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THE IMPACT OF EARLY COLLEGE PROGRAMS ON TRANSITIONING TO 4-
YEAR INSTITUTIONS

By
Tracie Hope Anderson Swilley

A Dissertation Submitted to the
Gardner-Webb University School of Education
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Approval Page

This dissertation was submitted by Tracie Hope Anderson Swilley under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Abstract

THE IMPACT OF EARLY COLLEGE PROGRAMS ON TRANSITIONING TO 4-YEAR INSTITUTIONS. Swilley, Tracie Hope Anderson, 2020: Dissertation, Gardner-Webb University.

Being college and/or career ready is the standard set for high school graduates today in the United States. High schools have the task of making certain that students possess the skills necessary to be prepared for college and/or the workforce. Specific measures are outlined to assess college and career readiness. Dual enrollment programs allow students to be enrolled in college and high school at the same time. Students are given the opportunity to experience college courses while still in the supportive environment of their high school and families. This study depicts the transition to 4-year institutions of nine students from a rural school district who graduated with an associate degree as well as their high school diploma through a dual enrollment program. Based on Tinto's (2017) Model of Student Motivation and Persistence, the goal of the study is to understand the impact of degree granting dual enrollment programs following graduation on students completing their first year in a 4-year college. Studies often show the benefits of dual enrollment programs and college entrance; however, little data were found to show how those dually enrolled students fared after completing 1 year of college. Being prepared for college includes factors other than academics, and this study strived to identify not only the academic, but also the psychological, emotional, and social impacts for students as they seek completion of their 4-year degree.

Keywords: degree granting dual enrollment programs, dual enrollment, early college academy, college readiness

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Chapter 1: Introduction

The educational system has always played a pivotal part in the maturation of citizens in our country. According to Mondal (2014), “Education is more than a means to individual advancement; it is often seen as a solution to social problems, such as delinquency, poverty, and unemployment, and as the key to a more civilized, more democratic and more prosperous society” (p. 1). The educational system serves a multitude of functions in the lives of our students. Those functions can include but are not limited to socialization, transmission of culture/norms, individual development, development of new knowledge, bestowing status, a change agent, and career preparation/placement. However, in recent years, the expectations have increased to include not just graduation but on-time graduation and ensuring that students are college and career ready. According to the U.S. Department of Education (2010),

It's critical that, collectively, we raise the bar so that every student in this country—regardless of socioeconomic status, race, or geographic location—is held to high learning standards that will ensure students have the skills to compete in today's global, knowledge-based economy. (p. 4)

The educational system's strength is directly related to the expectations of students. However, the rigor in the educational system has not been consistent, an inadequate preparation for life in the workforce and college; thus, it is pivotal that the rigor of school standards and expectations align with those that students will experience after high school in order to ensure success and provide accurate indicators of student progress.

College and career readiness is the expectation set for students in the United States. “The goal for America's educational system is clear: Every student should

graduate from high school ready for college or a career” (A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act, 2011, p. 4). In order to meet this goal, every state has the opportunity to design their preparation model as required under the Elementary and Secondary Education Act (ESEA). In order to unpack this goal, the state of South Carolina designed the Profile of the South Carolina Graduate. The profile includes three parts: world class knowledge, world class skills, and life and career characteristics.

World Class Knowledge is defined as the knowledge a graduate gains as a result of his or her exposure to rigorous standards in language arts, math, multiple languages, science, technology, engineering, mathematics (STEM), arts, and the social sciences.

World Class Skills are considered the abilities to be effective in the areas of creativity and innovation, critical thinking and problem solving, collaboration and teamwork, communication, information, media, technology, and knowing how to learn.

The Life and Career Characteristics include integrity, self-direction, global perspective, perseverance, work ethic, and interpersonal skills. (South Carolina Education Oversight Committee, 2015, p. 1)

Statement of the Problem

Although the standards have been set, many argue that the goal of the college and career ready graduate is not being met. Each state has its own set of standards or goals with what each defines as rigorous in order to prepare students to thrive after graduation; however, there is no specific curriculum attached to ensure that the standards or the rigor

are met. Studies reveal that the goal of college and career readiness is not being met with the current standards and rigor. Santelises (2016) reported,

Too many students are leaving high school with a diploma in hand but with no clear path forward. In fact, our new report shows that nearly half (47%) of American high school graduates complete neither a college- nor career-ready course of study. (p. 1)

Similarly, Chen (2016) discovered that “four out of ten college students (to include two-year institutions) are required to take remedial courses” (p. 15). In addition, Chen found that many employees commented that they were inadequately prepared for the workforce. As the data demonstrate, standards alone are not enough to ensure that a student is college or career ready. There must be a transparent and precise plan created in order to make certain that students are receiving the rigorous preparation and instruction needed to meet the desires of employers and postsecondary institutions.

ESEA of 1965 altered the K-12 educational system in the United States. ESEA began its involvement of the federal government by requiring equity for all students (Malin, Bragg, & Hackmann, 2017). However, over the past 50 years, the responsibility of education has been shifted from the federal government back to the states with the most recent addition being that of the Every Student Succeeds Act (ESSA) in 2015. ESSA replaced No Child Left Behind (NCLB), granting leeway to the states to develop accountability plans as long as goals were included that focused on test proficiency, English language proficiency and graduation rates (Klein, 2016). Additionally, Klein (2016) noted that postsecondary readiness was also one of the additional options of indicators that states could choose as an accountability measure under ESSA. According

to the Education Administration Quarterly, ESSA essentially requires that secondary education prepares students for a successful transition to college and the workforce.

As a result of the standard to ensure that high school graduates are college and/or career ready, education in each state has become a debate of which state is better. Career and technical classes are considered less difficult than college preparatory classes.

Historical concerns regarding placement of students in career and technical education (CTE) classes that may be perceived as less rigorous than academic courses and that may limit future college opportunities lending support to the prioritization of college over careers in prior CCR policy and practice. (Malin et al., 2017, p. 810).

Under the leadership of President Obama, college and/or career readiness was a top priority. “President Obama noted that several countries evidence higher college completion rates than the United States and predicted the countries that out-educate us today will out-compete us tomorrow” (Malin et al., 2017, p. 811). In addition, the administration made lofty goals for every American to complete at least 1 year of college. As a national policy, the need to clearly define college and career readiness took precedence. “College readiness has been defined as being academically prepared for postsecondary education, as measured through standardized test scores, course completion, and grade point average; career readiness has been defined as possessing skills presumed necessary for workforce success” (Malin et al., 2017, p. 812).

Although aspects of college readiness and career readiness overlap, policy makers did not agree as to which was preferential. As a result, policy makers simply concluded that students should leave high school both career and college ready (Malin et al., 2017).

With the federal mandate for college and/or career readiness being turned over to the states, college and career ready standards were developed. NCLB required that each state advance academic standards and measure student achievement of the standards “in aggregate and by specified demographic subgroups, and school systems, and states were held accountable for students’ academic performance” (Malin et al., 2017, p. 813). Standards were developed, but there was no insight as to how students were to meet the standards outlined by each state. Malin et al. (2017) found that it is impossible to compare states, as different levels of proficiency are outlined by each state. Just as it is impossible to compare states without the same standards, it is impossible to say whether states are truly preparing students for postsecondary studies or the global economy.

South Carolina adopted criteria in their accountability manual that define college ready, career ready, or college and career ready. As a result, every school in South Carolina has the percentage of their graduating classes meeting each criterion listed on their school report card. South Carolina wanted to determine outcomes and measures of college and career readiness in as many ways as could be valid and reliable. “The National High School Center created three main categories for assessing outcomes of college and career readiness: (a) on-track indicators, (b) attainment and authentication measures, and (c) accountability and improvement feedback” (Petcu, Frakes, Hoffman, & Young, 2016, p. 6). Designated indicators provide the assessment tool used to measure adequately whether a student is prepared for college and the workforce.

