, 2019). ECHS students who did not need math or English their senior year of high school could enter into college at a deficit due to retaining information from the curriculum. The ECHS student needs to understand the implication of not studying English or math in their senior year of high school.

First-generation college students are dropping out of college before the end of their freshman year at a rate of 67.6% (Schwinn, 2017). RAND conducted a study and found that 28.8% of first-generation students felt that high school had not adequately prepared them to enter higher education (Daugherty et al., 2016). Consequently, first-generation students are not earning a college credential as intended. When college students do not finish their four-year degree, they experience a significant deficit in lifetime earnings. Carnavale et al. (2011) conducted a study for Georgetown University in 2009 and found that individuals with a bachelor's degree earned 84% more in their lifetime than someone with just a high school diploma. According to Marie Groark from the Bill and Melinda Gates Foundation, there is a drastic need for reform as this disparity widens the earnings gap (Groark, 2014). The statistics regarding preparedness are alarming.

Early College High Schools were designed to eliminate unnecessary barriers, such as funding and preparedness, for first-generation students to attend college and help them complete a four-year degree (Struhl & Vargas, 2012). Many of the ECHS students generally come from underrepresented populations in postsecondary education. ECHS

participants include first-time in college (FTIC), low socioeconomic (SES), and racial minority students (Berger et al., 2014).

In Texas, Early College High Schools are expanding every year and involve many low socioeconomic, first-generation students who are the highest risk category for not completing a college credential (Texas Education Agency, 2020a). Data from a study conducted by Song and Zeiser (2019) suggests that students who participate in the ECHS program are 44% more likely to complete their associate degrees than traditional high school education (Schwinn, 2017). However, one of the current issues arising from students who participate in ECHS is not completing their four-year degree after finishing their associate degree in high school. ECHS students receive massive scholarships to complete their four-year degree. However, with the monetary aspect removed as a barrier to higher education, many ECHS students are not completing their four-year degree. The matriculation rate of students from an associate degree to a four-year degree at the study site is dismal as only two students from the initial cohort of 24 completed their bachelor's degree. Data on the cohorts of ECHS students completing their four-year degree at the research institution is limited due to only the first cohort has had enough time to finish their bachelor's degree. The data also takes into account that the initial cohort is the only group available that is within four years of graduating from ECHS with their diploma and their associate degree.

According to the Early College High School Blueprint Redesign (Schwinn, 2017), there are 199 ECHSs across the state of Texas as of today. Many more will open within the coming years as more school districts apply for funding for this initiative. School districts from across Texas that currently do not have ECHSs are looking into ways to

expand their current programs to include this innovative educational approach (Schwinn, 2017). With the expansion of this initiative and the need to ensure first-generation, lower socioeconomic, and ethnic minority students attend college, further research needs to justify the cost and significance of ECHSs across the state of Texas.

Purpose of the Study

While ECHS helps students earn an associate degree while in high school and then enter a four-year degree program, many ECHS students do not complete their four-year degree. This qualitative, multiple case study explores how mandatory advising and degree mapping aids in ECHS seniors' readiness to transfer to a university and graduate with their bachelor's degree. The study will also determine what elements in the advising sessions help students successfully transition to the university. Findings from this study could change elements of the way high school counselors advise ECHS students and help create a degree map for their transferring institution to complete their bachelor's degree. The findings could also implement new literacy programs and workshops to further aid with the ECHS student's successful transfer. This study explored the following central question: How has advising and degree mapping aided in ECHS students' readiness to transfer to a four-year university? The sub-questions for this study included:

1. What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university to complete their bachelor's degree?
2. What do ECHS seniors identify as other barriers to completing their bachelor's degree?
3. What could the Early Career High School program implement to ensure students are college-ready for the university?

With minimal literature regarding the effectiveness of ECHS programs, this study will help guide future ECHS programs and provide insight into potential mechanisms of mandatory advising and degree mapping that could help ECHS students successfully transfer to a four-year institution to complete their bachelor's degree. Student success has always been the priority of college administration, and this study will help ensure that student success stays at the forefront of education.

Theoretical Framework

The theoretical framework for this qualitative, multiple case study is grounded in Nancy Schlossberg's Transition Theory (Schlossberg, 2011). The Transition Theory involves the 4S model, which helps individuals, including students, successfully transition from one environment to another. The 4S model focuses on situation, self, support, and strategies (Schlossberg, 2011). Below I describe each of these components in more detail.

Table 1.1

Explanation of 4Ss

4Ss of Transition Theory	Schlossberg's Definition	How S applies to study
Situation	The person's situation at the time of transition	ECHS student graduating high school and transferring to a four-year institution
Self	The person's inner strength for coping with the situation	ECHS student's mindset and preparedness for transfer to a four-year institution
Support	Support that is available at time of transition	Meeting with a high school counselor and teacher for guidance
Strategies	Coping strategies that change and reframe the situation and reduce stress	Mandatory advising Degree mapping College advisor

Schlossberg describes the situation as what is going on in the individual's life during the transition (Schlossberg, 2011). The situation could bring stress to the individual. In this multiple case study, the ECHS student's "situation" involves graduating from high school and preparing to transition to a four-year institution to complete their bachelor's degree. The transfer can allow for extra stress if they feel they are not ready to transfer to a university successfully.

In this multiple case study, the ECHS student's conception of "self," including their mindset and preparedness to transition to a four-year institution, was an important consideration. Schlossberg describes self as the person's inner strength for coping with the situation, which involves optimism, resiliency, and inner resources (2011). When individuals possess these inner resources, they are more likely to overcome stressful situations, allowing for a smoother transition. If the ECHS student is more optimistic and has a sense of their inner resources, they may be better able to transition to a four-year university successfully.

Next, Schlossberg describes support as the available tools that help an individual smoothly transition (2011). Supports "help individuals mobilize their resources by sharing tasks, providing extra supplies of money, materials, tools, skills, and giving guidance about improving coping" (Schlossberg, 2008. p. 64). Supports can be categorized as affirmation, affection, and aid. Affection is an expression that someone likes, loves, or respects you. Affirmation is the idea that someone agrees that what you have done is appropriate or understandable. Aid involves more tangible supports such as food, money, information, time, etc. (Schlossberg, 2008). For ECHS students, "support" involves all the various support they have from their family, friends, and school

networks. Specifically, ECHS student support involves meeting with their high school counselor regularly. Support for the ECHS student also involves information sessions regarding the availability to learn about the different scholarships they qualify for when transferring. Another support for the ECHS student is having representatives from the frequent transfer institutions come to campus to promote their college and degrees.

Lastly, Schlossberg suggests that strategies center an individual's ability to reduce stress by implementing strategies that will help a smooth transition. This notion of strategies for transition stemmed from research conducted by Pearlin and Schooler (Pearlin & Schooler, 1978), who suggest that strategies can be classified into those that change the situation, reframe the situation, and help reduce stress for the transition (Schlossberg, 2011). The purpose of this study is to examine if providing students with additional support and coping strategies in the form of advising and degree mapping may help ECHS feel better prepared to transition to a four-year institution. Mandatory advising with a college advisor helps create a mentorship relationship where the advisor will help guide them through their next two years of college to complete their bachelor's degrees. In addition, the advising sessions included degree mapping, which helps alleviate wasted time and money so that the student may complete their bachelor's degree within the time frame for their program of study.

Schlossberg's Transition Theory serves as a framework to examine the situation surrounding transition and how the situation influences a successful transition. The theory also examines an individual's sense of self and how they utilize different supportive resources to help with the transition. In addition, transition theory examines what strategies individuals employ to help with a successful transition. This theoretical

framework is appropriate for this study as this multiple case study centers around examining ECHS students' preparedness to transition to a four-year institution. The student's perception of a successful transfer is considered, along with potential barriers that could prevent their successful completion of a bachelor's degree. In addition, this study explores the support students have both within the ECHS program and outside of the program. Finally, this study explicitly explores how providing additional coping strategies in advising and degree mapping may help students perceive their preparedness to successfully transition to a four-year university. Implementing the 4S Transition Theory framework will provide insight into the student's perception of college readiness and what modifications to the current plan surrounding ECHS need to be analyzed based on the student's recommendations for improvement to the ECHS initiative.

Research Design

This study was rooted in practitioner inquiry research tradition, in which I sought to examine my practice and its impact on ECHS students' preparedness for transition. I utilized a qualitative, multiple case study research design to examine how advising and degree mapping influence ECHS students' preparedness to transfer to a four-year institution. Early College High School seniors completed a questionnaire that consisted of Like Scale questions followed by open-ended questions at the beginning of their senior year in October 2020. Upon completing the questionnaire, qualitative data were collected and coded to determine critical factors discussed during their mandatory advising sessions. Feedback from the questionnaire and meetings during the fall semester helped create a degree map to their higher ed transfer institution. Students met with me twice during their fall and spring semesters. The advising sessions prepared the participant for

transfer after high school graduation. During the spring semester of 2021, participants focused on degree mapping sessions with me that helped guide them in understanding sequential coursework and offerings at their transfer institution. In addition, the participant and I examined the curriculum, possible scenarios for roadblocks and created solutions to ensure they stay on track to complete their four-year degree. Participants took a follow-up questionnaire in April 2021 that determined if the mandatory advising sessions and degree mapping helped prepare for a successful transition to a university and earn their bachelor's degree. The findings from the follow-up questionnaire demonstrated that the participants felt the mandatory advising and degree mapping sessions helped alleviate stress in preparing to transfer to a four-year institution.

Definition of Key Terms

Accelerated Programs: Programs in higher education intended to expedite completing the core subjects math or English (Igl, 2013).

Academic Accountability: A school's ability to demonstrate the value of their education in retention and success rates (Texas Education Agency, 2020d).

College Completion: The completion of at least an associate degree or certificate (Center, 2016).

College Preparatory Schools: The college concept is front and center (Texas Education Agency, 2020a).

Concurrent Enrollment: High school students are enrolled in high school courses and college courses simultaneously (Texas Education Agency, 2020a).

Core Curriculum: A set of courses that are considered essential and required for graduation from high school or college (Texas Education Agency, 2019a).

Dual Enrollment: High school students enroll in regular high school courses, and college courses are substituted for their high school classes (Texas Education Agency, 2020a).

ECHS Initiative: The effort to expand public school districts to offer this unique program that affords students at risk of never attending college can be dual-enrolled in high school and college, so they earn their diploma and associate degree at the same time (Texas Education Agency, 2020a).

ECHS: “Innovative high schools that allow students least likely to attend college an opportunity to earn a high school diploma and 60 college credit hours” (Texas Education Agency, 2020a).

English Language Learner (ELL): An individual whose primary language is not English; therefore, they learn English as a non-primary language (The Glossary of Educational Reform, 2013).

High School Reform: Refers to the government's willingness to address the problems with low achievement and dropout rates in high school (Texas Education Agency, 2020a).

Lower Socioeconomic Status (SES): A person's economic and sociological measure analyzes household income and education (Texas Education Agency, 2020a).

Postsecondary Education: Education beyond high school (The Glossary of Educational Reform, 2013).

Texas Education Agency ECHS: Designated high school for selected students that enter the program during their freshman year of high school (Texas Education Agency, 2020a).

Texas Success Initiative Assessment (TSIA): The State of Texas's official college entrance exam tests a student's placement level for college-level courses in English and math (Texas Education Agency, 2020b).

Conclusion

Early College High Schools formed out of the need for underrepresented student populations, including first-time in college (FTIC), low socioeconomic status, and racial minority students to complete a college credential. Unfortunately, many ECHS students who earned an associate degree upon completing high school did not continue their education to complete their bachelor's degree. The purpose of this qualitative, multiple case study was to understand why students are not finishing their bachelor's degree and how mandatory advising and degree mapping during the ECHS student's senior year of high school helped with a successful transition to a four-year university to complete their bachelor's degree. The next chapter examines relevant literature surrounding the current practices used for ECHS students and the need for more research.

CHAPTER TWO

Literature Review

Introduction

High schools recruit students in many different ways for the Early College High School program, from advertising to presentations to mailings sent out to potential students (Smerdon & Borman, 2009). At the inception of the ECHS programs, students were considered based on their public school classification (Texas Education Agency, 2020a). The initial qualifier was solely based on the student's free or reduced lunch participation. The student had to have this label to participate in the program. After the initial implementation, administrators realized the program needed additional qualifiers as many students who could benefit from the program were not utilizing the free or reduced lunch program (Texas Education Agency, 2019c). Different demographics were implemented to allow a more comprehensive and diverse program. The program's guiding principles would include socioeconomic status, racial ethnicity, and first-generation students, as set forth by the Texas Higher Education Coordination Board (Texas Education Agency, 2020a). Many states had specific requirements, which created varied programs across the country (Haxton et al., 2016).

This literature review explores several critical bodies of literature that aid in better understanding the problem of study. First, this literature review describes the underrepresentation of groups in higher education, including students of color, low income, and first-generation college students, and why they are not successful and are underrepresented in higher education. This section also highlights first-generation

students and their challenges and interventions to help them succeed in higher education. Second, the literature review examines ECHS and its implementation and success, and challenges. Third, the literature review explores college completion interventions currently used at the high school level, such as AVID, dual credit, and college readiness classes, along with college preparatory programs at the college level. Finally, this chapter outlines the need for further research about why students are not pursuing their bachelor's degree after high school completion.

The Inequities in Higher Education

There are approximately 1.3 million college students across the United States (An, 2013). Of this population, there is a disproportionately lower amount of minority students, specifically Hispanic and African-American students. Approximately 22% of students enrolled in associate degree programs are minorities of Hispanic or African-American ethnicities (Miller et al., 2017). The statistics dwindle as students pursue a more advanced degree. The percentage declines to 18% enrolled in bachelor programs, while doctoral degrees are even lower at 8% enrolled (Miller et al., 2017). Extensive research led by the Gates Foundation is continuously being conducted across multiple generations to determine the reasons for the disparity (Groark, 2014). The Gates Foundation has included leaders in education and public policy to look for ways to help alleviate the racial discrepancy amongst White, Hispanic, and African-American students.

Another inequity in higher education exists amongst economically disadvantaged students. Economically disadvantaged is defined in public school by whether a student qualifies for free or reduced-price lunch in high school (Miller et al., 2017). For higher

education, economically disadvantaged students are defined by a student receiving a Pell Grant any time before completing their degree (Hunt, 2015). As a result, higher education students who identify in this sector are less likely to complete any degree than their counterparts who are not economically disadvantaged (Hunt, 2015). The state of Texas recognized this national statistic and implemented the strategic 60x30 plan to help close the gap for economically disadvantaged students (Hunt, 2015). The plan started in 2015 as an innovative program to have 60% of Texans earn a college credential by 2030 (Hunt, 2015). The Texas Higher Education Coordinating Board recognized that Texas did not have enough students graduate with a college credential, and change was needed to stay current with job market trends. Experts stated, “in 12 years, 60% of Texans will need a certificate or degree for the state to stay competitive in the global economy” (Hunt, 2015, p. 44). With a large population of economically disadvantaged students in higher education and the national statistics on their completion rates, Texas knew change was needed and instill the program (Texas Education Agency, 2020d).

The term “first-generation college student” generally means the first in their family to go to college. There are many variations from first to graduate (Lucier, 2019). According to Postsecondary National Policy Institute (Postsecondary National Policy Institute, 2018), first-generation students are 41% African-American and 61% Latino and are typical of lower socioeconomic status. These students generally enroll in a two-year community college instead of a four-year university (*First-Generation Students*, 2018). An alarming statistic for this large group of students is that only 11% of them will complete their bachelor's degree within six years of completing high school.

On the other hand, 55% of their more economically advantaged peers will complete their degree within the same time frame (*First-Generation Students*, 2018). This discrepancy could be since 48% of first-generation students attend school part-time (6 hours or less), compared to 38% of students who had at least one parent earn a bachelor's degree (*First-Generation Students*, 2018). The statistics are essential to understand the demographics of first-generation students. Unfortunately, first-generation students do not have any guidance or support to help navigate higher education. The American Institutes for Research studied first-generation students and found their chance to complete a four-year degree increases with embedded support services and helps them understand what it means to be a college student and identify as learners (Barshay, 2020). The use of support services and mandatory advising sessions can increase a bachelor's degree for first-generation students.

Early College High School has approximately 38% of the first-generation population enroll in college preparatory math or English courses as they are not academically ready for college-level math and English (Lucier, 2019). When this population graduates from a traditional high school and takes the TSI (Texas Success Initiative) state placement exam into their local college, they cannot enroll in academic math and English due to their low score (Texas Higher Education Coordinating Board, 2019). Students must enroll in a non-credit bearing college preparatory course before taking the academic credit course. Due to the enrollment in non-credit bearing courses, there is a higher chance of dropping out since they must enroll in extra classes that do not count towards any degree (Texas Higher Education Coordinating Board, 2019). This

alarming statistic fuels ECHSs' growth across the country as more first-generation students need help and guidance to complete a bachelor's degree.

Rise of Early College High School Programs

As the Early College High School program has evolved across the country, hand selection of student participants is no longer practiced as it was at the program's inception. The termination of hand selection is due to the increased enrollment needed for funding the program and the required headcount for each state that participates in Early College High School programs (Smerdon & Borman, 2009). If the participating schools meet the criteria set for by the state agency and local school district, and there is room for enrollment, student acceptance will continue to increase (Berger et al., 2014), causing the program to grow at a possible exponential rate. Public school districts continue to develop ECHS programs to meet a critical need of lower socioeconomic, first-generation, and racial minority students completing a college degree. However, there is a lack of data on the ECHS's interventions and their effectiveness in preparing students to transfer to a university to complete a bachelor's degree. Data needs to be collected on individual interventions to understand better what is working and what areas need improvement.