The most frequent indicators are grade point average, enrollment in Advanced Placement (AP) and International Baccalaureate (IB) classes, and completed college and workforce applications (National High School Center, 2007). Attainment and

authentication measures are used to validate that a student is on-track for high school graduation. The founding of this category validates that college and career readiness standards are met. These measures include high school diplomas, GEDs, and certification in certain skills. The last category, accountability and improvement feedback, includes data collection that holds schools accountable for providing students with information on college and career readiness, which is often required by the state. Examples of this data include SAT scores, ACT scores, and high school report cards (National High School Center, 2007).

These measures are used by educators to make certain that students are being provided with what they need in order to succeed in college or the workforce (Petcu et al., 2016).

South Carolina used these guidelines to develop their accountability manual and determine how schools in the state are expected to assess whether students are college ready, career ready, or both. In order to adequately prepare students for success globally, South Carolina developed the 2020 vision: “All students will graduate with the knowledge and skills necessary to compete successfully in the global economy, participate in a democratic society, and contribute positively as members of families and communities” by the year 2020 (South Carolina Education Oversight Committee, 2013, p. 1). In order for this vision to come to fruition, the data for South Carolina had to be analyzed and a plan developed.

The state of South Carolina realized there was major work to be done for the 2020 vision to become reality after reviewing the data in 2014. “Forty-one percent of students attending two-year community colleges had to be remediated in English and math, providing conclusive data that students were not college-ready, as defined by Conley

(2008, 2012)” (Petcu et al., 2016, p. 11). South Carolina developed its own college and career readiness standards in 2015, abandoning the common core standards as decided by the elected officials for the state. South Carolina then decided to develop pathways to college readiness and career readiness. In order to bridge the gap between high school and postsecondary institutions, the South Carolina Course Alignment Project was created to act as a liaison.

The four main goals of SC CAP are to: (a) reduce curricular redundancy by reforming institutional alignment; (b) support local institutions with a statewide structure; (c) create regional collaborative networks of professional educators; and (d) heighten the number of high school graduates, high school graduates who enter college directly and students who are “college-ready” to succeed in credit-bearing courses. SC CAP places specific emphasis on South Carolina’s larger than average population of economically disadvantaged students. (Petcu et al., 2016, p. 13)

In order to serve all students and with the core knowledge that curriculum is foundational to meeting the goal, South Carolina instituted college preparatory courses as prerequisite requirements, ensuring all students would be college and career ready.

The South Carolina Commission on Higher Education and representatives from public institutions of higher education that make up the Advisory Committee on Academic Programs (ACAP) determined the basic coursework necessary for a student to be deemed college ready.

The College Preparatory Course Prerequisite Requirements was accepted as the core of the curriculum needed to prepare students for college-level coursework.

The College Preparatory Course Prerequisite Requirements were most recently adopted in 2006 and implemented in the 2011-12 academic year and include : (a) four units of English, (b) four units of mathematics, (c) three units of laboratory science, (d) two units of the same foreign language, (e) three units of social science, (f) one unit of elective, (g) one unit of physical education or ROTC, and (h) one unit of fine arts (South Carolina Commission on Higher Education, 2015).

A list of approved courses that meet the college preparation curriculum requirements was added as well. These College Preparatory Course Prerequisite Requirements serve as an indicator of college readiness at school, district, and state levels. (Petcu et al., 2016, p. 14)

Purpose and Research Question

Numerous initiatives were developed in South Carolina to help bridge the gap from high school to college and into the workforce. The goal of these initiatives was to bridge the gap between K-12 schools, postsecondary education, and the workforce. As a result, students were educated at an early age about college and career opportunities in order to ensure their individual pathways to success. Resources and partnerships were developed as part of these initiatives with the goal of creating opportunities for student success by means of college and career ready standards.

Career readiness in South Carolina became a joint venture. Employers, businesses, and government understood that they played a vital role in ensuring that high school graduates were prepared for the workforce. Employers in South Carolina require graduates to possess certain skills and expect that they can apply what they learned in the classroom to their occupations. “Employers, colleges, and universities expect similar

skill sets, including critical thinking, problem solving, computer literacy, and global perspectives. They also expect skills and traits that are more common in the workforce like self-direction, work ethic, and interpersonal skills” (Petcu et al., 2016, p. 19). In order to prepare students with the skills and knowledge required, initiatives were developed to begin educating students about careers as early as primary school.

College readiness indicates that students enrolling in college from high school are prepared for the rigor of such courses and do not need remedial courses. Programs such as College Board Advanced Placement (AP) and International Baccalaureate (IB) have been implemented to ensure that students are ready for college. In the state of South Carolina, secondary schools with Grades 11 and 12 have been required to offer AP course(s) since 1984: “Students enrolled in AP courses can earn high school credit as well as college credit with a score of ‘3’ or above on the corresponding subject test developed by the College Board” (Petcu et al., 2016, p. 7). The IB program is an additional option for students. “IB provides an academically challenging education for high school students with the aim of preparing them for the rigors of college or university study” (Petcu et al., 2016, p. 7). Both programs have shown success in some schools in South Carolina as depicted by passing scores on aligned assessments. However, dual and concurrent enrollment programs are growing tremendously as a third option for students in South Carolina schools.

Dual enrollment is one of the latest reform measures to storm the nation. As cited by Kilgore and Wagner (2016), “Student participation in dual enrollment in the United States increased approximately 75% from 2002 to 2011, from approximately 1.16 million to 2.04 million students (Marken, Gray, and Lewis 2013; Waits, Setzer and Lewis 2005)”

(p. 57). As more schools and states aspire to create a college-going culture to ensure that our communities are filled with educated citizens striving to improve communities, dual enrollment programs are steadily increasing. An (2012) stated, “One strategy to improve academic performance and college readiness is to provide students with a college experience prior to postsecondary entry” (p. 1). Exposing students to the rigor of college while still in high school helps to eliminate the fear of going to college because students know what to expect.

Dual enrollment programs allow students to enroll in high school and college at the same time. Students complete college credits that serve simultaneously as high school credits that satisfy their high school diploma requirements. Kronholz (2011) stated, “Dual enrollment policies and participation patterns vary widely across states, and programs designed explicitly for advanced students are a small fraction of the total” (p. 4). Dual enrollment opportunities vary from school to school and state to state. While some schools have dual enrollment opportunities for all students, others direct the program to more advanced students who then have the option to complete associate degrees while in high school. Students have the opportunity to graduate from college and high school in the same year. Kronholz found that most dual enrollment courses are taught by high school teachers who have received approval or credentials from the partnering institution. Some high school teachers serve as adjunct professors for community college partners. Other classes are taught by professors from the college on the high school campus or online. Dual enrollment programs vary widely and are based on the needs of the school; however, all programs are designed to offer students college credits while still in high school.

With the goal of ensuring college readiness, dual enrollment programs are being implemented to make certain that students are ready and prepared for college. Successful completion of dual enrollment courses provides evidence that a student is prepared to handle college curriculum based on the criteria set by the State Department of Education for South Carolina. Allen (2010) found that many social scientists and policy makers see dual enrollment as a way to align high school and college systems. Vertical articulation provides for the communication of elementary schools with middle schools and middle schools with high schools, but often a gap exists between high school and colleges and universities. The rare conversations that did occur were after students were in college and unprepared for the workload or rigor. An (2012) believed that dual enrollment programs force administrators from high schools and colleges to collaborate. This partnership offers students the opportunity to be college ready and allows high school teachers the opportunity to prepare all students for college.

Furthermore, dual enrollment affords students the opportunities to delve deeper into topics beyond the high school curriculum. Johnson and Brophy (2006) found that some honors courses in high school fail to provide the level of intellectual stimulation that dual enrollment courses provide. College courses are rigorous. When students are not required to engage with such rigor in high school, they are at a certain disadvantage and can result in their leaving college. Also, in their senior year, some students look for the easiest opportunities in which to complete high school. An (2012) found that dual enrollment is an antidote for “senioritis,” which refers to student lack of engagement and motivation during their senior year. In developing a college-going culture, high schools align student experience with rigor with that in continued education, thus preparing a

scaffold for success where higher level thinking is expected. According to DuFour and Eaker (1998), “Altering beliefs, expectations, and habits that have gone largely unexamined for years is a complex, messy, and challenging task” (p. 133). It does require time to shift student apathy during their senior year to engagement in rigorous critical thinking. The focus of such redirection must highlight the opportunities of dual enrollment programs and emphasize the academic preparedness and college readiness such programs provide.

Reviews of studies focused on dual enrollment students and college readiness have yielded positive results.

Dual enrollment and Early College projects were created to accelerate student learning and bridge the transition between high school and college. They serve to address low graduation rates for minority and low-income students; the high dropout rate in freshman year; low on-time graduation rates; and college completion rates. Although impact studies point to positive success rates among students, studies reveal that more teacher training will improve these programs. A major issue with dual enrollment courses is that high school teachers do not always incorporate the academic rigor as outlined as a goal of college readiness. Despite these areas of concerns, dual enrollment programs have had tremendous success devising course sequences and structures in order to support college readiness among Early College students. (Petcu et al., 2016, p. 14)

“In 2013, a total of 58,710 students in South Carolina were enrolled in college credit bearing courses in high school” (South Carolina Commission on Higher Education, 2014, p. 1). Additionally, “students earned an average of 9.9 credits through dual enrollment a

number separate from the credit they may have earned through AP or IB tests” (Petcu et al., 2016, p. 14).

Allen and Dadgar (2012) found “large and positive effects of the program in helping students earn more credits even after they have enrolled in college and in earning higher grades in college” (p. 19). Dual enrollment programs require students to maintain their academic momentum in order to remain motivated to excel instead of having a senior year of easy courses that ultimately diminishes a student’s drive for success. Kirst and Venezia (2001) believed that senioritis is the main reason most students enter college with a lack of motivation and a need for remediation. After a lackadaisical 6 months, students struggle with the academic preparedness required to tackle the college curriculum. Consequently, An (2012) found positive results from her study of dual enrollment students: “Thus far, I showed that students who participated in dual enrollment, on average, performed better in college than students who did not participate in dual enrollment” (p. 421). Ensuring that a student’s brain is intellectually stimulated throughout high school with a challenging curriculum has proven to yield positive results.

Exposure is key to predicting the success of students in college. Exposing students to college-level curriculum while in high school assists them with preparing for the rigor of college, allowing them the opportunity to face the challenges of college material while still in the comfort of their homes and with the support structures provided in a high school environment where they are already comfortable.

This research studied the dual enrollment program in a rural South Carolina high school in order to investigate its impact on college readiness. The study specifically

examined students who will earn an associate degree before graduating high school. The following research question guided the study: “What is the impact of a degree granting dual enrollment program on a student’s transition to a 4-year institution?”

Significance of the Study

There is a plethora of literature regarding the benefits and successes of dual enrollment and early college programs. However, there are limited studies concerning how students who participate in degree granting dual enrollment programs transition into 4-year institutions.

The findings of this study will help high schools with degree granting dual enrollment programs better prepare students to transition to 4-year institutions. Although dual enrollment students take college courses while in high school, the transition to college entails more than the academic demands of rigorous coursework. This study will shed light on the emotional, social, and academic factors that accompany students as they transition into a 4-year institution. Second, the information gathered during the study can inform technical schools about whether or not the coursework of their degree programs prepares students to transition into 4-year institutions. Last, this study will enhance the literature regarding early college programs by providing a detailed qualitative research study comprised of data concerning the transition of students from a rural, high-poverty school district to 4-year institutions. This study is significant because it has the opportunity to educate high schools, districts, and technical schools on how to ensure that their students are able to transition to 4-year institutions successfully.

Definition of Terms

The aim of this section is to provide the reader with the definitions of terms that

may be unfamiliar and terms that will appear throughout this dissertation. With many designs of dual enrollment programs across the country, it is important to define specifically the dual enrollment program structure utilized in this study.

Degree granting dual enrollment programs. Programs that are housed at a high school while partnered with a local technical school or community college. These programs are designed to allow students to earn both a high school diploma and associate degree simultaneously. Instructors for these courses include high school faculty, adjunct professors for the partnering technical school or community, and collegiate staff. Other names for this type of program are early college high school, early college, or STEM Early College Academy. These terms may be used interchangeably throughout this dissertation.

Dually enrolled. A student is both a high school student and a college student at the same time. Students are required to earn all high school student diploma-based requisites as set forth on their state guidelines while additionally fulfilling the requirements of the associate degree of the partnering institution.

Overview and Organization of Dissertation

This dissertation is divided into five chapters. Chapter 1 gives a broad overview of college and career readiness in order to clarify the problem, purpose, and significance of the study. The research question is identified, and definitions of key terms are provided. Chapter 2 begins with the theoretical framework, grounding the study with supporting literature concerning college and career readiness with a focus on dual enrollment programs. Chapter 3 outlines the methodology that is used in conducting the research and how data are collected and analyzed. Additionally, Chapter 3 discusses the

validity and reliability of this study. Chapter 4 presents the findings of the study, and Chapter 5 provides an analysis of the data along with implications for practice and recommendations regarding future research.

Chapter 2: Literature Review

Theoretical Framework

The purpose of the study was to examine the effects of degree granting dual enrollment programs on transitioning to 4-year institutions. This study is theoretically founded in the research of Tinto's (1993) model on student departure and continued research on college retention. Tinto (1993) identified three factors that cause students to leave college: challenges with academics, internal conflicts concerning educational and occupational goals, and their failure to become or remain involved in the institution's intellectual and social offerings. According to Tinto's (1975) theory, "the decision to drop out arises from a combination of student characteristics and the extent of their academic, environmental, and social integration in an institution" (Connolly, 2016, p. 1).

Tinto's (1975) original model delineated five categories to determine a student's reason(s) to drop out and how the institutions play a vital role in those decisions. He believed that "the stronger the individual's level of social and academic integration, the greater his or her subsequent commitment to their institution and to the goal of college graduation" (Pascarella, Terenzini, & Wolfe, 1986, p. 156). Tinto expanded his work in 1993 in order to analyze the longitudinal aspects of student departure. His expanded work included "adjustment difficulty, incongruence, isolation, finances, learning, and external obligations or commitments" to his original model (Connolly, 2016, p. 3). As shown Figure 1, Tinto's (1993) model is comprised of the following components: pre-entry attributes, goals and commitments, institutional experiences, and academic integration and social integration.