The RAND Corporation conducted a study that found that only 13% of students that qualified for free or reduced lunch participated in Early College High School programs, versus 27% of those who were not economically disadvantaged (Miller et al., 2017). Berger (2014) concluded that ECHS engaged students in a comprehensive support system; however, college completion's social skills and behaviors were still lacking. Students were ill-equipped to continue their studies after high school. Their social skills were not on the same level as their classmates. Many of their college-level peers were

two to three years older than ECHS students. In a study for the Bill and Melinda Gates Foundation, Berger found that 63.5% of students who attended early college had earned a college credential, versus 24.3% of their counterparts (Berger, 2014). The statistics demonstrated that the program was successful for the completion of an associate degree. However, starting at year five, which was their first year after high school and their junior year in college, 80.7% of the students enrolled in college, with less than 39.2% continuing to year six (Berger, 2014). The ECHS group of students persisted in year five of college at a higher rate than those that did not complete ECHS. While this was a positive impact, it still did not account for the sharp decline from years five to six. At year seven, the enrollment was 7.6% (Berger, 2014). This naturally occurring phenomenon was not a single occurrence. Colleges across the country cited similar statistics regarding their ECHS enrollment (Berger, 2014). This research demonstrates that the social skills and maturity level may influence why ECHS students do not finish their bachelor's degrees.

Early College High Schools are not a new concept. The first one dates back to the 1960s at Bard College at Simon's Rock in Great Barrington, Massachusetts (Barshay, 2020). In 2002, the Bill and Melinda Gates Foundation started funding ECHSs out of the disparity of Black and Hispanic students not attending or finishing a college credential (Barshay, 2020). Since then, numerous new campuses have opened across the country every year. As a result, there are over 300 ECHSs across the United States (Barshay, 2020).

In its inception, the Gates Foundation piloted Early College High School schools in many states, but primarily Texas and North Carolina (Barshay, 2020). Today, funding

for the ECHS is through local and state taxpayers in the same manner that regular public school is funded (Texas Education Agency, 2020c). According to research conducted, the programs tend to cost the school districts more per student; however, according to research conducted, the return on investment is 15 to 1, which many districts are willing to risk (Texas Education Agency, 2020c). The return on investment is due to higher salaries and reduced welfare costs over the student's lifetime (Carnavale et al., 2011). Carnavale et al. (2011) researched for Georgetown University and found that a bachelor's degree is worth \$2.8 million annually over a lifetime. Their research also found that a bachelor's degree holder earns 31% more than a person with an associate degree and 84% more than a high school graduate (2011). With an increase in degree holders comes an increase in taxpayers as they earn more, which means more taxes. The research found that associate degree holders pay an additional \$121,000 in public money over their lifetime, while bachelor's degree holders pay \$294,000 over their lifetime (Barshay, 2020). The statistics are the main reason why many public-school districts invest in this program.

Sadly, another reality of lifelong earnings and a reason for Early College High School that cater to racial minority students is that “at the highest education level, African Americans and Latinos earn close to one million dollars less than their white and Asian counterparts over a lifetime” (Carnavale et al., 2011, p. 37). The racial disparity amongst African Americans and Latinos versus whites and Asians has happened for many years and contributed to this. School districts and higher education institutions are aware of this and working to close the achievement and earnings gap. Hence, the rise in ECHS programs to help alleviate this burden.

As school districts across the country invest in these innovative programs, critics argue that the programs gear students towards an associate or bachelor's degree and not technical or vocational certificates or degrees (Barshay, 2020). Many programs across the country only award associate degrees (Struhl & Vargas, 2012). Initial research displayed the disparity amongst Blacks and Hispanics finishing a college degree, but the research was only for an associate or bachelor's degree (Berger et al., 2014).

Local and state school agencies did not consider vocational or technical career paths. Since its inception in Texas, all Early College High Schools have been aiming for an associate degree (Texas Education Agency, 2020a). Legislators in Texas finally recognized a gap in Texas pathways for completion and created the Pathways in Technology ECHS (P-TECH) program that started this academic year (Texas Education Agency, 2020b). In the Gulf Coast region of the United States, many lucrative job opportunities require a vocational or technical degree. Some of the Houston market's top-paying jobs are from this field, including Process Technology, Instrumentation, Maritime, and Non-Destructive Testing (Texas Education Agency, 2020b). The starting pay for this area is approximately \$48,000. With such a need in an expansive Texas area, ECHSs in the Houston area partnered with the Gulf Coast Consortium to create a P-TECH program for students in ECHS to complete instead of an associate degree. The Texas Education Agency aligned with the Texas Workforce Commission and the Texas Higher Education Coordinating Board to create and approve a P-TECH program plan (Texas Education Agency, 2020b). They reviewed “regional workforce needs, course transfer policies between institutions of higher education, internships, apprenticeships, and other work-based education programs for P-TECH students” (Texas Education Agency, 2020b, p. 1).

The program parallels the typical early college program and allows students to earn necessary certifications and training to enter the workforce upon completion. Currently, thirty-five districts across the state implemented sixty-three P-TECH programs this academic year (Texas Education Agency, 2019a). Ten new campuses are expected to open for the 2020–2021 academic year (Texas Education Agency, 2019a).

According to research conducted by Lee Hernandez (2016), career and technical education have had significant monetary reductions in funding across the country, as the focus is on degrees. However, in Texas from 2002–2003 to 2012–2013, there was an increase of 21% in students participating in CTE programs. With this growth, the need for an analysis of career placement happened, and the implementation of technical programs into the Early High School Initiative arose (Berger et al., 2014). In addition, a cost analysis was conducted as technical programs are more expensive than traditional programs. School districts that chose to participate acknowledged the extra cost but viewed the need for career placement for their students as more significant than the cost and agreed to implement the new program (Texas Education Agency, 2019a).

Another reason for the rise in Early College High Schools is that it is accessible to the students who participate (Zeiser, 2013). The schools are part of public education, and therefore the programs are free to students. Many of the students who participate in the program are of lower socioeconomic status, and the cost of college could be the determining factor in attempting and completing college (Barshay, 2020). Students' ability to earn a degree or certificate at little or no cost is a motivational factor for students to succeed (Woodcock & Olson Beal, 2013).

College Readiness and Interventions for High School Seniors

College readiness programs exist in many high schools across the country, programs that were not in existence 10–15 years ago (Barnett et al., 2012). Many states saw the discrepancy between racial and ethnic groups among college students. As a result, they created a curriculum that prepared high school students for college and closed the achievement gap (Lucier, 2019). “According to scholars and policymakers, one cause of this problem is the misalignment between high school graduation standards and college academic expectations” (Barnett et al., 2012, p. 12). This misalignment led to the creation of college preparatory courses in high school. One of the programs embedded in the college preparatory courses is AVID, Advancement via Individual Determination. The program works with college preparatory class students to encourage college and career readiness and success (AVID, 2020). Teachers are trained on the AVID strategies and resources to help students prepare for college. AVID recognizes a disparity among racial and ethnic groups in higher education and works to close the gap.

Radcliffe and Bos (2013) researched for seven years how to best prepare high school students for college and career readiness and focused on racial minority and lower socioeconomic status students. According to their research, approximately 1.2 million students fail to complete high school in the United States (Radcliffe and Bos, 2013). More than half of those students belong to racial minority groups (Radcliffe and Bos, 2013). High school dropouts could find a decent job in previous years and make enough wages to live a healthy life. That is not the case in today’s society. High school dropouts will more than likely face unemployment, poverty, ill-health, incarceration, and dependence on social services” (Radcliffe and Bos, 2013, p.139).

The study conducted by Radcliffe and Bos demonstrated that students who adhered to the college success AVID program's five goals successfully completed college. The five goals to develop a college culture are:

to understand the nature of college, recognize that a college education may be important to his or her future success, gain positive perceptions and aspirations about college, prepare academically for college admission, and set short- and long-term goals that support becoming college-ready. (2013, p. 140)

Their findings showed that the program positively impacted students; however, the data is limited due to the small number of participants (Radcliffe and Bos, 2013).

One of the benefits of having a program like AVID in high school is that it helps students understand what it takes to be a successful college student and learn about course sequences as students will choose what courses to take and when to take them. (Berger et al., 2014) found that 53% of postsecondary institutions reported having dual credit or Early College High School students; however, less than 10% took advantage of these programs offered while in high school due to college readiness. Their research suggests that course sequence and readiness are critical factors in determining their continued success after high school graduation.

High schools design courses centered around college readiness, starting their freshman year of high school and continuing throughout the program. The course sequence is crucial for the successful implementation of this rigorous program. Coursework that involves college preparation and study skills needs to start at the program's inception, setting a blueprint for success. More literature is needed to study course sequence and degree mapping on students' completion of a bachelor's degree.

State Requirements

AVID realized a need to help students focus on two core subjects that showed the most significant disparities within higher education, math, and English. The two subjects are gateway courses at most higher education institutions, which can inhibit students from completing a degree if they are not successful in these courses. With the added pressure to pass these courses, many states adopted new policies to help with graduation rates and student success. Texas adopted House Bill 2223 (HB2223), which states that starting in 2018–2019, colleges across Texas must have 25%, 50%, and 75% each year of their incoming, new college preparatory (not college-ready) students in co-requisite models (Hunt, 2015). Typically, college preparatory students enroll in college preparatory math or English courses before attempting the first-level academic course. Due to this, more time and money are needed to complete their degree. It also means that the student is more like to drop out of college (Radcliffe & Bos, 2013). The co-requisite model will allow students to earn their academic math or English credit while still attending the college preparatory course in one semester, so no extra time is needed to complete them (Hunt, 2015). In Texas, student grades must be awarded at the same time to adhere to the mandate. Implementing this house bill allows more college graduates to adhere to the Texas 60x30 plan (Hunt, 2015). The Texas 60x30 is the house bill that states that by year 2030, 60% of Texans, ages 25 to 34 will have a certificate or degree (Hunt, 2015).

In theory, college preparatory students co-enrolling in college preparatory and academic math or English sounds like a valuable strategy for completing college credit. The local community college and Texas Education Agency agreement states that the students must be college-ready in reading, writing, and math to take academic English or

math for college credit. Students who elect to partake in Early College High School enter the cohort during their freshman year of high school. At this point in their high school academic career, many students have not taken Algebra I, which is an indicator of success in higher education (Hunt, 2015). Being college-ready in either subject cannot be determined before enrolling in the program during their freshman year of high school, so this predictor is not a good indicator of its success. The students are not far enough into their high school academics to understand what college-ready entails and how to gain the necessary skills in a short amount of time to adhere to this requirement. Early College High School students circumvent this issue by taking their first-level math and English courses in ECHS (Edmunds et al., 2013). Taking these courses will help alleviate a potential barrier to not completing their first-level academic English and math classes.

Many higher education institutions across the state scrambled to plan for the drastic change in college preparatory courses starting with the 2019–2020 academic year. According to the Texas Higher Education Board (THECB), approximately 42% of students who need college preparatory education are first-generation students (Hunt, 2015). As a result, community colleges and universities are implementing programs and support systems that will help this large population of students and lower socioeconomic and racial minorities succeed in college.

Dual Credit

Dual credit programs for high school students started in 1983 as a call-to-action to help the situation (Miller et al., 2017). According to Bailey et al. (2010), nearly four-fifths of all high schools worldwide utilize dual credit programs. There has been a 650% increase in Texas's dual credit since 2000, and it continues to increase year after year

(Miller et al., 2017). While most programs are accessible to the students, some school districts partner with their local community college to offer tuition at a fraction of the cost. Texas success rates for dual credit students show that approximately 35% of those that complete college courses while in high school continue their education after high school and graduate with a bachelor's degree (Miller et al., 2017). In addition, of the 35% of graduates, only 12% are of a racial minority (Miller et al., 2017). These findings are consistent with national studies that have similar results.

College readiness is a factor to success at any given point during a student's academic career. Barriers and pitfalls can happen at any given moment. A typical junior in college is around age 20–21, whereas the Early College High School junior is only 18–19. ECHS students who finish their associate degree while in high school enter their junior year of college as eighteen or nineteen years old. For some, their peers' emotional and social disconnect due to the age difference and social and emotional disconnect cause them to withdraw from college (Edmunds et al., 2013). Edmunds et al. (2013) researched student engagement and readiness and found that ECHS students believed they were college-ready and well equipped to continue their education. However, once they entered college as a junior, less than 15% continued their academic careers (Edmunds et al., 2013). Students cited a disconnect from their peers; less administration and support systems did not help with their transition (Davis, 2010). The disconnect and issues create problems for ECHS students. As previously stated, Miller et al. (2017) researched ECHS students' readiness beyond year four of their academic career. After interviewing fifteen community college sample populations, their research concluded that direct advising helped college and social readiness for ECHS students increase program retention and

success by 6% for years five and six, the two years beyond high school. ECHS students require more advising, guidance, structure, and regular check-ins than a typical college student. Many first-generation students have no prior guidance or set an example of being a college student and attaining a degree. Advising is a crucial step for the success of ECHS students. Without a mentor's advice, the student could easily stray from their degree plan and waste valuable time and money.

The American Institutes for Research (AIR) conducted a study in 2013 for the Bill and Melinda Gates Foundation to determine the readiness of students who participated in Early College High School (Zeiser, 2013). Their study concluded that more than three in five Early College students enrolled in college beyond high school. However, they discovered that the students were underprepared for continued success, and less than 20% continued their education and graduated (Zeiser, 2013).

According to Struhl and Vargas (2012), a drastic change in higher education needs to occur. Questions about why racial minority students are not attending higher education institutions are at the forefront of conversations. The intellectual capacity of racial minority students is there, but other factors affect the outcome. Jobs for the Future conducted a study in 2004 and found that the most influential factor on minority students was academic preparation (An, 2013). Students who completed at least six or more college credits had a 12% higher chance to finish their baccalaureate degree versus students with less than three credits (An, 2013). Students who only completed one college-level course did not have an advantage in completing a degree over their non-participatory classmates. This statistic was critical in determining students' effectiveness in attending an occasional dual credit course during high school (An, 2013). The rigor of

college-level coursework from just one high school course did not influence their first-level postsecondary credential (An, 2013). When students have more exposure to college coursework and acclimate to the environment and rigor, they are more likely to finish their associate's or bachelor's degrees. Utilizing a mentor to help the student navigate coursework and enrollment will help complete a degree.

Assessment and Funding for College Prep Programs

Preparing high school students to attend college is a primary goal for public schools in Texas. In addition, states across the country look for ways to increase college readiness and success rates for first-year students entering college, particularly for racial groups underrepresented in higher education (Struhl & Vargas, 2012). High school students can start dual credit courses in their sophomore year or enroll in college prep courses offered at their school (Texas Education Agency, 2020a). Many benefits exist for both programs; however, statistics show that many students are still not taking advantage of current offerings at their high school (Struhl & Vargas, 2012). Struhl and Vargas (2012) conducted a study connected with Jobs for the Future to analyze if the programs positively impacted college completion. As expected, students were “significantly more likely to attend college, persist in college, and complete an associate degree or higher within six years” (Struhl & Vargas, 2012, p. v).

The findings stayed the same for all racial minority groups and low-income students. A surprising aspect was that students from low-income families preferred to attend a four-year college instead of a community college (Struhl & Vargas 2012). The dual-enrolled students were 2.2 times more likely to attend any college after high school, 2.0 times more likely to return their second year, and 1.7 times more likely to complete a

college degree, whether that be an associate or bachelor's degree (Struhl & Vargas, 2012). The issue with this study was that the cohort of students had traits of typical college students. Early College High School students are mainly racial minorities, lower socioeconomic status, and first-generation students (Haxton et al., 2016). Any high school student can be dual enrolled if their high school participates in a dual credit program (McCluskey, 1997). McCluskey (1997) found that approximately 41% of high school districts countrywide use dual credit programs as statistical analysis for implementation and funding from the state for an ECHS program. Dual credit programs do not have the exact requirements of ECHSs. Issues such as completion and enrollment data arise if the data does not compare a similar cohort of students who participate in ECHSs. Further research with a similar student population will yield more accurate results on the success of the program.

College preparatory programs need to happen across public school districts in the state of Texas. By participating in these programs, students will be more prepared for college, but it will also instill the work ethic and determination needed to fulfill a college degree or certificate. An issue that arises is that the state funds public schools, and a disproportionate amount of money is utilized for these programs. Texas Education Agency allots \$361,831,964 as part of the High School Allotment Fund to help prepare students for college and beyond (Texas Education Agency, 2019c). While this number appears to be substantial, it is less than 2% of the overall fiscal year budget across the state of Texas (Texas Education Agency, 2019b). This amount is further split among the participating school districts within the state. Currently, there are 1,020 total school districts within Texas (Texas Education Agency, 2020c). School districts receive at least

\$6,700 a fiscal year to implement a critical program (Agency, 2020b). In a public school district's overall yearly budget, this is minimal. More money needs to be funded for these intensive programs to aid our high school students' higher success rates in high school college preparatory courses.

College Completion for Early College High School Students

College completion refers to a student finishing their college credential. In 2016, Clarisse Haxton and seven other researchers conducted a longitudinal study that assessed whether Early College High School students graduated high school, enrolled in college, and obtained a degree by year six, two years after high school (Haxton et al., 2016). Their study had a treatment group of ECHS students and a control group of regular high school students. The study demonstrated that students who participated in ECHS showed statistically significant higher college enrollment levels at nine percentage points above the control group (Haxton et al., 2016). Those statistics were not much different for students concerning gender, racial minority, socioeconomic status, or college enrollment. The surprising data that arose from this study was that even though the goal of ECHS is for students to complete college courses and obtain an associate degree, the study found that this goal was not met as over one-third of the students in the treatment group did not enroll in college courses while in high school (Haxton et al., 2016). The data were consistent with previous research demonstrating the same phenomenon of high school juniors and seniors not enrolling in college-level courses (Haxton et al., 2016). Not enrolling in college-level courses occurs due to students exiting the program before graduation or never attending the early college program. The study also portrayed a positive statistical significance for enrolling at a two-year community college versus the

control group (Haxton et al., 2016). Once again, this is expected due to the program's nature and setting the students up to complete a college credential successfully. However, in year five, the gap between enrolling in a university and completing a credential was no longer significant, as in the study mentioned above (Haxton et al., 2016). Early college students transitioned to a four-year institution around the same percentage as the control group. Therefore, students who participate in ECHS should have a statistically positive impact on obtaining a bachelor's degree at a more significant percentage than students who start college courses after high school.

The study by Haxton et al. (2016) also found that students who did not participate in Early College High School and who earned an associate degree after high school was “statistically indistinguishable” as 2.6% of the treatment group versus 2% of the control group earned an associate degree after high school (Haxton et al., 2016). So, if Early College High School students had exposure to college culture and a head start on their education, why were they earning a degree near the same rate as students who did not partake in the program?

Extensive research has been conducted exploring the “noncognitive and social factors related to the adjustment that influence the successful transition to a university setting” (DeBerard et al., 2004, p. 56). Students must navigate cognitive and socioemotional demands that are different from high school experiences. When students have exposure to college experiences and behaviors, they are more likely to succeed in college (DeBerard et al., 2004). The experiences help relate to college expectations regarding attendance expectations, grading, college life, attitudes, and behaviors to succeed in college (DeBerard et al., 2004). Early College High School students

demonstrate a greater understanding of these factors as they have exposure while attending college classes in high school (DeBerard et al., 2004).

Success in college is due in part to a student's ability to become a self-regulated learner (Haxton et al., 2016). Students that attend college while in high school are under close supervision from family or caretakers; thus, they have not learned how to think or choose independently. Family members have made the decision making to this point, so the student's exposure is minimal. These skills are needed upon entry into college to be successful. Advisors at the high school and college are aware of this and may implement programs to help students learn to become college students and acquire the necessary skills to be successful (Haxton et al., 2016). Mandatory advising sessions, required tutoring, field trips, and study skills are part of the standard curriculum (Texas Education Agency, 2020a). As part of the ECHS Initiative, one of the main goals is increasing college readiness that will lead to completion. The more prepared a student is to enter college courses and be successful, the higher the chance for college completion.

First-generation and Early College High School students need guidance and support to be successful. Engle et al. (2006) reported findings from their study that showed that first-generation students had lower confidence and a sense of isolation when reflecting on their college experience. Institutions of higher education across the country report similar stories. To help curb the sense of not belonging in the college setting, higher education institutions can utilize interventions and student activities to alleviate students' negative association. Interventions and activities include student-led organizations, campus activities, and peer mentoring (Davis, 2010).

First-generation student groups are typically led by a former first-generation students who can attest to their challenges during their academic years. In addition, the group utilizes mentors assigned to first-generation students to help them navigate their education and create a graduation plan that entails mandatory courses for their major. Davis found that when first-generation students were assigned a college mentor, they made a deeper connection and relationship with their mentor (2010).

The mentorship program can be more effective by utilizing a mentor of the same racial ethnicity as the student. The Center for First-Generation Student Success planned on releasing a report during summer 2020 that detailed colleges had more successful first-generation students that utilized a mentor that is of the same race (Jehangir & Romasanta, 2020). Unfortunately, due to COVID-19, the report has been delayed. Nevertheless, extensive research has been conducted on mentor programs, and the results show that when a female Latina student matches with a Latina faculty member, each person experiences a more significant connection within their relationship (Hahs-Vaughn, 2004). To make the most out of these mentorship experiences, institutions must do a better job matching students with a mentor that can significantly impact their view of their educational experience.

As stated earlier, 48% of first-generation students attend part-time, which means they attempt six or fewer credit hours (Lucier, 2019). However, many students do not understand the different classifications of attendance. Being a full-time student (12 or more hours) implies that graduation can occur sooner, but also financial aid classifies students into three different categories (part-time, 3/4 time, and full-time). Utilizing a mentor helps this group of students understand that if they added one more course to their

semester, they would graduate at least one, possibly two, semesters earlier with their associate degree. In turn, this would help with their continued success towards a bachelor's degree.

Another critical aspect of interventions with first-generation students is to involve their families so everyone can have a clearer picture of what it means to be a college student (The College Board, 2007). Since first-generation students are the first in their families to attain a degree, they may not have prior guidance from someone within their family. As a result, the student navigates the complicated world of higher education. Some students will have supportive families, while others could have obstructive support to create extra academic obstacles (The College Board, 2007). More education attained within the family can help alleviate some of the barriers and challenges this group of students faces.

A potential barrier for first-generation students is the cost of college. The cost has increased by more than 500% since 1985 (Reddy, 2019). Many low SES, first-generation, or Early College High School students cannot afford higher education these days. Many first-generation students feel they cannot afford college; however, they could learn about cost-saving measures with proper advising and guidance. Many colleges seek first-generation students and offer scholarships, with many having fully-funded scholarships. The College Board reports that first-generation students are more hesitant than the general population to apply for financial aid and waivers (The College Board, 2007). It could be due to their lack of knowledge or immigration status, no guidance, and no understanding of required paperwork. Whatever the case may be, the more informed

students are, the more likely they are to make informed decisions that show college readiness.

Daugherty et al. (2016) surveyed RAND and found that connecting community college students with community resources that include tax services, wraparound supports, and government programs positively impacted student success, retention, persistence credits earned. In addition, there was a positive impact on adult learners age 25 or older, independent students, and racial minority students (Daugherty et al., 2016). The study suggests that colleges include public benefit programs for first-generation, lower socioeconomic status, or racial minority students to not only improve their overall well-being but help them academically as well. There is a designated office space for first-generation students at the RAND study site and a center where they can help with anything about college or needed resources. It is a “one-stop shop” for the students, so they will not go to multiple campus locations for help. This center helps many students on any given day and helps guide first-generation students through their academic careers. Students find the center helpful and ask for extended hours on their feedback forms (Daugherty et al., 2016). The center also has regular meetings with the first-generation student groups and their mentors. Combining the center and office space allows this group of students to feel a sense of belonging, which helps with student success and retention. Many colleges across the country, including this study’s site, have designated space for the students to help them feel safe and secure and provide valuable resources to succeed.

Degree Mapping and Advising

It is crucial to have a degree map for the Early College High School seniors

transfer institution. A degree map suggests the courses to enroll in term-by-term to ensure students enroll only in degree requirements. Students collaborate with their advisors on the choice of classes. Conversations regarding degree requirements can be lengthy, and advisors do not always have the available time to commit to this critical aspect.

According to this study's site, advising wait times can be longer than expected, especially during peak times. The research institution utilizes Tutor Trac to monitor the number of advising sessions per day and the advising session's length. The average length of the advising session is six minutes. Meaningful advising sessions need some time for the advisor to coach the student through classes at their transfer institution and formulate a degree plan for transfer. The Center for Community College Student Engagement (CCCSE) conducted a study in 2018, where researchers surveyed 179,672 students from 297 colleges. The survey concluded that students who spent more than 30 minutes in their advising sessions were more engaged in their academics and completing their degrees (Smith, 2018). The survey also found that students who met with an advisor twice or more were more engaged in their education; however, 36% of respondents stated they met with their advisor only once during the semester (Smith, 2018).

The Dana Center at the University of Texas at Austin found that students dropped out of college at a higher rate when not adequately advised (Dana Center Communication, 2020). In addition, the data shows that students need more time with an advisor to have a quality session for advising and degree mapping.

Conclusion

For students who participate in Early College High School programs across the country, the trade-off for them to be in this innovative program is missing out on

“typical” high school memories that include football games, homecoming, and prom. While these traditional memories are what most students experience, ECHS students experience something more vibrant and more profound—a free college education. Is it worth it? Students who complete the program believe so (Woodcock & Olson Beal, 2013). Many students come from families with limited resources, and therefore attending college presents an economic challenge to the family. Other students are the first in their families to attend college, so there is no guidance on navigating a steep path to success. The majority of students are from racial minority backgrounds where their population is underrepresented in higher education. Whatever the case may be, the opportunity to accomplish a monumental task for free has many students enrolled in ECHS across the country.

While the Early College High School program set out to afford this population of students to obtain a degree and prepare them to obtain their bachelor's degree, many participants fail to complete their four-year degrees. What is happening to cause this phenomenon, especially when barriers such as tuition and no guidance have been removed? Further research needs to be examined to determine what factors affect the completion of a four-year degree by ECHS students. Nevertheless, students have received the necessary skills, mentoring, and pathways to accomplish a goal that once might have seemed impossible.

Tuition continues to rise year after year. Universities are aware of this and working to find solutions to help this group of students transfers to a university to complete their bachelor's degree. The Greater Texas Foundation partnered with The University of Houston and Challenge Early High School in Houston to further their

college completion to a bachelor's degree (Ramirez, 2011). The Greater Texas Foundation reviewed the data that displayed this issue. As a result, a \$605,000 grant was enacted to give financial assistance to cohorts of 25 students per year from Challenge Early College High School to further their academics and finish their bachelor's degrees (Ramirez, 2011). Even when the monetary factor is removed for students, they are still not finishing their degree.

Further research is needed to find out what is contributing to the non-completion of a bachelor's degree. The research is critical since more Early College High Schools are opening every year across the country, and the economy continues to improve where college credentials are needed to have a successful career. School districts and community colleges must collaborate with neighboring universities to ensure a seamless transfer for the students. Everyone needs to work together to continue to close the achievement gap. Significant work has been done thus far, but there is always room for improvement. As the world changes and new issues arise, education needs to be continuously examined to ensure all participants' success. Education will continue to move in the right direction as long as trends and issues are examined continuously and modified as needed to ensure success for all. One of the first ways to handle this dilemma is to instill mandatory advising and degree mapping for all students participating in ECHS.

CHAPTER THREE

Methodology

Introduction

The purpose of this qualitative, multiple case study examined if mandatory advising and degree mapping helped Early College High School students to feel more prepared to successfully transfer to a four-year university and complete their bachelor's degree. To investigate this transition from ECHS to college, I utilized the Transition Theory framework by Nancy Schlossberg (2011). The Transition Theory model includes “understanding transitions, coping with transitions, and applying the model to work-life transitions” (Schlossberg, 2011, p. 159). Within The Transition Theory, there are four categories to help with the transition. The four categories are situation, self, support, and strategies. This study focused on ECHS students who entered college with a junior classification since their first two years were completed in high school. Although they had college class experience during high school, they entered their first year in an actual university setting. This study explored whether mandatory advising and degree mapping helped prepare the student for transition to the university and be adequately prepared to be a successful college student.

This chapter describes the methodology utilized for this study. First, the chapter explains the researcher's perspective, practitioner inquiry, followed by a qualitative multiple case study. Next, I describe the data collection and analysis procedures utilized in this study. Lastly, the chapter ends with the discussion and limitations of the research. This study explored the following central research question: How has advising and

degree mapping aided in ECHS students' readiness to transfer to a four-year university?

The sub-questions for this study included:

1. What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university to complete their bachelor's degree?
2. What do ECHS seniors identify as other barriers to completing their bachelor's degree?
3. What could the Early Career High School program implement to ensure students are college-ready for the university?

The sub-questions will help develop more in-depth advising questions to ensure student's needs are being met.

Researcher Perspective

The road to where I am today was not an easy one and was full of many detours. At an early age, I was told that college was a requirement after graduating from high school. My parents knew that the world was changing where a person could no longer support themselves without a college education, and they believed I would be the first in our family to finish college. I attended The University of Houston upon high school graduation but quickly realized I had no idea what I was doing. I had no one in my family or anyone close to me that could help me navigate college. I went from being a straight-A student in high school to failing several courses during my first semester in college. I was on academic probation my first semester, and I did not even know what that meant. I performed a little bit better in the spring semester but had chosen classes that were not part of my pre-pharmacy degree plan. I was too prideful to ask for help, and so I floundered my freshman year of college.

The following school year, I found out I was pregnant, so I dropped out of college to move with my husband, serving in the Marines and stationed in California. Eight years after high school in 2000, I was still married with three children, ages six, two, and a newborn. We were moving back home to Houston, and the realization hit that I would be another statistic for my race—a non-educated Hispanic mother. I then decided to return to school at my local community college, San Jacinto College. Just like before, I had no guidance, but this time I was determined to figure out what courses I needed to complete a teaching degree in the shortest amount of time. I learned about degree plans and utilized them to create my class schedule that showed my expected graduation date. I became fluent in degree mapping and graduated in December 2006 with my teaching degree, but more importantly, no extra classes were taken or money wasted. I was no longer a statistic for my race. Deer Park ISD was my site for student teaching, and they hired me to start after the winter break. That same month, January 2007, I enrolled in my Master's program while starting my teaching career. I finished my Master's in Educational Administration in May 2009 and was now the only person in my family and extended family to obtain a master's degree.

I was hired in May 2010 at the community college I attended and have been employed there since. I started out teaching math, then one year later, I became the math lead. Two years later, I became the Department Chair for College Preparatory. My department is for participants who are not academically prepared for college-level English and math. Many of our participants are just like me in many aspects: first in their family to attend college, racial minority, non-traditional participant, and those trying to

balance work, home life, and school at the same time. I have a deep passion for helping this population of participants as I can relate to their situation.

A local community college started Early College High School in 2014, with their first cohort graduating in May 2016. The same statistics have held steady since then. Many participants received fully-funded scholarships from across the country, but less than half of them had completed their bachelor's degree two years later. With many of these Hispanic participants, I have a vested interest in helping the students complete their degrees to alleviate racial groups' disparity in higher education. I worked with our current seniors participating in the program to examine if advising and degree mapping their next two years will help alleviate any anxiety or fear they have for transferring to a university and completing their bachelor's degree. My goal was to ensure they had a smooth and successful transition to a university to finish their degree and help close the equity gap in higher education. For this to happen, effective advising practices, including degree mapping, needed to happen for all ECHS participants (Freeman, 2008). It was also vital that I reflected on my role as researcher and adviser to the ECHS students and was cognizant of this role during my research.

Theoretical Framework

This qualitative, multiple case study utilized the Transition Theory by Nancy Schlossberg (2011) to explore participants' perceptions of readiness to transition from Early College High School to a four-year institution. The framework provided a structure for understanding the participants' situation, self, and support and examine how strategies such as advising and degree mapping might help ECHS students feel more prepared to

transition to a four-year institution. In addition, the framework informed the research questions, data collection, and data analysis.

Research Questions

The 4S framework provided a foundation for the research questions. First, I determined the participants' sense of self and their perception of preparedness for transition to a four-year institution with the framework. I then examined how well the participants understood the necessary components for a successful transition and concluded with a follow-up to the initial questionnaire.

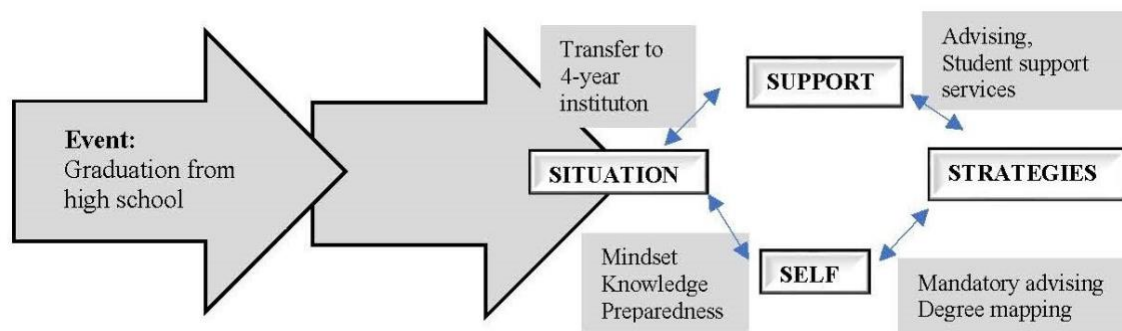


Figure 3.1. *4S framework flow chart.*

The research questions explored how prepared participants were to transition to a four-year university. Using the 4S' of Schlossberg's Transition Theory (2008), I examined the situation, self, support, and strategies that shaped the participants' responses. Schlossberg stated, "It represents a framework in which transitions of all kinds—positive and negative, dramatic and ordinary—can be analyzed, and possible interventions formulated" (Schlossberg, 1981, p. 3). Thus, the research questions probed participants' responses about their situation, sense of self, and support in transferring to a four-year institution. In addition, the research questions also explored the various

supports and strategies that participants found helpful in preparing to transition to a four-year institution.

Data Collection

Schlossberg's 4S Transition Theory also informed data collection. The questionnaire asked participants to reflect on their sense of self and the available support, as these are significant components of transition (Schlossberg, 2011). The participants rated their mindset (self), preparedness (support), and readiness for transfer (strategies and situation). The participants' answers to the questionnaire provided an introduction to our first advising session. I collected field notes during the advising session to provide the introduction to our second advising session, which led to the creation of a degree map to their intended four-year institution. Nancy Schlossberg states, "it is after the goal...to develop preventive interventions, pretransition, as well as effective support and counsel for those in transition" (Schlossberg, 1981, p. 16). Thus, data collection outcomes did help develop additional interventions and strategies to aid in more successful transitions.