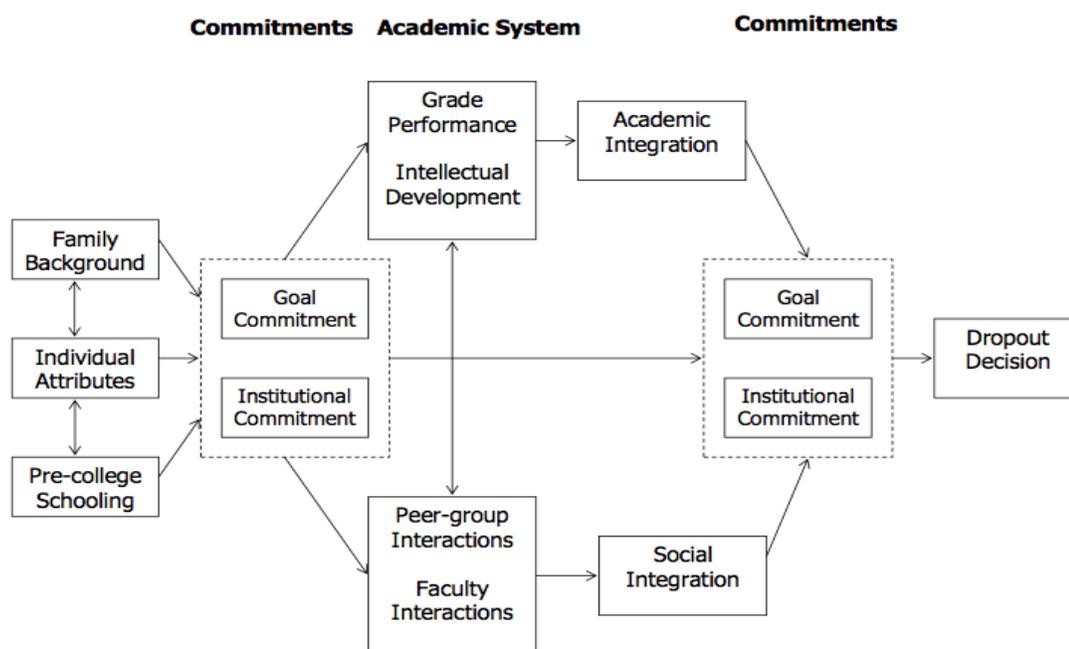


Figure 1. Tinto's (1993) Model.

Tinto's (1993) model, just as in his initial model, begins with pre-entry attributes. These attributes are then divided into family background, skills, abilities, and prior schooling. Connolly (2016) stated, "Although one cannot underestimate the significance of post-entry educational experiences, to a certain extent it is the pre-entry attributes associated with students which provide insight into understanding how they will ultimately respond to their educational environment and persist" (p. 3). Tinto (1993) believed that beginning with the student's pre-entry attributes, institutions of higher learning are given the ability to set realistic expectations so that students make the right choice, bridge the gap that exists for certain students that may be low-income or first generation, provide students with the information needed to adjust to the academic system, and place students in appropriate courses with proper counseling and advisement.

The second part of Tinto's (1993) model is labeled goals and commitments. This portion examines the student's intentions relative to their personal goals and outside commitments. Connolly (2016) stated that this segment of the model can be used to represent the characteristics that the student possesses at the time of enrollment and how those characteristics motivate and drive the student to achieve. "These characteristics and factors prepare the student to respond to experiences he or she may encounter at the given institution" (Connolly, 2016, p. 4). Tinto (2017) believed that the goal of college completion is necessary but not sufficient to keep a student enrolled in the college where they started. Some students have aspirations to transfer, and some students may be committed to graduate with a degree but not at any particular institution. Conversely, Tinto (2017) recognized that some students enroll in college with the goal of earning a degree from that particular institution. Tinto (2017) recognized that students have different motivations and goals for entering college. Tinto (2017) believed that institutions of higher education must not only understand their student's goals and commitments but make commitments to their students to keep them for degree completion.

Additionally, a student's external commitments can determine college completion. Tinto (1993) described external commitments as family, friends, work obligations, and social interactions. "The external forces can either be supportive or have a negative influence on a student's goals and commitments, subsequent interactions with the institutions, and ultimately, his or her departure decision" (Tinto, 1993, as cited in Connolly, 2016, p. 3). As in Tinto's (1975) original model, a student's success is what they have set out to do and determines their commitment to their career and educational

goals and to their institution of choice. Connolly (2016) described other characteristics related to commitment and goals as focus on educational desires, one's perception of progression towards those desires, reasons for college degree attainment, self-efficacy, and willingness to seek assistance academically when necessary.

The third component of Tinto's (1993) model, after expansion from his original research, addressed formal and informal aspects of experiences at the institution and the effect of the academic and social interactions present. Tinto (1993) believed that institutions must be devoted to establishing communities that are supportive of educational and social needs for all students as integral members, thus forming a sense of belonging. "The result is a bond, often expressed as a commitment, which serves to bind the individual to the group or community even when challenges arise" (Connolly, 2016, p. 6). Tinto (1993) described academic and nonacademic staff as having a responsibility to ensure that the experiences students have at their institution are inclusive. Tinto (1993) believed that the external community, which is comprised of the entities in which the student interacts, continues to impact student retention longitudinally. The college has an obligation to make all students believe they have an opportunity to be engaged and involved on campus.

The fourth component of Tinto's (1993) model examined academic integration. Connolly (2016) stated, "A unifying theme for many of the studies is the idea that a student's involvement in the social environment as well as the academic environment is critical to success in college" (p. 5). The student must be able to find the balance and feel a sense of belonging to thrive in a college setting.

The fifth component, social integration, aligns with the student's academic

integration. Tinto (1993) found that positive campus experiences increase a student's involvement in academic and social systems, while negative experiences do the exact opposite. Tinto (1993) did recognize that a student can be motivated to succeed despite negative experiences and poor integration in academic and social interactions, yet some experiences externally can be out of the institution's realm of influence. Connolly (2016) emphasized the main ingredients of institutional experiences include academic performance, staff interactions, extracurricular activities, and peer group interactions. "Tinto's model proposes that once a student is emotionally connected with the institution, their cognitive and academic performance will inform and they will perform" (Connolly, 2016, p. 7). Connolly asserted that academic and social integration can be shaped by campus activities and outside-of-classroom communications with staff and peers.

Connolly (2016) and Tinto (1993) have continued research regarding student retention and college departure. Connolly stated, "The most notable theory is Tinto's 1993 model of student departure, which reflects the results of almost twenty years of research contributing to the body of knowledge surrounding this theory" (p. 8). Tinto (1993) suggested that students enter college with attributes and experiences that shape their basis for interaction with formal and informal components of the institutions in which they enroll. He proposed that institutions of higher education use the information in the study to shape their practices to ensure students are motivated, committed to stay involved, and continue to support the institution.

Motivating students to succeed becomes pivotal to the completion of a degree program. Tinto (2017) stated three factors that are significant to student motivation are student self-efficacy, their sense of belonging, and their perceived value of the

curriculum, as depicted in Figure 2. Although discussed briefly, these three factors are discussed in greater detail later following Figure 2.

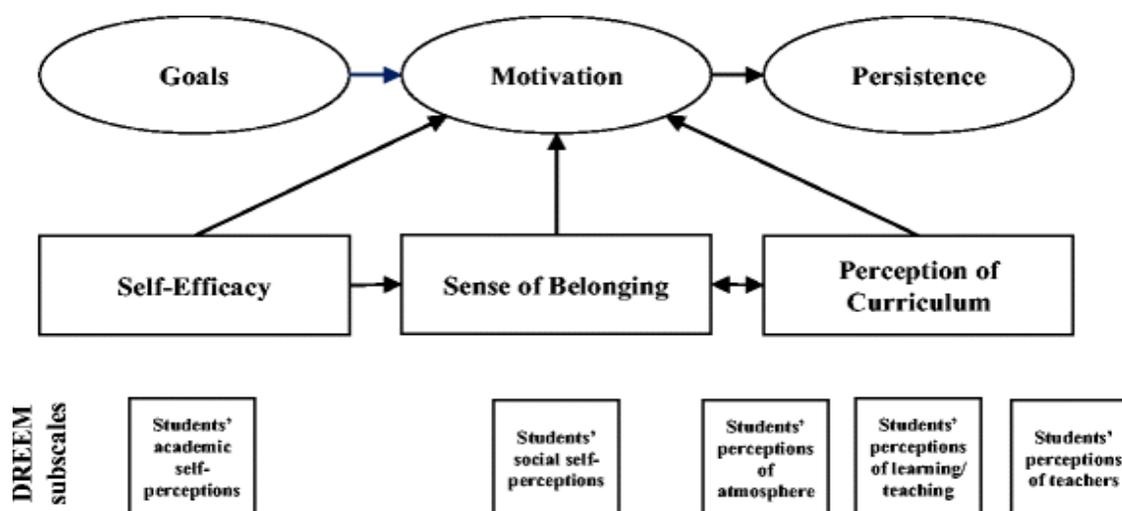


Figure 2. Tinto's (2017) Model of Student Motivation and Persistence.

Tinto (2017) believed that self-efficacy is learned, not inherited. Self-efficacy influences how a person addresses goals, tasks, and challenges (Tinto, 2017). When students learn what motivates them to endure and the skills needed to overcome obstacles, they possess the confidence to complete a difficult program of study, as opposed to settling for a high school diploma.

Although most students experience situations that allow them to strengthen their self-efficacy, some also face tasks that weaken their confidence and self-esteem. Tinto (2017) believed that this is particularly true during the crucial first year, as students seek to adjust to the heightened demands of college.

Self-efficacy is a part of student motivation, but it is not isolated. Students must experience a sense of belonging. Simply believing that one can successfully complete

college is not enough to earn a college degree; it takes work. Tinto (2017) believed that students must see themselves as members of a community of other students, faculty, and staff who value their membership. “Students who perceive themselves as belonging are more likely to persist, because it leads not only to enhanced motivation but also a willingness to engage others in ways that further persistence” (Hausmann, Schofield, Woods, 2007, p. 820). Tinto (2017) stated that this is the case for self-efficacy; developing a sense of belonging during the first year facilitates other forms of engagement that enhance student development, learning, and completion.

Personal relevance is a factor that classroom teachers are encouraged to include in their daily lessons plans as a best practice. Marzano (2001) believed that students engage more when they can connect to the material that is being presented. Similarly, Tinto (2017) believed that students need to recognize that the content being shared with them is of value and has personal relevance. When value is found in the material one is learning, the students is more apt to have the motivation to persist. Conversely, if the material is deemed to be irrelevant or of low value, students will often not gain the motivation to continue or thrive. Students perceive that the curriculum is of quality and is relevant based on faculty pedagogy, perceptions of the institution, and preferences of how students learn and their personal values (Tinto, 2017).

College and Career Readiness

The U.S. Department of Education (2010) set college and career readiness as a priority during the Obama administration. There is an ongoing deliberation of what college readiness is and how students can be deemed college ready. A student is deemed “college ready” in South Carolina if the student meets one of the following criteria:

- Scores a composite score of 20 or higher on the ACT composite;
- Scores a composite score of 1020 or higher on the SAT composite;
- Scores a 3 or higher on an Advanced Placement (AP) exam;
- Scores a 4 or higher on any International Baccalaureate (IB) assessment.

Only higher learning (HL) exams may count; or

- Completes at least six (6) credit hours in dual enrollment courses with a grade of C or higher. (South Carolina Education Oversight Committee, 2018, p. 38)

The ACT deems a student college ready based on the college readiness benchmarks in the areas of English, reading, math, and science (ACT, 2012). The ACT college readiness benchmarks are the minimum ACT scores that were set based on the scores of students who were successful in their first year of college (Allen & Radunzel, 2017). These ACT benchmark scores are used to predict whether or not a student will be successful.

Conley (2008) defined college readiness as a student being prepared to attend a postsecondary institution offering a baccalaureate degree without needing remediation. Conley (2012) explained that a college ready student is able to take courses at the college level without modifications. Conley's (2012) framework lists four keys to college and career readiness: (a) key cognitive strategies, (b) key content knowledge, (c) key learning skills and techniques, and (d) key transition knowledge and skills. Students are deemed to be ready based on mastery of all four areas.

Conley (2012) defined key cognitive strategies as the ways of thinking needed for college-level work. College-level thinking includes problem formulation, research, interpretation, communication, precision, and accuracy. Conley (2012) believed that students are college ready if they can formulate hypotheses and develop problem-solving

strategies, identify sources and collect information, analyze and evaluate results or varying views, organize and construct work products in different ways, and monitor and confirm that work completed is accurate and precise. Conley (2008) stated that those who teach entry level courses in college have identified these strategies as being an integral part of student success.

Conley (2012) defined key content knowledge as the “big ideas” (p. 2) from core subject areas, an understanding of the structure of knowledge in core subjects which allows the student to be able to gain insight and retain the information that is presented to him or her. Conley (2008) identified writing as the single academic skill correlated to student success. This key also includes the student’s ability to retain the technical knowledge and skills associated with career goals, the ways students engage with content knowledge, its perceived value to the student and the effort that the student is willing to apply, and their understanding of why they succeed or fail in understanding the content (Conley, 2012). Being equipped with the necessary building blocks is an essential component of being prepared for any endeavor.

Conley (2012) defined key learning skills and techniques with two broad categories: ownership of learning and learning techniques. In 2008, Conley referred to these skills and techniques as academic behaviors such as “time management, strategic study skills, awareness of one’s true performance, and the persistence and ability to use study groups” (p. 24). “Student ownership of learning includes goal setting, persistence, self-awareness, motivation, progress monitoring, help seeking, and self-efficacy” (Conley, 2012, p. 2). Tinto (2017) identified goals, motivation, and persistence as a model supporting college retention. He stated, “self-efficacy, a sense of belonging, and

perceptions of value or relevance of their studies lead to the motivation to persist” (Tinto, 2017, p. 255).

Students are motivated to attend college for different reasons. Tinto (2017) identified that some students are more intrinsically motivated regarding college (e.g., depth of knowledge, growth and development, independence), while others see the long-term extrinsic benefits (e.g., salary, career options, educational opportunities). When students gain the benefits, Tinto (2017) and Conley (2012) agreed that they will succeed in college.

Conley’s (2012) final key to college and career readiness examines transition knowledge and skills. Conley (2012) believed that students must possess certain skills and knowledge to transition successfully to life beyond high school. He recognized that there may not be equal access to the knowledge for all students. “Least likely to have this information are students from families and communities historically under-represented in higher education or certain career pathways” (Conley, 2012, p. 2). Conley (2012) suggested that students understand how to select appropriate courses in high school to prepare them for their college program; have a knowledge of financial requirements; be focused on a career pathway or major, college, or workforce norms; and know when and how to self-advocate. Dual enrollment programs have been used to address transitioning issues.

Dual Enrollment for College Readiness

Dual enrollment, also known as dual credit, allows students to earn credits while still enrolled in high school (Cowan & Goldhaber, 2015). Simon (2017) stated,

The emergence of dual enrollment programs in the 1970s and 1980s were

designed primarily to keep talented students challenged, but also to provide a smooth transition from high school to college, provide vocational preparedness, and provide a stronger pathway toward a college degree. (p. 156)

An (2012) stated, “educators and policy makers view dual enrollment as a viable mechanism to align secondary and postsecondary systems” (p. 101). Kronholz (2011) stated, “Dual enrollment policies and participation patterns vary widely across states, and programs designed explicitly for advanced students are a small fraction of the total” (p. 4). As Simon concluded from his study, more research is needed on the extent to which a student receives an authentic college experience in terms of rigor in the courses offered in high school.