Data Analysis and Intended Outcomes

During data collection, I formulated overarching themes that derived from memoing the interviews and questionnaire responses. First, the theoretical framework informed initial codes and categories. Second, categories that emerged from the initial questionnaire and follow-up interviews informed the advising and degree mapping session. Finally, participant responses helped determine what support and strategies they needed to transition to a four-year institution successfully.

The theoretical framework informed the study's findings of what supports and strategies are needed to aid in a smoother transition for the ECHS student to a four-year university. The ultimate goal of the research was to identify potential improvements to the ECHS program and potential barriers that could inhibit the student from completing their bachelor's degrees.

Research Design

According to Creswell qualitative research is for “exploring and understanding the meaning individuals or groups ascribe to social or human practice” (2009, p. 2). One of the types of qualitative research is a case study. A case study is described in two parts, according to Yin (2014). The first part involves an in-depth look into the case study within the real-world context. The second part involves understanding that there are more variables than data points (Yin, 2014). The qualitative case study research method allowed for surveys, questionnaires, and interviews to explore the research questions. The qualitative case study method was chosen due to the natural setting in a college where the participant attended Early College High School at the research institution. According to Creswell (2009), the qualitative research method is the preferred method when analyzing data from surveys, interviews, and narratives.

This study employed a qualitative, multiple case study design to determine if mandatory advising and degree mapping helped Early College High School participants' perceptions of readiness to transfer to a university to complete a bachelor's degree. As data from The Dana Center at UT Austin suggested (2020), participants who are not knowledgeable about higher education and all it encompasses have a higher dropout rate versus participants who have been advised throughout their education. I chose the

qualitative, multiple case study because multiple participants provided insight into how mandatory advising and degree mapping affected completing a bachelor's degree. The case study met the requirements of both Yin and Creswell (2014). The case study sought to answer the “how” or “what” it takes to succeed at the university to complete a bachelor's degree. The main research questions sought to assess participants’ perceptions of college readiness and if the advising and degree mapping sessions helped prepare them for transfer to the university.

I chose the qualitative case study research method because data collection measures such as questionnaires, field notes, and interviews with the Early College High School participants would help me answer the research questions. I conducted a uniform questionnaire that consisted of Likert scale questions, followed by open-ended questions for all participants. I then interviewed each participant via Zoom and asked questions based on their questionnaire answers. The questionnaire and interview helped guide our advising session during the second month of the participant's fall semester. The questions were open-ended and helped influence our subsequent advising session. During the second advising session, the participant and I discussed any changes, roadblocks, or concerns the student had regarding completing a bachelor's degree. In Spring 2021, we discussed degree mapping to their transfer institution. The degree map helped guide the student in their choice of classes and course sequence. The goal of the advising and degree mapping sessions was to help the participants develop a degree map for their remaining two years of college by the end of their senior year of high school.

While conducting the qualitative, multiple case study research, I had the role of advisor and researcher to the ECHS students; as such, I also engaged in practitioner

inquiry. According to Anderson et al. (2007), practitioner action research is “done within an action-oriented setting in which reflection on action is the driving force of the research” (p. 14). Anderson (2007) argues that practitioner inquiry also involves the researcher studying their actions and the effects of their actions. In this study, I utilized my advisor's expertise and background in higher education to work with the participants. I advise students quite frequently, particularly Latino students. The students are comfortable talking with me since I am of the same race. I also have a vested interest in their success since I was a first-generation, racial minority student. My previous classification compared to the ECHS student allowed me to understand the issues and barriers that could detour a successful transition to the university. I knew my role as advisor and what I needed to address to ensure our advising sessions were successful. I included degree mapping as a necessary component for the research as I wanted to understand the effect degree mapping and mandatory advising had for the ECHS student to have a successful transition to a four-year institution.

In addition to participating in this research as an advisor, I was also the researcher as I conducted and analyzed the questionnaire, interviews, and advising sessions. I wanted to understand how mandatory advising from an advisor who had first-hand knowledge of potential issues with college transition would help the ECHS student successfully transition to a four-year institution. As the researcher, I wanted to understand how providing students with strategies and support such as advising and degree mapping with a qualified advisor with prior experience might influence a student's successful transfer to a four-year institution. Anderson et al. (2007) described action research as “an ongoing series of cycles that involve moments of planning actions, acting, observing the

effects, and reflecting on one's observations" (p. 22). I planned our advising sessions to ensure that I asked the right open-ended questions to allow the student to feel comfortable conversing with me about personal topics. I acted as the researcher and observed my questioning strategies to ensure I was headed in the right direction and make necessary adjustments. I wanted to ensure I utilized our time effectively and efficiently since the participant and I had limited advising sessions. I reflected on my role as the advisor and researcher and adhered to all ethical considerations.

Site of Data Collection

Data were collected from Early College High School seniors who attended classes at the research institution, comprising four campuses. According to the 2019 census, the research site in a Houston area suburb has a 68.9% Hispanic population (U.S. Census, 2019). In addition, the median income is \$53,331, and only 14.2% of the 151,000 population holds a bachelor's or higher (U.S. Census, 2019). The research site was chosen since it is one of the community colleges within the Houston area to have the ECHS program.

Early College High School at the research institution started in 2010 to represent lower socioeconomic, racial minority, and first-generation participants in higher education in the Houston area. Participants applied during their eighth grade of middle school and interviewed the high school Principal to ensure they understood the program's rigor and what it entailed. Their ninth-grade and tenth-grade year of high school were spent at their home high school campus, with their eleventh and twelfth grades fully immersed at the partnering community college.

Participants and Sampling

This study utilized purposeful sampling to select individuals who understood and to help answer the research questions. According to the local school district, approximately 53 seniors for the Early College High School for the 2020–2021 academic year. The 53 seniors all came from various backgrounds. All 53 participants are first-generation participants. Forty of the 53 seniors are Hispanic, while six are African-American and seven are Caucasian. There are 26 females and 27 males in the program. Participating ECHS students attended a Zoom meeting in August 2020 that explained the qualitative study, and the participants asked questions regarding the research. Participants chose to opt-in to the study, which required mandatory advising sessions and degree mapping to their transfer institution. Five ECHS seniors for the 2020–2021 academic year participated at the beginning of the research study, but two participants opted out after the questionnaire. The three participants included two males and one female who were all Hispanic. The three participants completed the study in its entirety, and their responses were used for the research.

I used pseudonyms for each participant due to their age and their stories' nature. Table 3.1 lists their race, low socioeconomic status, and planned transfer institution with the intended major. Two of the initial five participants opted out after completing the initial questionnaire due to familial reasons. Briana stated her parents were worried about how much information was needed regarding her and her family. The parents were uncomfortable and told Briana she could do what she wanted, but she still opted out not to upset her parents.

The other student, Carmen, opted out for much of the same reason as Briana. Her parents were concerned with finances and the needed information to complete paperwork

for financial aid. Briana’s family did not want anyone to know about their family history, as the parents were embarrassed by their socioeconomic status and lack of speaking English. Carmen respected her parents’ wish and declined to continue in the study.

The remaining three participants are first-generation participants, as this is a requirement to enroll in Early College High School (Texas Education Agency, 2020a). In addition, the participants were Hispanics, who were also classified as low socioeconomic status. Participant information is presented in Table 3.1. All three participants worried about funding their education beyond high school because their families could not afford the cost of higher education. Informational meetings at their high school regarding scholarship opportunities were held during their senior year.

Table 3.1

Participant Overview

Participant	Race	Low-SES	Transfer Institution	Intended Major
Armando	Hispanic	X	University of Houston	Business Finance
Rudy	Hispanic	X	Texas State University	Biology for Med School
Leticia	Hispanic	X	Sam Houston State University	English High School Teacher

Advising and Degree Mapping Sessions

This study involved ongoing advising and degree mapping interventions. In the section below, I describe each part of this process. Before beginning the research, I held an informational meeting with the Early College High School seniors regarding the study and what it entailed. Five participants filled out a questionnaire that included a Likert

scale and open-ended questions regarding preparedness for transfer to a university. After completion of the questionnaire, two participants opted out of the study. The answers from the questionnaire guided the participant's first advising session in the fall semester of 2020.

Early College High School participants attended their first mandatory advising session individually with me to understand what transferring to a university entailed. The advising sessions' goal was to learn the participant's backgrounds and use their responses from the questionnaire to determine what they knew about transferring to a four-year university. I used a semi-structured interview (see Appendix B) to guide the advising session and discuss additional topics at their next advising session. During the first session, the participants presented their background stories, shared their concerns about transferring to a college, and talked openly about their experience in ECHS. After this session, the participants met with their high school counselor as intended, then returned to a second advising session in the spring of 2021. I reflected on our initial session and determined I needed to recap our first session at the start of our second session.

The second advising session revisited the conversation from the first advising session and provided feedback to participants' unanswered questions. During the second session, the participant and I talked about the changes since the first advising meeting. The participants asked questions to ensure they were prepared to graduate from high school and transfer to the university of their choice. The participant and I discussed what financial aid meant and the different components of aid. The participant and I prepared their application for admission to the university of their choice. The participant and I filled out the financial aid forms and looked at possible scholarships at their transfer

institution. The second advising session also discussed why degree mapping was necessary. At the end of this session, the student met with their high school counselor to help with the map. Once again, I reflected on our advising session, making notes along the way.

Two months after the second advising session, the participants returned to me for a degree mapping session, where further analysis and discussion of their map took place. The degree mapping session helped them analyze their course sequence for their final two years of college to obtain a bachelor's degree. The participant and I talked about their choice of classes and identified areas of concern. The degree mapping session answered any last-minute questions the participants had regarding transferring and analyzing their potential degree map creation. The participant and I discussed their map, and I helped identify areas of concern or ones that needed more analysis. I coached the student through the mapping session, and the student and I agreed upon a final degree map. The student printed out their final degree map to show their high school counselor for final approval. The high school counselor stated they were correct and thanked me for helping the participants. At the end of the degree mapping session, the participants completed the same questionnaire from the beginning of the study. The same questionnaire helped me analyze how their perceptions of college readiness for transfer had changed. The questionnaire also provided insight to ensure I was appropriate in my reflection of the researcher and advisor.

Data Collection

This study examined how mandatory advising and degree mapping of Early College High School participants helped to create a successful transition to the university

to complete their bachelor's degree. Creswell (2009) described data collection as categorized into four basic information types: observations, interviews, documents, and audiovisual materials. For this qualitative, multiple case study, data collection consisted of a questionnaire given to the ECHS participants at the beginning of the 2020–2021 academic year in August and again at the end of the school year in April 2021. The questionnaire had two different sections. The first section had questions that were examined utilizing a Likert scale. The questionnaire's Likert scale section had three subsections that helped identify a starting point for the participant interviews. The first section consisted of questions that dealt with the participant's perception of their mindset and how it related to being a successful student. The second section of the Likert-scale portion of the questionnaire focused on participants' perceptions of their readiness for transfer. Finally, the last section of the Likert scale section dealt with how much the participant felt they knew about the university setting. The questionnaire also included an additional section with open-ended questions where participants responded about their preparedness for college transfer and possible barriers and issues in the transfer process.

Participants completed the questionnaire via Google forms. Once the participants completed the questionnaire, I tallied their responses based on each particular question from the Likert scale section. For the open-ended questions, I memoed notes I observed in their responses. I used this data to help formulate the way to approach each individual advising session and interview. I used the questions presented in Appendix B and tailored each one to formulate prompts for the participant's semi-structured interview. Yin (2014) identified the interview as one of the most important aspects of a case study. The semi-structured interview with the participant took place via Zoom during the first advising

session after their interview. I utilized the semi-structured interview from Appendix B to lead to open conversations (Yin, 2014). I obtained permission to audio record all sessions throughout the study. I recorded the interviews and took detailed field notes to identify themes during the interview, advising, and degree mapping sessions.

In the first advising session, participants shared their background and why they chose Early College High School. I took field notes during their story to highlight overlapping themes with their questionnaire responses and used this with their responses to the questionnaire to guide our interview. I also took field notes and audio recorded during their interview, where the participant and I discussed how the participant felt about transferring and any potential barriers or roadblocks during their last two years of college. The participant and I further discussed how the participant would successfully handle the barriers and roadblocks and what information was needed to transition to the university. At the end of the interview, I explained to the participant that they should continue working with their high school counselor as planned, and our advising would resume in Spring 2021.

In the spring semester of the participants' senior year of high school, we resumed our advising sessions via Zoom. Once again, I took field notes and recorded our session with their permission. The participant and I discussed how their advising sessions with their high school counselor went between our sessions. The participant and I further discussed if any of their concerns or issues still existed and possible solutions. Again, the participants expressed concerns and sought answers to their questions. Towards the end of the second advising session, I transitioned our discussion to degree mapping. The participant and I talked about the reasoning behind degree mapping and the critical

components. The participant was given instructions to create a degree map with the help of their high school counselor and bring it to our final session on degree mapping.

The participant's final session was over degree mapping. I took field notes and audio recorded as I did with the other sessions. The participant and I looked over their map and discussed issues, roadblocks, areas of concern, and how they created their map. I coached the participant by exploring why a degree map and course sequencing were critical to a successful transition to their transfer university. After the session, the participant was given the same questionnaire as the study's inception. They were also asked the same interview questions as the first advising session. The participant and I discussed how their answers had evolved, and I explained how their new map and advising sessions prepared them for the transition. The degree mapping session concluded the study.

Data Analysis

Data analysis involved organizing data, analyzing text, coding, and interpreting the data (Creswell & Poth, 2018). Data analysis was concurrently conducted as I made interpretations and wrote reports (Creswell, 2009). I used Creswell and Poth's "data analysis spiral" (2018, p. 185) to approach the analysis process. The data analysis spiral has five steps that helped to analyze the data collected for this study. The five steps included organizing the data, memoing emerging themes, coding into themes, assessing interpretations, and visualizing the data (Creswell & Poth, 2018).

Organizing the Data

My data collection methods involved the initial questionnaire that utilized a Likert scale and open-ended questions, interviews, and field notes for advising sessions and

degree mapping sessions at the end of the student's senior year. First, I stored the responses to the interviews, questionnaire, advising sessions, and degree mapping session on my computer in an Excel file that was password protected. Then, I started organizing the data by creating a table with my research questions and the case study's type of data collection used for each question (see Table 3.2). The table below served as the foundation for the data analysis.

Table 3.2

Organization of Data Analysis for Research Questions

Research Question	Data Collection
How has advising and degree mapping aided in ECHS participants' readiness to transfer to a four-year university?	<ul style="list-style-type: none"> • Questionnaire • Interview
What elements of advising participants in their transition to a university are necessary for completing their bachelor's degree?	<ul style="list-style-type: none"> • Interview • Advising Session
What elements of degree mapping do participants find helpful to ease the transition to a four-year university?	<ul style="list-style-type: none"> • Interview • Advising Sessions • Degree Mapping Session
The study will also seek to answer what the high school seniors identify as other barriers to completing their bachelor's degree?	<ul style="list-style-type: none"> • Interview • Advising Sessions • Questionnaire
What could the program implement to ensure participants are college-ready for the university?	<ul style="list-style-type: none"> • Interview • Advising Sessions

Data collection and data analysis were conducted simultaneously; as Creswell and Poth (2018) stated, collection and analysis are natural occurrences for qualitative research. The questionnaires were organized by totaling each Likert scale question for all participants. I created separate files for each participant and another one for overarching themes that I identified.

The questionnaire concluded with the student's responses to the second section of the four open-ended questions. I also identified themes in each response and then the overarching themes within the three case studies. Finally, I filed the findings in their individual folder.

Memoing and Coding

I transcribed all the open-ended questions from our advising sessions, questionnaires, and interview transcripts and began memoing codes, categories, and emerging themes. First, I utilized an Excel spreadsheet that recorded all highlighted notes from the transcripts, including the participant's responses to the questionnaire, interviews, advising sessions, and degree mapping session. Next, I notated overarching themes from the participants' responses during their two advising and one degree mapping sessions. Once themes emerged, the information was classified into sub-themes and further analyzed using Excel. The themes that emerged from the questionnaire, interviews, and advising sessions included the need for college advising, increasing sense of preparedness for transfer, potential barriers to completing their bachelor's degree and financing their education.

Assessing Interpretations

The overarching themes that spanned all cases helped formulate a conclusion for the qualitative, multiple case study and summarize the key findings for this research. The findings also helped to determine the summary of the research and create of distribution of findings. In interpreting the data, I was surprised to find that the participants had not thought about barriers to completion of their bachelor's degree. I expected them to have

given thought to barriers since they were a lower socioeconomic and racial minority who faced challenges entering and finishing the Early College High School program.

I found it interesting that the participant's high school counseling sessions were relatively short. Lower socioeconomic, racial minority students are underrepresented in higher education for many reasons, with the financial aspect as one of them. However, the Association of American Colleges and Universities (Kammerer, 2019) found that longer, meaningful advising sessions with lower socioeconomic students could help them create an action plan to help them be successful.

Data Validation

Creswell and Miller (2000) identified eight validation strategies for qualitative research. This study employed three of those strategies, including member checking, prolonged engagement, and peer debriefing. The first validation strategy employed in this study was member checking. Member checking allowed me to include the participants to review the credibility and accuracy of their responses that I memoed from their advising sessions. This technique is considered "the most critical technique for establishing credibility" (Creswell & Miller, 2000, p. 4). Creswell (2005) utilized a method of member checking to validate the data. He stated:

Member checking is the process in which the researcher asks one or more participants in the study to check the accuracy of the account. This check involves taking the findings back to the participants and asking them (in writing or an interview) about the report's accuracy. You ask participants about many aspects of the study, such as whether the description is complete and realistic, if the themes are accurate to include, and if the interpretations are fair and representative. (p. 252)

Each participant read several sections of their particular case study findings to check for the recorded information's accuracy. The participant agreed with my interpretations,

where I used thick and rich descriptions regarding their responses to our sessions. I utilized their descriptions to validate their perspective.

Another validation used in this study was the prolonged engagement and observation in the field, including building trust with the participants and checking for misinformation. I spent a prolonged amount of time in the field by working with the Early College High School participants for the entire academic year. I watched the participants progress through the advising sessions and become aware of what was needed for a successful transition to the university. It helped to provide a greater understanding of preparing to transfer to a university conducted by their high school counselor

Lastly, I utilized peer debriefing. I asked a colleague familiar with qualitative research to review my coding and emerging themes for clarity and accuracy. In addition, I shared my case analysis for peer review. The peer-review process served as validation to ensure I was honest about the research study's findings and asked hard questions about interpreting the data and the methods used for the research study. The peer debriefer asked pertinent questions to ensure my data were accurate and easily understood. This validation method helped to ensure that my interpretation of the data were valid.

Ethical Considerations

I served as the advisor for the study's advising sessions and the researcher for this multiple case study. Therefore, I needed to carefully reflect on my role as the researcher conducting this study in a school district where I worked. For practitioner inquiry, I needed to acknowledge my presence as the researcher, the advisor and reflect on my involvement within the case study. As an insider to this case study, I had an advantage in

having firsthand knowledge of advising the students I interacted with weekly. I improved my advising skills each week due to this. Action research was “fundamentally about questioning the status quo and working toward change.” (Herr & Anderson, 2005, p. 151). Within this case study, I researched if mandatory advising and degree mapping helped ECHS students feel more prepared to transfer to a four-year institution successfully. ECHS students were of low socioeconomic status; therefore, I needed to be aware of this to change the percentage of ECHS students graduating with a bachelor’s degree.

I focused on protecting my participants as human subjects. As the researcher, I protected personal information as the participant’s financial background was analyzed. I was mindful of influence and bias as a first-generation, racial minority student. I also understood the implication that could arise due to biases towards the ECHS student. As the advisor, I was aware of the participant population as they could be classified as minors due to age. Therefore, I utilized pseudonyms for participants for anonymity. Another ethical consideration was the sensitivity of demographics and confidential information. I was aware of sensitive issues and handled them with care and concern for the participants. There was reciprocity between myself and the participants as all parties gained valuable insight from this study. I was mindful of how the interview improved “the human situation” (Creswell, 2009, p. 91).

When I analyzed the data and its interpretation, I provided an accurate account of the information; as Creswell stated, this is imperative (Creswell, 2009). I needed to make sure I accurately transcribed the participant’s sessions and accurately reported the findings. Information was checked for accuracy and validated appropriately by member

checking from the participants. APA guidelines were followed throughout the entire report. Lastly, an IRB was not required due to the small number of participants.

Limitations and Delimitations

This study had several limitations and delimitations. The participant's Early College High School classes, our two advising sessions, and one degree mapping session were conducted via Zoom. For limitations, participants were not in a classroom setting due to COVID-19; therefore, conducting face-to-face sessions was impossible. In addition, the limitation of not having an office setting for the interview and sessions may have prevented personal rapport with the participants.

Another potential limitation of the research was the size of the participant pool. The interviewed population was only 8% of an average Early College High School graduating class as three participants participated. According to the Texas Education Agency (2019a), the average graduating class size is 25 to 45. Therefore, the small sample of participants may not necessarily represent the overall population of ECHS students.

Participation in this case study was limited to seniors in the Early College High School program at the research institution. The study participants were all high school seniors graduating in May 2021, as this was necessary as they graduate with their associate degree and transfer to a university. Also, the participants from the initial cohort of ECHS students were the only graduating class for comparison, and they did not have enough time to finish the bachelor's degree. Lastly, if the advising sessions end and the student decides that transferring to a university is not the best option, I did not make any decisions based on my data interpretation.

One delimitation for the research study centered around the student's motivation to participate in Early College High School. Students were chosen based on their willingness to succeed in college-level classes at an early age. Therefore, I only used this group of highly motivated students, which may impact the research findings. Another delimitation that I used was that my research analyzed only our Texas region and did not include other ECHS schools across the state.

Conclusion

A qualitative multiple case study design allowed me to interview, analyze, interpret, and accurately report the benefits of degree mapping and mandatory advising sessions for Early College High School participants. I described the site selection, data collection, and analysis. I also discussed ethical considerations as the researcher, along with delimitation and limitations of this study. The study's results can change what interventions are utilized during the student's senior year to foster a smooth transition to the university and complete their bachelor's degree. The following chapter examined the results and discussed the implications of the research findings.

CHAPTER FOUR

Results and Implications

Introduction

This study utilized multiple case study research that examined if mandatory advising and degree mapping sessions helped Early College High School seniors successfully transition to the university setting. In addition, I analyzed how adequate the ECHS student felt the advising and degree mapping sessions prepared them for transfer to a university. Data collection included questionnaires, interviews, and case notes. The study sought to answer the following central research question: How has advising and degree mapping aided in ECHS students' readiness to transfer to a four-year university? Also, this study explored the following sub-questions:

1. What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university?
2. What do ECHS seniors identify as other barriers to completing their bachelor's degree?
3. What could the Early Career High School program implement to ensure students are college-ready for the university?

This chapter presents the multiple case study findings by analyzing the questionnaire responses from the three participants. Implications presented from this qualitative, multiple case study involve the 4S model of the situation, self, support, and strategies. The basis is the Transition Theory framework from Nancy Schlossberg (2011). The framework centers around understanding and adequately coping with the transition to success (Schlossberg, 2011). I begin by providing an analysis of the mandatory advising

and degree mapping sessions. The analysis provided insight to determine if there was an increase in participant's perceptions of readiness for a successful transition to a four-year university (Freeman, 2008). This chapter also reveals the questionnaire's findings, answers to the open-ended questions, and themes that emerged from the interview, advising, and degree mapping sessions. The presentation of the findings evolves in five steps. First, I present the findings from the initial questionnaire. Second, this chapter describes the individual case study analysis. The analysis helped to define the themes that emerged from the individual advising and mappings sessions. Third, I discuss the overarching themes that emerged from the cross-case analysis. Fourth, I use the collected data to answer the research questions and examine what perceived changes need to occur in Early College High School. Lastly, this chapter concludes with a discussion of the results and a description of the implications of this study.

The Questionnaire

I provided each participant with a questionnaire at the beginning of the research process. The questionnaire had a Likert-scale section, followed by open-ended questions. The questionnaire helped formulate the individual case narratives and explain why the participants chose the Early College High School program. The participants answered the questions based on their perceptions and experiences.

The first section of the questionnaire utilized the Likert Scale, as shown in Table 4.1 below. The questionnaire had three sections: mindset, preparedness, and transfer. The data showed the percentage of the participants who answered each question. According to the mindset section, 83.3% of the participants felt they had the correct mindset to transfer to the university to complete their bachelor's degree. However, only 46.7% of the

participants felt they were well prepared to transfer. The last section of the questionnaire focused on different aspects needed to transition to the university successfully. As with the lower score in preparedness, only 20% of the participants showed that they understood the university's necessary components. The Likert scale section of the questionnaire demonstrated that the participants felt they were in the correct mindset to handle the transfer to a university; however, they felt they were not adequately prepared to be a successful university students. The participant's open-ended responses were used as the starting point for the interview.

The open-ended responses of the questionnaire in Table 4.1 were just as telling as the first Likert scale section. Three participants said they “were anxious” about transferring because they felt they had not been adequately prepared. Four participants felt the most challenging part about transferring to a university was that they would not have help. The four Hispanic students hoped their advisor would be of the same race as “they can relate to us.” Hahs-Vaughn (2004) conducted a study that demonstrated that when students matched with an advisor of the same race, their chance of completing a college degree almost doubled (p. 490). Students felt a stronger connection and relationship with their advisor when this happened, formed a bond, and trusted their advisor for proper guidance. The same race phenomenon that the Hahs-Vaughn study found was evident in the case study participants as well. The participants stated they were “willing to share more since I could relate, felt comfortable talking, and more open to deeper dialogue regarding their background history” with me since I am Hispanic and can relate to their culture.

Table 4.1

Initial Questionnaire: Mindset

Question	Highly Unlikely	Unlikely	Likely	Somewhat Likely	Very Likely
I can make decisions on my own without the help of others.	0%	0%	20%	60%	20%
I handle obstacles efficiently.	0%	40%	20%	40%	0%
I manage my time wisely.	20%	0%	60%	20%	0%
I adhere to due dates.	0%	0%	60%	20%	20%
I can multi-task.	0%	20%	40%	40%	0%
I can get easily distracted.	0%	20%	40%	40%	0%

Table 4.2

Second Questionnaire: Preparedness

Question	Highly Unlikely	Unlikely	Likely	Somewhat Likely	Very Likely
I will ask questions if I do not understand.	20%	40%	20%	20%	0%
When completing tasks online, I can stay focused.	20%	20%	20%	40%	0%
I feel ECHS prepared me for the university of my choice.	0%	60%	40%	0%	0%

Table 4.3

Third Questionnaire: Transfer

Question	Highly Unlikely	Unlikely	Likely	Somewhat Likely	Very Likely
I know what to expect when I transfer.	20%	60%	20%	0%	0%
I know how to build my class schedule.	40%	40%	20%	0%	0%
I understand how my GPA is calculated.	60%	20%	20%	0%	0%
I understand how financial aid works.	80%	20%	0%	0%	0%
I feel I am prepared to be successful at the university.	20%	60%	20%	0%	0%

Research conducted by AVID suggests that many Hispanic students want to stay close to home to help the household (AVID, 2020). Only one participant had thought about potential roadblocks or barriers to their education, and it was their family situation. The participant struggled with the idea of leaving to attend a university that was not close to their home. Universities across the country were aware of this dynamic and worked to embed support services in Early College High Schools to help with this phenomenon (AVID, 2020).

Most responses to the last open-ended questionnaire question dealt with funding and financial aid, advising, support services, and underprepared transition. Student responses displayed the need for advising sessions to help successfully transfer to the university, including helping students understand the university support services available free of charge. In addition, the students needed input on financial aid and all it

encompassed, along with explanations on the different forms of aid available to them, such as grants, scholarships, and student loans. The participant's responses to the questionnaire's open-ended questions helped guide our first advising session, including an interview.

Individual Case Analysis

In the sections below, I provide individual descriptions of each participant. First, I provide background information on each participant, followed by a detailed description of each advising and degree mapping session. I also describe participants' answers to the research questions. Lastly, I summarize each participant's information.

Armando

Armando is the second to the youngest child of his three siblings. He was born in a small town in the state of Nuevo Leon in Mexico. His parents were farmers in Mexico and struggled to make ends meet as neither had finished school in Mexico. When Armando's youngest sibling was born, the family moved to Detroit for employment. No one in the family spoke English, and he remembered how hard it was in elementary school to learn the alphabet in second grade. Armando stated, "...kids would laugh at my accent and tell me they could not understand what I was saying. I hated being there because no one was like me." Finally, his mother told him to keep learning and trying to speak English, as she was determined for all her children to learn English and get an education. When he was in fifth grade, the family moved to Houston to be close to an aunt and uncle that lived there. On his first day at school, he was pleased to notice that many students "looked just like me and my brother and sisters."

His oldest sibling was a junior in high school and wanted to go to college when he graduated. His sister was a sophomore and wanted to follow in her brother's footsteps, and the parents encouraged all the children to attend college. However, when his older brother dropped out of college and his sister got pregnant, he knew he had to set an example for his younger sister. The family always struggled, and he believed a college education was necessary to not live in poverty.

He remembered in eighth grade attending a session at his school where counselors talked to all the eighth graders about the Early College High School program. He stated, "I was so happy to hear I could get a degree and not pay for it so my family would not struggle to pay for my school. I had to be in this program." What he did not know at the time was that he was completing an associate's degree and what that meant. He felt deflated when he learned he had to continue his education after high school because he had no idea how to pay for it. He turned to his high school counselor for guidance. One counselor helped Armando understand what his high school years looked like and had him picture himself "walking across the stage graduating." The counselor explained that she would help prepare him for the college classes in high school and continue his education to transfer to the University of Houston to major in Business Finance. He trusted her and felt she would follow through with her word. However, as time went on in the early high school program, he saw less of her and felt lost and betrayed. He considered removing himself from the program because he felt no one cared.

At the start of his senior year in August 2020, Armando felt happy that he decided to stay enrolled in Early College High School to earn his associate's degree. He felt "accomplished to be the first in my family to get an education." However, due to

COVID-19, he did not have personal interactions with his teachers or counselors. He wanted help to make sure he was on the right path to transfer to the University of Houston. With all the craziness of learning via Zoom and not knowing when to speak up in class, he decided he would try to figure out how to enroll at the University of Houston on his own.

Armando's Questionnaire and First Advising Session

Armando's responses to the questionnaire and his interview set the foundation for our advising sessions. At our initial session, the participant and I started with his interview, which asked about his background. I asked, "tell me about yourself. Let me know who you are, family dynamics, but only if you are willing to share, and why you chose to enter the Early College High School program." The participant and I had the Zoom meeting for almost two hours to discuss his aspirations, career goals, and background. He wanted to become a financial analyst so he could help people properly invest their money. I used this career goal and the background he shared with me to lead the advising session. After our interview, I asked Armando how well prepared he felt in regards to transferring. He stated that he felt very prepared to transfer based on his high school education and academic dedication. One concern that the participant and I discussed was potential barriers to completing his education, to which he did not believe there were any. I gave potential barriers that could arise, including family, health, or financial issues. Armando stated he had not thought of barriers regarding his continued education. His answers to the questions on the questionnaire regarding transfer demonstrated he had not realized there could be potential roadblocks to achieving his education. I asked Armando about his high school counseling sessions and his

interpretation of what helped him mentally prepare for transfer and what areas needed further conversation. He stated he needed to know how to succeed at the university because he thought it would be the same as in the Early College High School program. At the end of our discussion, he stated he felt “more lost than before, but it is a good lost because it just means I need to think more thoroughly.” I asked him to reflect on his advising session with me, continue his sessions with his high school counselor, and list any questions or concerns that need further conversation.

Armando's Second Advising Session

Armando returned in his spring semester for his second advising session and had several questions that needed answers. First, he asked how he could pay for his education if his family did not make enough money to pay for his education. He felt that “his education dream was over because he could not afford it.” His question guided the advising session. We spent the next two hours discussing financial options, and I helped him finish his FAFSA application. Armando was not aware there were various forms of funding and was afraid he would not qualify for any help because he did not have a job. I explained to him that working was not the only qualifier to receiving financial aid.

Once Armando and I finished his FAFSA application, I showed him various sites to apply for scholarships, including his community college's scholarship office who offered scholarships for transferring students who completed an associate degree. The financial aspect provided a transition to a discussion regarding degree mapping and its importance, so there is no extra money and time. At the end of the advising session, I tasked Armando with completing a degree map with his high school counselor and bring it for our last session over degree mapping.

Armando's Degree Mapping Session

Our last session ensured that Armando and his high school counselor created a degree map that allowed for a successful transition to the university. I reviewed his degree map and explained how scheduling classes worked and the different choices he would make. In ECHS, there are not many choices for the participants since the curriculum is set forth by the school district (Texas Education Agency, 2020a). Armando felt lost and overwhelmed looking at the degree plan because his “counselor created it” for him. I explained that he and I would analyze it one step at a time, and I would help guide him in ensuring his course sequence would allow for success. We went semester by semester, and Armando explained his choice of elective credits. He chose classes that did not pertain to his degree plan and did not research prerequisites on some courses. I opened up the degree plan for his transfer institution, and he learned how degree mapping helped for his transition because he was not aware he had to look for prerequisites on courses. We discussed the importance of prerequisites and course sequencing that would help with his transition to the university. He made suggested course edits regarding sequencing and choice of classes. We made the necessary changes and concluded our last session with what he felt was “the best session ever, and thank you so much for helping me save time and money.” I asked him to complete the questionnaire to compare his initial perception of a successful transfer to now.

Armando's Answers to the Research Questions

Armando provided thoughtful insights into each research question. He asked that all questions be submitted to him at one time so he could “really think about my answers and make sure it is what I want to say.”

Central research question: How has advising and degree mapping aided in ECHS students' readiness to transfer to a four-year university? Armando stated that many students believe they are ready for transfer because “we talk with our high school counselors a lot.” He thought the sessions covered everything he needed to transfer because they told them they would know everything before graduation. Armando stated that he realized his high school counselors had not prepared him to transfer at the study's inception. Armando felt more comfortable going from the community college setting to a university after having our two advising and one degree mapping sessions. His initial responses to the questionnaire showed he felt only 20% prepared to transfer successfully. However, when presented with the same questions after the study, Armando felt 80% ready to transfer successfully. Armando's responses confirmed the Transition Theory by Schlossberg and understanding the transition from high school to the university setting (Schlossberg, 2011).

Armando also felt the degree-mapping session was the most beneficial aspect of our sessions because he had never thought that course sequencing mattered or could make a difference in success. He stated that he “felt he was ready to transfer and be successful after his mapping session.” His answer to the question supported Sukhanove and Norz's (2018) findings that degree mapping is critical for students to succeed in college.