Nationally, dual enrollment participation has expanded rapidly since the 1990s (Hofmann, 2012). By 2010-2011, enrollment in dual credit courses reached approximately 2 million students in public high schools (Thomas, Marken, Gray, & Lewis, 2013). “And the number of students under 18 taking college courses has skyrocketed. It went from under 300,000 in 1995 to over 3 million in 2015” (Balonon-Rosen, 2019, p. 1). Hofmann (2012) noted that dual enrollment programs vary in design but have the ultimate goal of offering high school students college courses. Hofmann stated that some dual enrollment programs are located on the college campus, while some students take courses at their high school campuses. “Dual enrollment requires high school-college partnerships, which brings administrators from both education systems together” (An, 2012, p. 411). An (2012) recognized this partnership offers students the opportunity to be college ready and high school teachers the opportunity to prepare all students for college because of the articulation that is

established. In addition, dual enrollment affords students the opportunities to delve deeper into topics beyond the high school curriculum and experience more rigor. “For some students, even high school honors courses do not provide the same level of intellectual stimulation as their equivalent dual enrollment course” (Johnson & Brophy, 2006; Olszewski-Kubilius, 1998, as cited in An, 2012, p. 411). College courses go beyond the realms of high school requirements. This is sometimes the reason college students are not able to remain in college, because they are not used to working with the level of rigor required. Also, in their senior year, some students look for the easy way out. “Dual enrollment further reduces ‘senioritis,’ which refers to students’ disengagement with rigorous course regiment during their senior year of high school” (An, 2012, p. 411). Developing a college-going culture in the high school assists students with the skills and knowledge required to challenge themselves throughout all 4 years. According to DuFour and Eaker (1998), “Altering beliefs, expectations, and habits that have gone largely unexamined for years is a complex, messy, and challenging task” (p. 133). Dual enrollment programs offer students the opportunity to experience collegiate level coursework while in high school and with the supports that are in place for high school students.

Reviews of students enrolled in dual enrollment programs have shown college readiness and have yielded positive results. Allen and Dadgar (2012) found, “large and positive effects of the program in helping students earn more credits even after they have enrolled in college and in earning higher grades in college” (p. 19). Dual enrollment programs have helped students to maintain their academic momentum in order to remain motivated to excel instead of having a senior year of easy courses that ultimately

diminishes a student's drive for success. "Some have charged senioritis as a contributor to the high level of remediation and low level of persistence once students enter college" (Kirst & Venezia, 2001, p. 93). After taking it easy for 6 months, students may struggle with academic preparedness in order to tackle the college curriculum. An (2012) also found positive results from her study of dual enrollment students: "Thus far, I showed that students who participated in dual enrollment, on average, performed better in college than students who did not participate in dual enrollment" (p. 421). Ensuring that a student's brain is intellectually stimulated throughout high school with a challenging curriculum has been proven to yield positive results.

Participation in dual enrollment programs offers many benefits to students. Iland and Iland (2015) discussed the benefits of dual enrollment based on their experience with their family. The following were the benefits discovered in this research:

- 1. It may be free.** In many states, students who are enrolled in high school do not have to pay tuition to attend one or more classes at the community college...
- 2. Earn dual credits.** Students who dual-enroll can often earn high school credit for the courses that they are taking and earn community college credit. In many cases, the credits can go toward a certificate or Associate Degree...
- 3. More course options.** Some students with disabilities struggle with a foreign language requirement for high school graduation or college entrance, but taking Sign Language at the community college can fulfill that requirement...
- 4. Nights, weekends, and online.** College courses may be offered evenings and weekends, avoiding conflict with high school schedules...

5. **Personal development.** ...It is a preparatory class for anyone who needs help with skills such as study skills, organization, time management, and planning.
6. **Get familiar with procedures and routines.** The 'unknown' can be stressful... Students who are dual-enrolled can ease into change with the support of parents or school staff...
7. **Learn about resources.** Dual enrollment can 'buy time' for a high school student to learn about support options and opportunities, including tutoring, study groups, career counseling, and work-study programs...
8. **Create a social niche.** ...A dual enrolled student who later attends community college will already have a sense of belonging and recognize some familiar faces on campus. (Iland & Iland, 2015, pp. 30-31)

Simon (2017) conducted a study to investigate how dual enrollment programs directly or indirectly influenced student persistence using Tinto's (1993) model of student departure. The study used case studies, questionnaires, focus groups, and institutional data collected by the college of first-year freshmen. The questionnaire was given to 172 students at a small, public liberal university in the Midwest, and five areas were created: dual enrollment, degree aspiration, institutional commitment, social integration, and academic integration as in the description of Tinto's (1993) model. Although Tinto's (1993) model founded the study, Simon sought to examine the additional component of dual enrollment programs assisting with students transitioning to college. Simon hypothesized that since dual enrollment programs occurred prior to enrollment in higher education, students who participated in dual enrollment programs transition easier to college.

Simon (2017) tested several hypotheses to find statistical correlations for dual enrollment programs and Tinto's (1993) model. Simon summarized his findings on Tinto's (1993) model to have a weak yet positive association between a student's parents' education and social integration, a weak yet positive association to the degree of dual enrollment experiences and academic integration. Additionally, he found that academic integration contributed to the likelihood of student persistence.

Focus groups in the study yielded more findings. "Students reported that they had an easier time transitioning to the institution as a result of participating in dual enrollment courses because they had access and were expected to use various technologies used by the college or university" (Simon, 2017, p. 148). Students noted that the use of Desire2Learn (D2L), which is a platform used for online courses, university email, access codes, and college registration experiences, helped with transitioning. Students also reported they were motivated to participate in dual enrollment programs due to the financial savings and the ability to a jump-start on college. Simon (2017) noted other important findings including a special note that the range of experiences in dual enrollment courses varied immensely.

While most students in the focus groups reported that the dual enrollment course(s) they took met their expectations for a college level course in relation to rigor, self-discipline, and overall challenge, other students reported that their particular dual enrollment course was too easy of that the teacher was not competent in the subject matter. (Simon, 2017, p. 149)

Simon concluded that more research was needed on the structure and nature of dual enrollment courses.

Simon (2017) did find a correlation between the degree of transition experiences with dual enrollment programs and academic integration. Other researchers supported this finding too. An (2012) suggested that students who participate in dual enrollment programs are more successful academically than students who do not participate in dual enrollment programs. Karp, Calcagno, Hughes, Jeong, and Bailey (2007) found that participation in dual enrollment programs is positively related to college GPA, persistence, and degree attainment. Similarly, An found that dual enrollment enrollees earned a first-year GPA .11 points higher than students who were not enrolled in dual enrollment programs. The study concluded that more research was needed to understand the efficacy of dual enrollment programs in relation to academic performance and persistence.

Rosenberg's (2018) account of a first-generation college student from modest means in Ohio, whose dual enrollment opportunities afforded her access to college and reshaped her future, demonstrated the benefits of dual credit programs. The college credits she earned in high school saved her family thousands of dollars (Rosenberg, 2018). High schools in Ohio are mandated by state legislature to pay for their students to take college courses, and they share certified teachers with postsecondary credentials to limit costs. This has increased the number of students graduating from high schools with college credits and matriculating to college. "In 2013, 28 percent of the graduating seniors went on to enroll in an associate or bachelor's degree program. By 2016, 47 percent were pursuing college degrees" (Rosenberg, 2018, p. 16). College is now a realistic option for students because of the dual credit opportunities afforded to them by their high school.

Larger districts in Virginia are also experiencing success with dual credit opportunities. “We call our approach to dual credit a ‘degree-seeking cohort model.’ Henrico County’s model encourages students to complete both a high school diploma and an associate degree by the time they finish 12th grade” (Rosenberg, 2018, p. 17). The college courses are offered at one high school in the county by teachers with the necessary credentials to teach the courses. The district is making certain that students are performing in the college courses through advisement with school and career counselors. “They monitor students’ attendance and grades in their college course and raise concerns when warranted” (Rosenberg, 2018, p. 18). The district also has academic coaches to help students meet the new demands of the college-level curriculum and then with the transition to college.