Sub-question 1: What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university? Armando acknowledged he did not understand degree mapping at our second advising session of the study. However, once I explained degree mapping and asked him to complete a map

with his high school counselor, he found degree mapping useful, so he knew what to take when he transferred to the university. Armando was worried about picking the wrong classes and wasting time and money. With degree mapping, he stated that “having someone take the time to help me understand how to pick classes and make sure I am not wasting time. I greatly appreciate all your help.” In closing, Armando found the time commitment from a college advisor and explanation of courses having prerequisites as the most beneficial aspect of degree mapping.

Armando believed his quick counseling sessions with his high school counselor were enough guidance at the beginning of the study. When presented with this same question at the end of the study, Armando stated this was an easy answer; “have a good advisor.” He explored his career goals and aspirations with me, and I helped him realize potential barriers to college and how to overcome obstacles. He knew he “needed to find someone to help me be successful. And then you entered, and everything was better.” I probed him to think deeper and how he would answer another student if they asked why they should go to an advising session. He said that he would “tell the student that the advisor is there to help them and willing to take their time to make sure they go to a university.” He also stated that letting the advisor know about their background helped the two parties get to know each other.

Sub-question 2: What do ECHS seniors identify as other barriers to completing their bachelor's degree? At the beginning of the study, Armando did not envision any barriers to his education. When he was presented with this question, he was perplexed as he said, “I have never really thought of this. Why would there be barriers? I know what I want to do.” I explained how sometimes it does not go as planned and to think of issues

or concerns that could cause him not to finish. Armando stated he was afraid he would have to work full-time to help the family. He also worried about not being home to help with his sister and take her to school functions. However, he received a scholarship to attend The University of Houston, and it included housing so he would not be living at home.

When I probed about academic issues, his first response was, “that will never happen since I am too determined.” I referred back to his questionnaire where he answered “unlikely” on the question, “I feel I am prepared to be successful at the university.” He explained that he answered that because he answered it before he started the sessions, and now he felt confident, there would not be any barriers to his education. After our advising sessions, he was not worried about the university setting because he and I walked through potential issues that could arise. The advising sessions demonstrated how before the study, he thought there were no barriers to his completion. Through mandatory advising and at the end of the case study, he was aware of potential barriers. He had the necessary knowledge and skillset to handle any potential roadblocks to completing a bachelor’s degree.

Sub-question 3: What could the Early Career High School program implement to ensure students are college-ready for the university? At the beginning of the study, Armando felt his ECHS program had all the necessary components to help the students be college-ready for the university. Once our advising and mapping sessions concluded, Armando stated, “get an actual college advisor and not one from high school.” He felt the advising sessions with me were “way more beneficial” than the Zoom meetings he had with his high school counselor. He also felt that Early College High School students

should have more choices after viewing a degree plan. He felt that “this program is not a real college. At least we get a degree, but this is not college.”

Summary of Armando’s Advising and Degree Mapping Sessions

Armando was one of four children who promoted education and offered support along the way. He entered into ECHS so he could earn a degree without having his parents pay for an education. He did not realize his education continued, but he wanted to transfer to the University of Houston after our discussions. After our final discussion, I feel confident Armando will be successful in his transition to the university. His mindset grew from believing he had all the necessary tools from ECHS, but after the advising and mapping session, he realized the changes that need to happen with the ECHS program. His final recommendation of the case study was that a college advisor conduct advising sessions and for degree mapping to become a standard practice in ECHS.

Rudy

Rudy is one of two children born to his parents, with his father born in Mexico and his mother born in Laredo, Texas. His parents never talked about attending college and instead believed the military was the best option. His older brother left for the Army after graduation, and the parents expected the same for Rudy. During the spring semester of high school, Rudy entered the Early College High School program. He did not know about the program until a friend of his told him about it. He talked to a high school counselor who told him he could not enter during the spring semester because he had missed the first part of the program. Rudy stated, “I was determined to get into the program because I did not want to go to the military. I wanted to go to college to become a doctor.” After several conversations with the high school counselor, the administration

from ECHS allowed him to enter the program. Rudy was determined to be successful and had his “eye set on a degree.” Now he is in his senior year of high school and feels overwhelmed with everything that needs to happen to transfer to Texas State University.

Now that Rudy is approaching graduation, he feels lost and unsure what to do if he transfers. He feels as if it might be better to join the military since “it is easier.” He stated that the only reason he is hanging on is because his high school counselor helped him figure out what to do next and helps every step of the way. The counselor answered all his questions and is helping guide him to his junior year of college. She wants to follow up for his senior year of college and is determined to see him graduate with his bachelor’s degree.

Rudy’s Questionnaire and First Advising Session

Rudy’s responses to the questionnaire helped formulate our interview and first advising session. I started the advising session with the interview and asked Rudy to provide the information he was comfortable sharing regarding his background. I knew he chose ECHS because he did not want to join the military and wanted an education. Our initial advising session via Zoom was an hour-long, and he provided insight that medical school was the penultimate goal he desired to reach. He wants to attend Texas State University to earn a Biology degree to apply to medical school. Rudy stated he chose medicine because science has always piqued his curiosity, and he wanted his education and career to be meaningful. When his interview concluded, I asked Rudy how prepared he felt to transfer to Texas State. His answer was perplexing; he felt ready at one point but lost at the same time because he felt the military would be more accessible. Rudy did not feel prepared to be successful. Rudy knew he had the academic skillset to be

successful. He “had heard from friends that Early College High School did not provide guidance when the students left the ECHS program.” Oliver et al. (2010) conducted research and argued that when students have a guidance counselor who creates a mentorship relationship, they are more likely to feel comfortable finishing their degree. Rudy lost this mentorship relationship during his junior year of high school and needed guidance for transferring to finish his bachelor’s degree. At the end of our session, I asked Rudy how he felt after this session, to which he replied, “please do not leave and not help me. I want to go to school, but I need help on what to do.”

Rudy’s Second Advising Session

Rudy returned in the spring semester for his next advising session. Rudy and I talked about obstacles and how life can intervene at any given moment, and he needed a plan of action. According to the Association of American Colleges, approximately 50% of all students change their major during their sophomore year (Freeman, 2008). When Rudy and I discussed the obstacles, I explained the AACU’s statistics regarding changing majors, and he said he never thought of that. I explained that the last session was to ensure he had chosen the correct classes for his degree map to Texas State University and ask any last-minute questions. He stated he felt inspired to pursue his degree based on our previous advising session. I started off asking if he had any unanswered questions, to which he replied, “no, but I have some new ones I want answered, please.” Rudy is insightful and thinks ahead, and wanted to know what he needed to be aware of if he felt he needed to drop out at any point. I stated that he and I would discuss potential barriers and possible resolutions to the scenarios. I asked how he planned on financing his education, and he said he wanted to complete his financial aid application, but his mom

did not want to give him her information to finish it. Rudy had researched and applied for numerous grants and scholarships, but he had not applied for loans because of his mother. Rudy said he “wished his family supported his decision” as he felt alone and lost. His lack of family support motivated Rudy to pursue his dream of a bachelor’s degree and never give up. At the end of the advising session, I asked him to return to his high school counselor, create a degree map with the help of his high school counselor, and bring it to our advising session in two months.

Rudy’s Degree Mapping Session

Our degree mapping session started with analyzing the map he and his high school counselor created. I asked several questions regarding his course choices and the sequencing of courses. Rudy stated he told his high school counselor to “pick what was easiest” to graduate. I asked if he had input in the course choices, and he stated no. I discussed with Rudy the importance of taking ownership of your education, and the sequence he chose for his courses needed more research because of prerequisites on math and science courses. He stated that the only prerequisites he knew were from high school and his calculus sequence. After further discussion with Rudy, I learned that he did not know that all science and math courses at the sophomore or higher level have prerequisites. I also discussed how taking several writing-intensive courses could become burdensome and lead to withdrawing from a course. After our discussion, he chose a different course sequence not to get overwhelmed and finalized his degree map. After the session, I asked him to complete the questionnaire he had taken before determining how his perception of readiness to transfer changed. Rudy stated, “without you, I would probably be joining the military, even though I do not want to go.” He thanked me and

said he would have never known about this part of the transfer process and found it very beneficial. Rudy's feedback proved that degree mapping is an essential part of transferring to complete his bachelor's degree.

Rudy's Answers to the Research Questions

Rudy came ready for all sessions as he felt the advising sessions were going to help him. He actively participated and enjoyed each session. Rudy provided great insight and feedback for the main research question and the sub-questions. He wanted to provide as much information as possible to help others in the future. With the help of Rudy's high school counselor, he feels more confident about his transfer. Rudy stated, "I think it helps that she understands where I am coming from since she is Mexican too. She told me how she got to where she is now, and I can relate to that." Research from the First-Generation Center for Student Success shows a higher graduation rate when the mentor is of the same race as the mentee (Jehangir & Romasanta, 2020).

Rudy is prepared to tackle the next two years after graduating from the ECHS. He is excited about what is to come and feels that with the "help from my counselor in high school and you, there is no way I can fail." Rudy asked if he could continue reaching out to me after he transfers so he always feels prepared to handle issues that might arise at the university, and I said, "of course."

Central research question: How has advising and degree mapping aided in ECHS students' readiness to transfer to a four-year university? When presented with the main research question, Rudy felt most ECHS students feel prepared based on their sessions with their high school counselor. While he felt this way, he acknowledged that the advising and mapping sessions made the absolute difference and set him up for success.

He suggested that discussing potential issues that could arise from transferring to a university and potential solutions to navigate those barriers was constructive in his readiness to transfer.

Sub-question 1: What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university? When presented with this question regarding advising, Rudy stated, “They (the high school counselors) should do a degree map like we did because it was good to think about the future.” He also appreciated that I asked him about his life because his high school counselor never inquired. According to the Association of American Colleges and Universities, Freeman (2008) stated, “through advising, students will be able to put the college experience into perspective, especially about understanding the value of the learning process, whether it is independent or collaborative.”

Rudy found degree mapping useful, so he knew what to take when he transferred to the university. He was worried about picking the wrong classes and wasting time and money. With degree mapping, he stated that “having someone take the time to help me understand how to pick classes and make sure I am not wasting time. I greatly appreciate all your help.” Rudy’s responses provided positive feedback that degree mapping was worth his time and effort, and this process could help him achieve a successful transfer to a university to fulfill his bachelor’s degree.

Sub-question 2: What do ECHS students identify as other barriers to completing their bachelor's degree? Rudy believed a possible barrier to completing a bachelor’s degree is “having your parents support you in your decision.” He stated that his father

was upset that he was not entering the military after high school. He and his father exchanged words at one point because Rudy was determined to finish college, even if he had no parental support. The college board's report stated how family support could be helpful or a barrier to education (The College Board, 2007). Rudy longed for parental support but never received it.

Rudy was also worried about the financial aspect of paying for school for the next two years. He had talked with his mother about financial aid, but she refused to give her information because she was afraid of the government knowing too much about them. He told her he could take out student loans in his name, but she urged him not to. He stated, "figuring out how to pay for college could be a barrier for many Mexican students because we do not have money for college." Reddy (2019) acknowledged the cost of higher education as a barrier for many racial minorities and lower socioeconomic students who have no parental support. Paying for college was one of Rudy's most essential concerns after he thought about this question. He stated his high school counselor talked about financial aid but never explained it, so he did not know what to do. Haxton et al. (Haxton et al., 2016) determined in their research that 30% of students who are unaware of financial aid and its impact are less likely to finish a degree.

Sub-question 3: What could the Early Career High School program implement to ensure students are college-ready for the university? Rudy thought a field trip to the universities the students want to attend would be an excellent way to see the university and learn about it before moving. He knew he wanted to attend Texas State University, but when I asked why he said, "because my friends are going there and they have a Biology major." I was elated to see that Rudy was critically thinking about his next two

years of college, but I felt he and I needed to explore other options if there is a better fit for him to apply for medical school. Rudy and I talked about the different majors in college and how Freeman (2008) found that students change their majors halfway through their sophomore year. Rudy did not want this statistic to apply to him, so Rudy and I researched and found chemistry would be a better major to apply for medical school. Rudy thanked me for taking the time to help him and said he would stay in touch.

Summary of Rudy's Advising and Degree Mapping Sessions

Rudy did not have parental support to attend school, as his parents wanted him to join the military. However, Rudy was determined to go to college because he wanted to become a doctor. Rudy indicated that having an advisor of the same race helps because the student can relate to the advisor and be more forthcoming. He also stated that degree mapping was essential and should start in high school. Overall, Rudy found the advising and mapping sessions to be beneficial.

Leticia

Leticia was the youngest of two children born and raised in a suburb of Houston, Texas. Her parents were both born in Texas and moved to Houston for work before they had children. Her father worked on the railroads all his life. Her mother worked as an office cleaner for a corporate organization and did maid service on the weekends for residential customers. When her parents were eighteen, Leticia's older sister was born, and two years later, Leticia was born. As Leticia remembered, "life was never easy for my parents, but they worked hard to give my sister and me everything we wanted."

When Leticia was eight, she vividly remembered her world crashing down. Her aunt was in an automobile accident with her older sister as the passenger, and both passed

away. Her parents were devastated as the four of them were a very tight family unit. Leticia wondered how her parents would move forward without her sister. However, more importantly, Leticia worried about who would guide her through life since the most important person in her life was no longer here. Leticia struggled for quite some time but then realized she needed to “pick herself back up because that is what my sister would do.” From that moment on, Leticia pushed herself academically. She had always loved English and wanted to attend Sam Houston University to become a high school English teacher.

Leticia believed nothing could stop her from fulfilling her dream. She had always wanted to be a teacher and felt the ECHS program would help her with college funding and complete a teaching degree. She enlisted the help of the college advisor assigned to Leticia’s cohort. Leticia was comfortable talking to the advisor because the advisor had already attended college and could guide her towards completion. Radcliffe and Bos (2013) conducted research that concluded that students who enlist help from advisors were more like to graduate with a bachelor’s degree.

Leticia’s Questionnaire and First Advising Session

Leticia’s responses from the Likert scale section of the questionnaire showed she felt she was prepared to transfer to the university; however, her response also indicated she did not think the Early College High School program had adequately given her all the necessary tools to transfer successfully. I used Leticia’s responses to the questionnaire to help guide our first advising session. I started by asking her to share background information to help explore creating the best path to complete her teaching degree successfully. Next, I asked Leticia if she had thought about barriers or obstacles that

could deter her from her dream. She stated, “nothing will get me off course. I have wanted this forever, and nothing will stop me. Plus, I owe it to my sister to finish this.” I presented two different scenarios that could be a barrier to completion. First, I asked how she would handle it if someone in her family got sick and needed help to care for them. Leticia stated she had never thought of it and asked if she could think about it and bring her answer to our next session. Next, I asked her about financing her education, and Leticia stated she was not worried about that because she received scholarships and grants that would cover her tuition. However, she was not aware that other outside resources required a FAFSA application. Leticia and I spent the next hour filling out her application as much as possible. She finished it at home after entering her parent’s information. Leticia stated she would finish it and look into other financial options and return to our second session prepared with answers to her unanswered questions.

Leticia was astounded at how much we covered during our initial session and was afraid she would not develop more questions for our second session. At the end of the first advising session, Leticia felt she was ready to transfer because she felt more confident in her abilities to navigate the university, and she was determined to make her parents and sister proud. Leticia said she “often talked at night aloud, hoping her sister could hear her from heaven.” She stated that her sister’s presence helped guide her towards completing her teaching degree, and nothing could stand in her way.

Leticia’s Second Advising Session

Leticia returned during the spring semester for our second advising session. She came prepared with research on possible barriers. Leticia went home and researched barriers because she had not previously thought of domestic or personal issues that could

deter her from reaching her goals. She was always afraid of being injured after her sister's death. Leticia and I discussed how an injury could become a potential roadblock to finishing a degree, whether small or large. Leticia was prepared for this discussion and stated, "since everything is online now due to COVID, I could still reach my goals by online learning."

After discussing barriers, Leticia asked if I could explain what the university setting was like and how I felt she would "fit in" at the university since she was younger than her peers. This furthered our discussion on successfully transferring to a university and demonstrated she lacked the basic understanding of university expectations and how to pay for college. We discussed the various forms of financial aid again to ensure she understood her options. Leticia stated that she had input all her information into her FAFSA application but was concerned she did not fill it out correctly. I helped guide her through the FAFSA application she had submitted to ensure it was filled out correctly. Upon review, she had filled it out correctly, and I told her to wait to hear from the university to determine her award.

Once Leticia and I finished talking about financial aid, I asked her if she thought about her course sequence. Then, I explained how some courses had prerequisites, and others had many different class choices. Finally, I asked Leticia to return to her high school counselor to create a degree map that she and I would analyze at our last session.

Leticia's Degree Mapping Session

At our degree mapping session, Leticia returned with a degree map towards her teaching degree. Leticia was excited that she and her counselor had mapped out her next

two years of college to reach her dream of being a high school English teacher. When I analyzed her degree map, I understood how she selected classes thoughtfully, but the problem was that she created a degree map for middle school. Luckily, there were not many changes to her degree map due to this. She did a great job creating a degree map demonstrating analysis, sequencing, and thoughtful coursework choice. Leticia stated that the degree map was “the best thing in my opinion because I know what I need to take before I even register.” She thanked me for introducing her to the map and asked if she could stay in contact if something changed.

Leticia’s Answers to the Research Questions

Leticia felt she needed to complete the advising and mapping sessions to honor her sister and her parents, who wanted her to finish a higher education degree. Leticia felt prepared for her transfer from ECHS to Sam Houston State University. She will receive her associates in education and successfully transfer to Sam Houston to pursue her high school English degree and be a great teacher to help influence students. Leticia also believes that she can accomplish anything in life through advising and having a mentor. She recommends that every student, and not just ECHS students, have a mentor to help them complete their degree and have an advisor who will follow their degree plan.

Central research question: How has advising and degree mapping aided in ECHS students’ readiness to transfer to a four-year university? Leticia stated that most Early College High School students, including herself, thought they were prepared for transfer because they were in an accelerated program. She felt she knew everything and would not need help. After attending these sessions, Leticia stated, “We really have no clue how to transfer and be successful.” Leticia also stated that ECHS students should understand

what it takes to be successful before entering the program so “they can see the end in mind.”

Leticia stated that the best part of our sessions was the advising by a college advisor. She felt our sessions were more meaningful than her high school counselor's because we talked more than they did. Leticia did not like the time constraint with her high school counselor and felt “my counselor did not listen to me. When my time was up, I had to leave even if I was not finished talking about what I needed.” Our advising sessions had no time constraint, and she found this very beneficial.

Leticia also felt the degree mapping helped her be ready for transfer because she had never thought about course sequencing. Once she and I looked at her degree plan, and she returned with a completed one after meeting with her high school counselor, she “really realized” that she was not ready at all. The sessions led to Leticia worrying if she knew everything she needs to know to be successful. I explained that this study helped her prepare for transfer to the university and hopefully alleviate her doubts about success. Her statements regarding the importance of degree mapping were supported by Sukhonove and Norz’s (2018) research regarding the importance of degree mapping and how it will help students be successful in their academics.

Sub-question 1: What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university? Leticia recommended advising sessions to include how to be a successful college student at a university as she heard it was different from a community college student. In addition, the advising session needed to include trust and a counselor who was “willing to help you achieve your goals.” Leticia’s statement regarding the counselor correlated with the

research conducted by Maister et al. (2000) that a trusted advisor made a difference in the success and completion rates of racial minority students. Leticia also stated that having the student create their map and bring it back to the counselor helped them understand how to create the best plan without wasting time and money. Lastly, Leticia stated the financial aid options needed to be discussed because she was unaware of them because they had never been mentioned. She believed this was crucial because some students might not consider transferring to a university because of financial needs and might decide to transfer if they knew aid existed to help them.

Sub-question 2: What do ECHS seniors identify as other barriers to completing their bachelor's degree? Leticia knew a barrier for most students of a racial minority was finding the money to pay for college and leaving home. She was scared to leave her parents alone but knew it was only temporary to fulfill her dream and return home to help them with expenses. Her parents were worried about her living by herself because they could not financially help her out. They knew she was a determined individual and wanted to see her finish her degree. Her parents want her to “be a Latina with an education” as this is an underrepresented population in higher education. Bensimon (2005) conducted research and found that students determined to succeed would close the achievement gap for racial minorities. Other barriers Leticia identified as potential barriers could be “something happening at home, and you cannot continue your education.” She noted, “We need a backup plan in case this happens.”

Sub-question 3: What could the Early Career High School program implement to ensure students are college-ready for the university? Leticia stated that programs needed

to implement transitional programs to help students prepare from the beginning of the ECHS. She felt she did not learn about these programs until her senior year, and since she is a planner, it would help to have the information in the beginning.

Leticia also felt the program needed more advising sessions from college advisors than the high school counselor. She stated she and several classmates did not look forward to meeting with their high school counselor because it was “the same thing over and over.” When she met with a college advisor or me, every session was different and had a brief agenda for dialogue so the advisor and student knew the talking points and could have a successful session.

Summary of Leticia's Advising and Degree Mapping Sessions

Leticia is a determined female who knows that she wants to become a high school English teacher to honor the memory of her late sister. She learned about dealing with potential barriers and successfully overcoming obstacles by having an alternate way to complete her education. Finally, with the help of a college advisor and degree mapping, she felt she was ready to transfer and fulfill her dream of becoming a teacher to help others.

Cross-Case Analysis

The cross-case analysis for this qualitative, multiple case study involved finding emerging themes from the advising and mapping sessions with the Early College High School students. For each interview I conducted with the participants, I coded themes that evolved from the transcripts. Coding included highlighting standard terms used in the transcripts. I then placed the standard terms into categories to help create the themes that emerged from each participant. Four themes emerged from the questionnaire, interviews,

advising, and degree mapping sessions. These four themes included: the benefit of a college advisor, growing preparedness for transfer, potential barriers to transfer, and financing education. The first theme centered around the benefit of working with a college advisor. The participants stated there is a more significant benefit from the college advisor as the sessions are longer and more insightful. The second theme that emerged was the growing preparedness for transfer. Participants entered the case study feeling prepared for a successful transfer; however, as the case study progressed, they realized they were not as prepared as they believed.

The third theme that emerged was potential barriers. The participants had not thought of barriers that could deter them from completing their bachelor's degree. However, after our advising sessions, they stated this was a crucial area to consider. Lastly, financing education was an overarching theme for all three participants as they were of low socioeconomic status and needed help paying for college. I describe these themes in greater detail in the section below.

The Benefit of a College Advisor

I discovered that the predominant theme was the need for college advising. All three participants who completed the study felt the college advising with a college advisor was the most beneficial aspect of the study. The study demonstrated that while high school counseling was necessary, the added sessions from a college advisor positively impacted the participants. The data showed that participants were more comfortable talking with the college advisor, which helped create meaningful advising sessions. The finding reiterated the study by The Association of American Colleges and Universities' effective advising practices. The study stated that advising sessions helped

students gain experience and knowledge to completing a college credential (Freeman, 2008). The advising sessions with a college advisor helped students learn decision-making skills and take ownership of their education. Freeman (2008) found through his research that advising was a critical component for college completion. The confidence created after our advising and degree mapping sessions demonstrated that advising sessions with college advisors was the most beneficial aspect of their sense of preparedness for a successful transition to a university. In reflecting on this finding as the researcher and advisor, I correlated the success as part of the practitioner action research. I analyzed my questioning strategies using my background knowledge as a college advisor, reflecting on the questions themselves and ensuring I asked the right questions.

Increasing Preparedness to Transfer

Students' preparedness to transfer to a university was the second theme found from the cross-case analysis. When the Early College High School participants completed the initial questionnaire, they all indicated feeling lost regarding transferring to the university before starting the study. They did not even know what it meant to be prepared to transfer, much less how to do it. All three participants felt the ECHS program helped them obtain an Associate's degree, but they had not had in-depth preparation to transfer to a university successfully. The findings showed that all participants felt the exposure to college advisors and degree mapping helped prepare them for transfer. Upon completing all our sessions, the participants felt prepared to transition to the university setting based on our sessions successfully. As the researcher, I determined the need for the advisor to help the students be aware of their mindset regarding transferring. In addition, I determined the need for better advising practices that helped the student understand all

the necessary components for a successful transition. As the advisor, I analyzed my awareness of their mindset and determined that I could work with their high school counselor to understand better transferring to a university.

Potential Barriers to Transfer

Potential barriers that could lead to the non-completion of a bachelor's degree were the study's third emerging theme. When the three participants were presented with this question, they did not think about barriers that could impede their success. Once the participants were presented the question regarding barriers, it became evident based on their responses that they felt prepared to be successful on their transfer to the university after determining potential barriers. The Department of Education's findings regarding college completion and barriers for low socioeconomic status make racial minority students support this case study's theme by identifying potential completion barriers. Removing barriers will help prevent students from not completing their bachelor's degrees. As the researcher, I determined that the participants had not thought of barriers, which meant this needed further discussion in high school. As the advisor, I found that collaborating with the high school could prove beneficial to discuss barriers. I also discovered that my questioning strategy could strengthen if I gave the student a possible scenario and brainstormed to solve a solution. Then, based on the student's answer, I could formulate my questions regarding barriers accordingly.

Financing Education

The fourth theme that emerged from the study was that the participants had not fully considered the financial burden of transitioning to a university and had not prepared for this reality. All participants stated their families could not afford to pay for their

education, but all participants had little knowledge of financial aid and scholarships. One participant researched options but needed further guidance to understand their financial options. Through the advising sessions, I explained the process of applying for aid and the information needed to complete the application. I guided the participants on the parent section, so they had all the necessary components to process it successfully. I also discussed the variety of student loans and the pros and cons of each variation. The participants and I also discussed scholarships and grants, and all participants were ecstatic to learn such items existed (Edmunds et al., 2013). As the researcher, I understood how discussion needs to start in high school regarding the financial aspect of higher education. As the advisor, I could further the student's financial knowledge by collaborating with the high school counselor on workshops or meetings regarding the various forms of aid to help alleviate the cost of their education.

Table 4.4

Connections to the Theoretical Framework

4Ss of Transition Theory	Connection
Situation	Graduate ECHS and transfer to a four-year institution
Self	<ul style="list-style-type: none"> • Determined • Optimistic • Reflective
Support	<ul style="list-style-type: none"> • Family • High school counselor • College advisor
Strategies	<ul style="list-style-type: none"> • Mentor relationship (preferably same race or ethnicity) • Discussion on potential barriers • Advising • Degree Mapping

Note: This table was created according to the transition theory of Schlossberg (2011).

To continue data analysis, I analyzed the data using Schlossberg's Transition Theory. The situation included all participants graduating from ECHS and transitioning to a four-year institution to complete their bachelor's degree. The purpose of the study was to explore if mandatory advising and degree mapping allowed for a successful transition to the university.

The second part of the Transition Theory is self, which relates to the participant's mindset regarding transfer to a four-year institution and completing their bachelor's degree. As the researcher and advisor, I felt this part of the Transition Theory had been adequately presented to the participants as they thought about their end goals. All three participants were resilient by having their end goal in mind, and after our advising sessions, they were aware of barriers and adequately prepared for obstacles that could deter them from completing their bachelor's degree.

The third component of the Transition Theory supports the available support to the participants while enrolled in ECHS and after graduation. Two participants had family support, while one participant lacked the support and wished he had it to help him finish his bachelor's degree. All three participants had support from their high school counselor to create their degree map. Since I was the researcher and advisor, all three participants had me help guide them towards a successful transition as the participants and I met for their advising and degree mapping sessions. I explored possible barriers and offered support beyond transfer to provide support as they transitioned to a university.

The last element of the Transition Theory centers around strategies to help the participants successfully transition to complete their bachelor's degree. Since I was the researcher and advisor, I created a mentor relationship with all three participants where

they were comfortable speaking to me. According to their feedback, it helped that I was of the same race as the three participants. According to the participants, two of the most critical strategies included mandatory advising and degree mapping. Another strategy was discussing potential barriers that could deter them from their goal. The participants and I discussed the potential barriers, including family, personal, or health issues, and discussed how to handle each situation properly. All participants found the advising sessions beneficial due to no time constraint, trust between the participant and me, and discussion of potential barriers. Lastly, all participants were grateful we created a degree map that detailed their coursework at their transfer institution. The degree map helped alleviate unnecessary costs, coursework, and time to completion of their degree.

Answering the Research Questions

The central research question, along with the sub-questions, was the basis for this case study. Each of the questions and responses is below. How has advising and degree mapping aided in ECHS students' readiness to transfer to a four-year university?

Sub-questions

At the inception of the case study, participants felt they had the correct mindset needed for a successful transition to a four-year institution; however, they lacked preparedness to transfer. The case study's results indicated that all aspects of transferring to a university need to start in ECHS. In addition, the participants did not understand how the university differed from the community college. They believed the university setting would be the same as their ECHS program before our discussion. The responses to the initial questionnaire demonstrated the need for further guidance on the expectations at a four-year institution. The findings also demonstrated the need for the high school

counselor and college advisor to collaborate, so students transition successfully to a four-year institution. Participants had not thought of course sequencing, nor had they thought of the implications regarding coursework. Analyzing the potential issues regarding coursework needs further discussion. The degree maps help align coursework with the student's intended major. Also, creating a degree map with a counselor or advisor will inhibit unnecessary coursework completed, costing money and time. When students enroll in courses that do not pertain to their major, they risk losing financial aid. Students do not fully understand all the various forms of financial aid. During the student's senior year of high school, they must have regular discussions with their high school counselor and college advisor to understand the various forms of financial aid.

What elements of advising and degree mapping do ECHS participants find useful to ease the transition to a four-year university to complete their bachelor's degree?

Schlossberg's Transition Theory states that support and strategies need consideration and implemented to successfully transition to a four-year institution (Schlossberg, 2011). For example, one form of support involving having a college advisor, but having a college advisor of the same race creates more trust as the students would be willing to share more background information and build a rapport with the advisor. In addition, as Hahs-Vaughn demonstrated, students are more receptive to an advisor of the same race (Hahs-Vaughn, 2004). Findings from the case study revealed that the participants were willing to divulge background information and stated that having an advisor that looked like them allowed for further discussion that was richer in context.

What do ECHS seniors identify as other barriers to completing their bachelor's degree? Upon analyzing the data from the case study, the participants revealed several barriers to completing the bachelor's degree. First, the financial impact of funding their higher education presented a potential barrier. Second, the participants felt literacy workshops and programs help understand a potential financial barrier. Next, participants felt family and health issues could be potential barriers, whether known or a surprise. Finally, the participants had not thought of potential barriers before the case study.

What could the Early Career High School program implement to ensure students are college-ready for the university? Participants felt the ECHS program needed to implement literacy programs during high school to understand funding their junior and senior college levels. They were not aware of other financial aid besides the scholarships they receive from ECHS. The participants also felt advising by a college advisor would help alleviate stress in the transition to the university as the college advisor knows the university setting. The findings from the study demonstrated the need for collaboration between the high school counselors and college advisors, so both entities work simultaneously to ensure a smooth transition for the ECHS student. In the following section, I provide details about the findings and implications of this study.

Discussion & Implications

This multiple case study research revealed three significant findings related to Early College High School programs and their preparation to transfer to a four-year university. Each of these findings also leads to several implications for this study. Below I describe the findings from this study, including 1) the need for advising by a college

advisor, 2) the need for degree mapping, and 3) reconsidering program qualifications and financial literacy.

Finding 1: The Need for Advising by a College Advisor

In conducting this qualitative, multiple case study, I found that students need to be advised by a college advisor. The participants found this very beneficial and believed ECHS students need college advising during the program. For this to happen, college advisors need to work with the high school counselors to coach and guide students to make their own decisions. Also, the ECHS needs to utilize its resources and incorporate academic advising with a college advisor during the student's senior year of high school. Research conducted by Berger et al. (2014) demonstrated how students need to learn how to make informed decisions regarding their education to take ownership of their education. The alignment of the high school and community college policies and procedures should include advising by college advisors to understand the impact and significance of meeting with the college advisors and mentors. Edmunds et al. (2013) stated how important it is to "expose students to the culture and norms of college via explicit instruction" and create advising sessions held by college advisors (p. 31). Past studies regarding transfer to a university did not include ECHS data and were mainly conducted over dual credit and AVID programs. Since ECHS is a newer, innovative approach to allow racial minority, low socioeconomic, and first-generation students to complete a bachelor's degree, further research needs to be conducted. I analyzed advising sessions' effectiveness and degree mapping to successfully transition to the university and graduate with a bachelor's degree.

This study demonstrated that the Association of American Colleges and Universities' research regarding advising plays a vital role in students' success was indeed correct (Freeman, 2008). In addition, the participants in this study all felt advising with a college advisor was more beneficial than a high school counselor and helped alleviate any fears or concerns with transfer to a university.

The Association of American Colleges and Universities states that advising will enhance student success and is necessary for completing a bachelor's degree (Freeman, 2008). The research I conducted correlated to their findings where the high school counselors need to align their advising sessions with the college advisors to prepare for a successful transition to the university. The alignment of the sessions correlates to the strategies category of the Transition Theory framework from Nancy Schlossberg (2011). Since Texas implemented the 60x30 grant to help students earn a college credential, an essential aspect of this grant should include mandatory college advising (Hunt, 2015). Texas Higher Education Coordinating Board oversees Early College High School programs and should consider implementing advising and degree mapping as a necessary component to the ECHS program. Professional development sessions need to include both the high school and college advisors to ensure a smooth transition for the ECHS student. Therefore, the implications from this finding incorporate teamwork from both the high school counselor and college advisor during the ECHS student's senior year. The two entities can utilize their strengths and collaborate to allow the ECHS students to feel they will have a more successful transition to finish their bachelor's degree to prepare them for transfer and prepared for the successful attainment of a bachelor's degree.

Finding 2: The Need for Degree Mapping

This multiple case study demonstrated the need for degree mapping as a component of college advising to help prepare students to transfer to the university successfully. Degree mapping helps students to analyze their college education and determine course prerequisites and sequencing. It allows the student to take ownership of their education and determine the best course of action as they know their strengths and weaknesses. The participants found degree mapping as a necessary component for all students in Early College High School. It allowed the participants to take ownership of their education by creating it with their high school counselor and then analyzing sequence and course selection. The participants were excited about transferring to the university and saving time and money in their path to completion. Unfortunately, there is a lack of literature surrounding degree mapping, so this multiple case study provided a critical need for students to transfer to the university successfully.

Degree mapping needs to become a mandatory practice for all Early College High School students during their senior year of high school. Utilizing degree mapping as a mandatory practice for all ECHS students will help students avoid unnecessary coursework not required for their degree plan. Research by Sukhanove and Norz (2018) stated that students who utilized a degree map on average had less than eight extra hours on their transcript versus twenty-one for a student who did not create a degree map. The high school counselors will need to be coached on proper degree mapping so the process can start in high school and continue into the student's higher education. The implications from this finding will be most beneficial to the students so they do not waste time and money are unnecessary coursework. It also allows students to have a plan of action should an obstacle arise that could detour their education.