If there is a “secret sauce” to making these programs work effectively, what school districts need to have in place from the start are strong systems of advising, formal monitoring of student progress, and attention to the needs of high school teachers leading college courses and ongoing communication with college partners and families of students. (Rosenberg, 2018, p. 18)

Effective support helps high school students succeed in dual enrollment courses and ultimately transition to college or universities afterwards.

CollegeNow is one of the oldest dual enrollment programs in the state of New York. Pierce (2017) quoted the director of CollegeNow as stating, “this program helps provide a seamless transition from high school to college” (p. 17). Students earn high school and college credits through CollegeNow and get a jump start on the college experience. “If students come to college with credits under their belt, that often gives

them the momentum they need to succeed” (Pierce, 2017, p. 17). CollegeNow attributes their success to the strong partnership with the community college and stresses the need for the partnership to be strong and collaborative for student success.

There are many models that dual enrollment programs can take. CollegeNow allows students to take courses at their own school taught by their professors. Pierce (2017) noted that offering dual enrollment courses at high schools provides students with more access because transportation is not an issue. He also stated that concerns about a student’s social or emotional readiness for college life are alleviated if the courses are at their school. Conversely, being on a college campus would be more authentic and many high schools do not have the staff qualified to teach college courses.

As aforementioned, dual enrollment models vary. At Snead State Community College in Alabama, some students are served at their high school, while others come on campus. “Dual enrollment courses are an opportunity to introduce college to a population who wouldn’t normally think about it,” stated President Robert Exley (Pierce, 2017, p. 18). Pierce (2017) noted that when students come to the college campus, they get access and learn about campus activities to include the academic center for tutoring. Colleges and schools are putting students through the same retention processes as regular students to ensure their success. Pierce stated, “students go through the same retention processes as the college’s other students –such as meeting with faculty advisors to make sure they are on track academically” (p. 23). Successful dual enrollment programs create ways for students to receive the support necessary to succeed.

Bibo (2016) explained that research and experience show that students who are in dual enrollment programs are more likely to graduate high school,

enroll in college, and persist in college. “By spending time in a college classroom environment while still in the relatively safe place of home and high school, students gain a real understanding of what is required to succeed” (Bibo, 2016, p. 21). The students also persisted in college because the momentum for degree completion began in high school, thus reducing the amount of time and money spent in college.

The District of Columbia noted five factors in the success of their partnerships with the local colleges: roles and responsibilities, data sharing, cost responsibilities, program logistics and rules, and eligible courses. Dual enrollment students stated that they felt uncomfortable asking for help from professors. When this information was received, work began with school staff to improve self-efficacy skills. Bibo (2016) expressed the need to have an agreement laid out that clearly identified everyone’s responsibility to the effectiveness of dual enrollment. Clarifying everyone’s role while ensuring that the students had the belief in their ability to succeed produced great successes for the district. “In 2015-16, 193 students earned nearly 350 college credits” (Bibo, 2016, p. 21). The enrollment was projected to increase to over 200 students the following fall. The district reported seeing students gain their “sea-legs” (Bibo, 2016, p. 21) while still in high school. “They and their families feel more equipped to make smarter, more informed college choices as a result of their dual enrollment experience” (Bibo, 2016, p. 21). The school district planned to continue to build self-efficacy of students while ensuring that they were prepared for college success.

Dual enrollment opportunities have the ability to assist with the transition to college by affording some of the initial transitional fears to occur while they are still living in the security of their homes and attending traditional high schools. Students in dual enrollment programs have the opportunity to experience a college campus, meet professors, take rigorous coursework, and experience many other transitional aspects of first year college students. Tinto (2017) believed that early experiences in college set the tone for a successful transition and help a student believe that they are capable of college completion. Dual enrollment serves as an avenue to the early experiences that improve a student's belief in their ability to attend and complete college.

Sense of Belonging

As the result of his research on human motivation, Abraham H. Maslow, an American psychologist, developed Maslow's (1943) hierarchy of needs theory. Wikipedia (n.d.) defined Maslow's hierarchy of needs as "a theory of psychological health predicated on fulfilling innate human needs in priority, culminated in self-actualization" (p. 1). Self-actualization is defined as the "realization or fulfillment of one's talents and potentialities, especially considered as a drive or need present in everyone" (Dictionary.com, 2019). Maslow's research asserted that human behavior can be shaped by motivation and the fulfillment of needs. In his triangular representation of human needs, Maslow illustrated the hierarchy of needs in which humans may meet multiple levels of the hierarchy at one given time but with strict requirements that the lower level needs must be met in order for higher order levels to be achieved. The levels are depicted in Figure 3.

- Self-actualization – includes morality, creativity, problem-solving, etc.
- Esteem – includes confidence, self-esteem, achievement, respect, etc.
- Belongingness – includes love, friendship, intimacy, family, etc.
- Safety – includes security of environment, employment, resources, health, property, etc.
- Physiological – includes air, food, water, sex, sleep, other factors towards homeostasis, etc. (“Maslow’s Hierarchy of Needs,” 2016, p. 1).

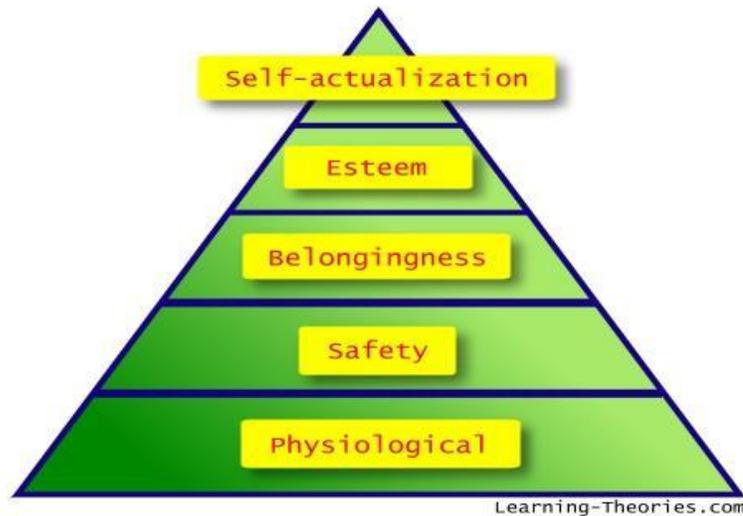


Figure 3. Maslow’s Hierarchy of Needs Pyramid.

The level order is essential according to Maslow’s (1943) theory. Maslow explained that physiological needs are often met for most healthy humans; but if they are unmet, they take priority before any other levels can be reached. For example, in times of emergency, the safety level takes the forefront. Once levels are attained, Maslow believed that higher levels will be reached. However, to

reach the highest level of the hierarchy of needs, self-actualization or self-fulfillment, one must have a personal desire to grow. Therefore, intrinsic motivation is required for self-actualization and self-fulfillment.

Critics of Maslow's (1943) work note the vagueness of the concept of deficiency as the term is broad and does not take into account how each individual person defines the concept of deficiency. Exceptions to level requirements are also questioned by critics. For example, they note that in some cases, a person may risk his or her own safety to save someone else from a dangerous situation. Although criticized, Maslow's hierarchy of needs is still cited today by many researchers.

Maslow (1943) asserted that if an individual's need to fit in is not fulfilled, they "will hunger for affectionate relations with people in general, namely for a place in his group, and [...] strive with great intensity to achieve this goal" (p. 381). Knekta and McCartney (2018) conducted a case study of 10 semi-structured interviews with biology majors in order to determine if high levels of sense of belonging and involvement in the biology department would yield higher retention rates. Grounded in research by Tinto (2017) and student persistence in college, the goal of the study was to allow students to discuss their sense of belonging in the biology department in order to gather strategies that would improve student experiences and ultimately earn a better student retention.