Finding 3: Reconsidering Program Qualification and Financial Literacy

A necessary component for a student to be eligible for the Early College High School program is classification as economically disadvantaged (low-SES). The criteria for determining low-SES while in public education is determined by the student's enrollment in free or reduced lunch in the public school (Miller et al., 2017). This factor alone should not determine whether or not a student should receive a Pell grant (Texas Education Agency, 2020d). There need to be other options since many students in public education do not take advantage of free or reduced lunch due to the stigma and embarrassment. A consistent factor for qualification between high school and college should be part of the program. Administrators from The Texas Higher Education Coordinating Board and Texas Education Agency need to thoroughly discuss an alternative for high school students qualifying for the program. The proposed change needs to be part of the Memorandum for Understanding between the Early College High School and the college, as the MEU serves as the student's degree path.

Financial literacy workshops should incorporate into the program where students are allowed class time to attend these workshops held by the college. The students need to understand the various forms of paying for college. The student also needs to understand the payoff of their education. Carnavale et al. (2011) researched lifetime earnings for a person who earned a bachelor's degree. The research showed that a person with a bachelor's degree would earn 84% more throughout their lifetime than a high school graduate. The financial literacy programs will help students understand funding and the purpose of having an education.

My implications for this finding recommends exploring alternative qualifications for students to enroll in Early College High School. This would allow more students who

need this program to enroll and successfully transition to the university to complete their bachelor's degrees. In addition, the enrollment of more students who complete a bachelor's degree will help close the financial gap between race and ethnicity. Another implication for this finding is incorporating financial literacy workshops during ECHS where the families and students attend to understand their options. The literacy knowledge will help students who are not considering transfer due to financial issues learn their options and possibly transfer and complete their degree.

Conclusion

The study began with the central research question, how has advising and degree mapping aided in Early College High School students' readiness to transfer to a four-year university? With ECHS students being of lower socioeconomic status and the majority are minorities and findings from Radcliffe and Bos (2013) demonstrated how underrepresented this population of students are and the need to incorporate programs to alleviate this issue. Literature regarding the successful transition of the ECHS student to a university is minuscule. Further research is needed to determine the success rates for completing their bachelor's degree and whether advising and mapping help alleviate this issue.

A qualitative, multiple case study was used for this research as questions, interviews, advising sessions, and mapping sessions were utilized. This research shows that spending time with a college advisor for advising and degree mapping makes a difference in the ECHS student feeling prepared to transition to the university. The research also showed that advising and mapping with Early College High School students must occur during Early College High School, but with a college advisor. High school

counselors and college advisors should collaborate to ensure students receive all necessary information before completing their associate's degree. Students need to understand how to complete a bachelor's degree the most efficient way without completing unnecessary courses. The degree mapping sessions alleviate this issue by ensuring no extra time or money to complete their bachelor's degree.

Lastly, the findings show the need for financial literacy programs embedded in high school as ECHS students do not understand loans, grants, scholarships, and positive and negative components of all financial aid. Workshops that include high school counselors and college advisors working together to present financial literacy to the ECHS students will alleviate unnecessary stress on the ECHS student. Additionally, the workshops need to include the student's family to know all the necessary information for the ECHS student to transfer to the university and alleviate stress.

CHAPTER FIVE

Distribution of Findings

Executive Summary

Early College High School began in 2002 to address systemic underrepresentation of racial minorities, lower socioeconomic status, and first-generation students in higher education. Students simultaneously earn a high school diploma and an associate's degree through a partnership with a local community college. During their junior and senior year of high school, students fully immerse at the partnered community college. Upon graduation from high school, the student will have earned their associate degree and a high school diploma. The student then transfers to a four-year university with a junior classification. While this program intends to help students successfully transfer to a university, program data reveals that many students are not continuing their higher education after high school.

Racial minorities earn one million dollars less over their lifetime than their white and Asian counterparts (Carnavale et al., 2011). The earnings statistic was one of the main reasons for the creation of Early College High School. Carnavale et al. (2011) determined through their research that approximately 42% of racial minority and low socioeconomic status students do not finish their four-year degrees. ECHS is a newer, innovative approach to college completion that embeds student support services, such as advising, tutoring, and study sessions. School districts across the country have adopted this program, but little research exists on its effectiveness. More research regarding ECHS is needed to understand the effectiveness of the ECHS program.

Overview of Data Collection and Analysis Procedures

This study employed a qualitative, multiple case research design rooted in the practitioner inquiry tradition. Data collection used during the research included questionnaires, interviews, and student narratives regarding their background and education. The study examined Early College High School participants' backgrounds and perceptions about their readiness to transfer to a four-year university and if mandatory advising and degree mapping sessions helped ECHS graduates feel more prepared to transfer to a university to finish their bachelor's degree. The study explored what aspects of degree mapping and advising the students found most useful and what needed to improve for a seamless transition from the ECHS program to the university.

Schlossberg's Transition Theory framework (Freeman, 2008) informed this case study. The Transition Theory involved the 4 Ss that analyzed the situation, self, support, and strategies used to create a successful transition to a four-year institution. The advising and degree mapping sessions are strategies to help the ECHS student have the necessary tools to transfer to a four-year university and complete their bachelor's degree. Freeman (2008) researched and found that advising was a critical aspect of completing a degree. The advising sessions explored the goals and aspirations of the participants, and the degree mapping sessions helped create a concrete plan to help the participants map out their transition to a four-year university.

To begin the research, I asked participants to complete an initial questionnaire regarding their preparedness to transfer to a four-year institution. I then held two advising and one degree mapping session(s) with the students. The first one utilized their questionnaire answers to guide a conversation regarding their goals for transfer and what they perceived was needed to be successful at the university. The second advising session

addressed continued concerns raised by the participants and addressed all of their unanswered questions. The second advising session also gauged if the participants' perceptions of transfer had changed. In this session, participants were also introduced to degree mapping and began to create a degree map. In a third session focused on degree mapping, the participants and I discussed their degree map and how to utilize it not to waste time or money upon transfer. The participants and I also discussed how degree mapping was necessary for the participant to transfer successfully. Lastly, the participant completed the same questionnaire to view how their perception of a successful transition to the university had evolved. Coding helped to identify themes. The themes helped complete the cross-case analysis, which helped identify key findings from the advising and mapping sessions.

Summary of Key Findings

Three key findings emerged from the data analysis for the qualitative, multiple case study. First, the central finding that emerged was the importance of college advising completed by a college advisor versus a high school counselor. Second, participants felt the advising received while in Early College High School and on their high school campuses did not adequately prepare them for college. Finally, participants felt that while their high school counselor helped prepare them with some aspects of the college transfer process, a more in-depth discussion needs to happen while in ECHS.

The second finding that emerged was the need for the advising and degree mapping sessions with the college advisor as the advisor provided more information on preparing for the transition. The participants and I explored potential obstacles and barriers to help them understand the importance of analyzing all aspects of completing a

bachelor's degree. With the creation of the degree map, which detailed their coursework for the next two years of college and the exploration of possible pitfalls, the participants were thankful for the degree mapping that would help save them time and money.

Lastly, the third finding was the need for more robust entrance qualifications for Early College High School and financial literacy at the program's inception. The participants are aware of their colleagues who could benefit from the program but do not want to enroll based on the Free and Reduced lunch program to fear stigmatization. With this as the only qualifier to enter into ECHS, other entry methods need to be researched and implemented so more students can benefit from the program. Also, the participants felt financial literacy needed to happen at the beginning of the program because many families do not know how they will pay for the program and keep their children away from it. The participants suggested a Literacy Night to invite parents and families to discuss the pertinence of the program and become better acclimated to what the program is trying to achieve.

Freeman (2008) identified the need for students to take ownership in their academics, and the exploration allowed this to happen. As a higher education professional, I gave them valuable resources such as a degree map to help them successfully transfer to the university. Once the participants and I discussed the university setting, the participants were confident they would successfully transfer and finish their bachelor's degree.

The findings correlated to Schlossberg's Transition Theory (2011) and demonstrated the importance of degree mapping. One of the critical differences between participants' experiences with high school counselors versus college advisors was the

degree mapping part of college advising. College advising includes explaining a degree plan, the necessary skills to be a successful college student, selecting classes, and creating a degree map that shows the sequence of courses semester by semester. Students suggested that the advising and degree mapping were more beneficial when conducted alongside a college advisor during the research study. The students felt that the degree-mapping sessions should be a required component for advising all Early College High School seniors. The students looked forward to creating a schedule for the next two years. The map design helped them navigate their transition to the university and finish their degree without wasting extra time and money. The participants also felt that meeting with a college advisor helped them build trust with someone who could help them navigate their transition to the university setting. The Center University of New York (CUNY) researched degree mapping and found it critical to obtain a degree (Sukhanove & Norz, 2018). The study's findings demonstrated that advising and degree mapping is an essential aspect of successfully advising students to transfer to the university.

The third finding surrounded the financial aspect of higher education. One of our advising sessions' main components was learning about the financial aspects of higher education, including discussion around scholarships, grants, and loans. The participants were not aware of their financial aid options and what the application process entailed. I explained the differences between scholarships, grants, and loans. I discussed how scholarships are typically awarded based on academics or sports, and payback is not required unless the student drops out of school. I then discussed grants and how the college uses grants to determine funds available for loans. Grants, like scholarships, do not have to be paid back unless the student changes enrolled hours, drops, or fails a class.

Finally, I explained what loans entailed and how there are two types of loans; subsidized and unsubsidized loans. The participants were only aware of scholarships and did not receive any information on grants or loans. The participants felt motivated to proceed, and two students asked to meet with me via Zoom to discuss further information regarding the financial aspect of college.

Informed Recommendations

Based on the key findings from this qualitative study, there are three recommendations for Early College High Schools. The first recommendation is that high school counseling sessions need to include sessions with an advisor from the partnered community college. The high school counselors could reiterate what the college advisor stated to ensure students understand the information. According to Eric White from Inside Higher Ed (2020), the advising sessions are critical and need to include professors, mentors, or counselors from higher education institutions. Advising is a critical aspect of the success of students finishing their degrees. The college advisor provides an enhanced session versus the high school counselor. The participants from the study recommended that advising comes from the college advisors as they were “more equipped” than the high school counselor. The relationship strengthened between the participant and college advisors as they earned the trust of the participant. Maiser et al. (2000) stated that the relationship with a trusted advisor helps the student complete their degree.

The second recommendation from the case study research demonstrated the need for degree mapping with ECHS students before graduating high school. The advisors could meet regularly with the student to ensure they are still on a path to success. All three participants from the study stated that the degree map was the most significant

contributor to their pending transfer to the university. The degree map planned the participant's next two years of college to complete their bachelor's degree. Sessions can assist with a successful transition to the university so the ECHS student can complete their bachelor's degree. I recommend, as previously stated, including college advisors for the degree mapping sessions. The responses from the participants demonstrated the importance of degree mapping and should occur during high school. It is a critical component to the participant's overall success. Sukhanove and Norz (2018) found that the inclusion of degree mapping before transitioning demonstrated the necessity of degree mapping to help students prepare for a successful transfer to a university.

Lastly, another key finding was the need to inform Early College High School students about financial options for their higher education. All participants for the case study did not understand what financial aid encompassed and the necessary information needed to apply for financial aid. Reddy (2019) stated that with the student loan debt reaching \$1.2 trillion and the average student paying over \$35,000 in interest over their loan term, many students do not understand all the loan costs and payback options. Students need to learn about the price of education and the various form of paying for college.

These recommendations increase the Early College High School student's possibility of successfully transitioning to the university setting. Since ECHS programs assist racial minorities, lower socioeconomic status, and first-generation students complete a degree, these recommendations are necessary to help participants successfully transfer to a four-year university and complete their bachelor's degree.

Findings Distribution Proposal

Distribution of the findings and recommendations from this study will include key stakeholders, including high school administration, counselors, and teachers. The findings will also include the college administrators and advisors. I will prepare an agenda, handouts, and a presentation to share with everyone. The recommendations for changes will also be presented at the public school district and college board meetings so everyone is aware of the recommended changes. The multiple case study research will prove beneficial in helping more Early College High School students to complete their bachelor's degrees by utilizing advising and degree mapping sessions before transfer.

As a result of my qualitative, multiple case study research, my target audience is the President and Vice-Chancellors of partnered community colleges as they are the program's primary decision-makers. The distribution of key findings will also include college advisors, high school counselors, and their principals. The inclusion of high school faculty and college faculty will help all involved parties understand the importance and goal of the advising and degree mapping sessions. The Dean of Early College High School will also be invited to attend, so the high school and college's alignment is seamless. Lastly, I will offer training to all faculty in conjunction with the Department of Professional Development at the ECHS site so training can occur for all college and high school personnel.

With all the target audience members collaborating and offering suggestions and feedback on the advising training, students should successfully transition to the university. Additionally, the collaboration and understanding between the college advisors, high school counselors, and the students' ultimate goal could impact this underrepresented population's completion rates in higher education.

Proposed Distribution Method

I want to conduct a presentation for all key stakeholders to demonstrate the need for change to advising and degree mapping for Early College High School students. The key stakeholders would include administration from the high school and college, high school counselors, college advisors, and staff from the Department of Professional Development.

The presentation will be conducted at the college in a collaboration room to allow for collaboration, discussion, and recommendations for the Early College High School program. The presentation will last approximately four hours to allow time for interaction of everyone involved in the training. The presentation would also include role-playing situations to discuss how to address the scenario correctly.

Research Presentation

Presentation of the research can also occur at a professional conference for either high school or higher education. The statistics, findings, and proposed changes can address any questions or concerns the attendees have. I would submit a proposal for the conference, and once approved, I would plan the presentation. The presentation will need no more than an hour, as most professional conferences have forty-five minutes to an hour per presentation. The presentation will include prepared handouts and conclude with a question and answer session, so attendees are aware of options to enhance advising during ECHS and college.

I will create necessary materials to successfully present at the high school and college meeting or a professional conference. Materials will include a PowerPoint presenting the critical information, with graphics used instead of an abundance of words

on a slide. Handouts will accompany the PowerPoint presentation with writing sections for the attendees to take notes. The high school and college meeting will include role-playing situations where attendees will problem solve and collaborate to develop the proper solution. With the presentation and all necessary components, attendees could implement change into their local program to create higher success rates for racial minorities, lower socioeconomic status, and first-generation students.

Conclusion

This study began with the participant's perception of what a successful transition to the university entailed. The study utilized a questionnaire, followed by an interview, two advising sessions, and one degree mapping session. The study concluded with the same questionnaire at the inception of the research to understand how the participant's perception of readiness to transfer had evolved.

The interviews provided background knowledge about the participants and helped guide the first advising session. The second advising session provided additional information regarding how to successfully transition to the university and answered questions of concern from the participants. The interview and two advising sessions led to the final degree mapping session. The degree mapping session helped participants understand their course sequence for the last two years of college.

The key findings aligned with the literature regarding the importance of advising and degree mapping to prepare students to transfer to a university successfully. High schools and partnered community colleges should collaborate to ensure a successful transition for students. Sharing the research findings with other partnerships between the Early College High School and community college helps alleviate unnecessary barriers

for students and helps them understand the importance of enlisting the help of a trusted advisor to make the best choices to transfer to a university successfully.

APPENDICES

APPENDIX A

Questionnaire

Necessary Information: Please fill out the information.

- Your initials are used but will be protected for privacy
- Your email address will provide the researcher a means to contact you for possible future participation in the study
- Please list your top 2 transfer institutions, with #1 being your first choice.

Initials	
Email address	
1st transfer school	
2nd transfer school	

Directions: Please rate the questions to the best of your ability based upon your traits and experiences. Please be as honest as possible

Question	1-Highly Unlikely 2-Unlikely 3-Likely 4-Somewhat Likely 5-Very Likely				
I can make decisions on my own without the help of others.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I handle obstacles efficiently.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I manage my time wisely.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I adhere to due dates.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I can multi-task.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I can get easily distracted.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I will ask questions if I do not understand.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
When completing tasks online, I can stay focused.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>

I feel ECHS prepared me for the university of my choice.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I know what to expect when I transfer.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I know how to build my class schedule.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I understand how my GPA is calculated.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I understand how financial aid works.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>
I feel I am prepared to be successful at the university.	1- <input type="checkbox"/>	2- <input type="checkbox"/>	3- <input type="checkbox"/>	4- <input type="checkbox"/>	5- <input type="checkbox"/>

Short Answer Questions: Please provide as much information as you would like

How do you feel about transferring to a university? Please elaborate as much as possible.

What do you think will be the most challenging part about transitioning to a university?

How will you handle potential roadblocks or barriers to completing your bachelor's degree?

What do you think you need more information on to be successful in your transition to a university?

APPENDIX B

Interview Protocol

Date/Time of Interview: _____

Interviewee: _____

1. Are you a 1st gen student?
2. Do you participate in the free/reduced lunch program?
3. What is your racial ethnicity?
4. How do you feel ECHS has prepared you for transfer to a university?
5. Do you plan on transferring? If so, where?
6. Do you foresee any potential barriers to transferring to a university? If so, what?
7. What is your planned major of study?
8. What is your ultimate career goal?
9. What does degree mapping mean to you?
10. Do you feel prepared to be successful at the university?
11. What do you need from me during our advising sessions to help you along the way?

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