For this study, Goodenow (1993) defined student sense of belonging to the department as "students' sense of being accepted, valued, included, and encouraged by others (teachers and peers) in the department setting and of

feelings oneself to be an important part of the life and activity of the department” (p. 25). Tinto’s (1993) model was the theoretical framework for the case study with a focus on institutional actions. Knekta and McCartney (2018) specifically noted Tinto’s (2017) theory in which students were more likely to succeed if they were given clear, high expectations; social and financial support; frequent feedback; and opportunities for active involvement with their peers and faculty.

The results of the study revealed that overall, the students felt strongly that they were accepted, valued, and respected in the biology department and described the relationships with faculty and staff as positive, which aligned perfectly with the first half Goodenow’s (1993) definition of sense of belonging. However, the interviews also revealed that students did not consider themselves to be a strong member of the department. The second half of the definition focused on the feeling of being an important part of the department. The interviews unveiled that the students felt as if they were “taking” from the department as far as the knowledge of coursework, but that they were not a part of “giving” to the department in the form of research or volunteering. Knekta and McCartney (2018) noted that the students interviewed were freshmen and sophomores, which may explain why they did not feel as involved. However, the researchers made the recommendation for the department to try to find ways to include students from the start and to support their sense of belonging, ultimately leading to student retention.

Possessing a sense of belonging is not optional; rather, it is fundamental to the success of the human being in that particular setting. Dunbar and Carter

(2017) discussed a similar sense of belonging and its importance in fostering student nurses' affective bonds. These researchers examined what was needed in nursing programs to ensure that the next generation of childcare professionals, which nurses comprise the largest proportion, are effective and affective.

Pedagogical practices were examined to ensure that student nurses believed that they belonged in the program. Dunbar and Carter referenced Maslow and noted that the need to belong is fundamental to human motivation and a powerful influence of cognitive processes, emotional patterns, behavioral responses, and health and well-being. Additionally, the researchers noted that several studies have found links between belonging and academic engagement and performance.

Dunbar and Carter (2017) defined "place belongingness" as an attachment of individual experiences to a particular place and perception of being an integral part of the place. The literature discussed in the article suggests that clinical placements and the sense of belonging at that particular placement can directly impact a student's self-concept, self-efficacy, motivation, and confidence.

Dunbar and Carter described an adequate placement for a clinical student relative to the sense of at "homeness" the student felt. In their results, Dunbar and Carter stated, "It appears that for students who cross boundaries between practice and academic placements, a sense of belongingness is a prerequisite for learning and personal and professional development" (p. 368). It was discovered that it required both academic and clinical staff of the student nurses to ensure that the student feels safe and secure and that they develop affective bonds to ensure success. Additionally, the researchers concluded that a sense of belongingness

and social connectedness with the feelings of being at home were vital to student nurses developing the affective bonds needed to be supportive to children and their families, potential future patients. Recommendations were given to ensure that the pedagogies practiced fostered a sense of belongingness to give students the feeling that they “belonged” and “fit in.”

As college campuses strive to be more inclusive, a growing body of research is developing on the impact of a student’s sense of belonging and their satisfaction with their school. Supiano (2018) cited two studies that were presented at the American Educational Research Association’s annual meeting in New York. The first study, “Experiences with Diversity and Students’ Satisfaction and Sense of Belonging at Research Universities,” investigated the links between student satisfaction and sense of belonging and their experiences with diverse peers and their feelings about the climate of the campus. The study found that frequent interactions with different peers was positively correlated to a strong sense of belonging. Student feelings regarding the climate of the campus had a stronger correlation to student satisfaction with specific focus on belonging.

The second study presented, entitled “Learning Communities, Mattering, and Sense of Belonging: Structural Equation Modeling from Year 1 of a Longitudinal Study,” defined the components of a comprehensive transitional program for first generation and low-income students relative to belonging and mattering. The data revealed that peer mentoring and staff support and care had a direct positive correlation to sense of belonging for the students. There was also significance noted between mattering and belonging in the study.

Supiano (2018) concluded the article with recommendations for colleges to develop a better campus climate. She recommended that colleges begin by analyzing their campus climate either by creating their own measure or by using the National Assessment of Collegiate Campus Climates. Not only should colleges use students to analyze the current climate, but Supiano suggested involving students in the process to develop solutions from a variety of perspectives. Small changes can have a great impact on students. An example discussed international students with limited transportation options that required that they eat the majority of their meals on campus as feeling as if all the food offered on campus was “American.” As a result of their findings, the campus began to offer cuisines from other countries, allowing the students experiences that felt like home at little cost to the university. Colleges can no longer take for granted a student’s sense of belonging but must develop strategies to ensure that all students believe that they matter and fit in.

Craggs and Kelly (2017) conducted a study on school belonging of secondary school students who had been involved in a “managed move.” A managed move is defined as a “process whereby a collaborating school agrees to accept a pupil at risk of exclusion from another collaborating school” (Craggs & Kelly, 2017, p. 58). The participants of the study were required to be a part of a managed move, attending the receiving school for at least 6 weeks; and for ethical reasons, they could not have ongoing mental health services. The first four participants to meet the requirement were selected, and parental approval was obtained for participation in the interviews for the study.

The findings revealed that making friends and feeling safe were the most prominent themes associated with a sense of belonging as mentioned by all participants. Conversely, the ability to forge positive relationships with peers was also discussed as a major fear and source of anxiety for students during the managed move. The next theme that was expressed was the need to be understood or accepted. Two of the four participants believed that the feeling of being understood or accepted was the responsibility of the receiving school, while two other participants believed that the stereotypes made it harder for them to feel like they could be themselves at the new school. All participants believed that additional supports at the receiving school that met their specific needs helped with their sense of belonging tremendously.

The findings from Craggs and Kelly (2017) also disclosed that having the ability to participate in extracurricular activities and facilitation of peer relationships positively correlated to student feelings of belonging. Conversely, the participants spoke about the negative impact the initial trial period had on their sense of belonging. Students believed that the trial period at the receiver school was a source of anxiety and thus gave the feeling that they did not belong. Two of the four participants did take a “sole responsibility” stance in some aspects of the interview. The researchers noted that those two students believed that ultimately, it was their responsibility to belong despite what the school staff did. The researchers, however, made recommendations to the staff concerning ways to promote a sense of belonging with attention being directed to the trial period. The recommendations were to try to mitigate any risk of negative impact

to an already vulnerable population by using everyday ways and methods to make students believe that they belong in the school, ultimately providing support for a smooth transition and success.

Self-Efficacy

In keeping with Maslow's (1943) hierarchy, the fourth level is esteem which can be defined as confidence and efficacy. "Self-efficacy is typically defined as a person's belief in his/her ability to succeed in a specific situation or at a specific task" (Bandura, 1977, 1993, p. 193). School counselors, teachers, and administrators in a school setting have the opportunity to encourage students to believe in themselves to succeed in a tough situation. Experiencing difficult experiences in high school, while having support and extrinsic motivation, allows students to find their intrinsic motivation and push through obstacles that arise. Some students have to overcome a number of obstacles like low self-esteem, lack of parental support, and limited financial resources to further their education (Franks, 2016).

Ozmun (2013) conducted a study with 114 juniors and seniors from eight high schools in southeast Texas who were enrolled in dual credit programs at a local community college. The students were given a survey to complete that had four sections and 67 questions. To assess their college and academic self-efficacy, Ozmun used two surveys: the College Academic Self-Efficacy Scale (CASES) and the College Self-Efficacy Inventory (CSEI). "Academic self-efficacy is the level of confidence possessed by a student in his or her capacity to succeed academically, which hold the potential to translate into improved academic persistence and performance" (Ozmun, 2013, p. 4). Similarly, college self-efficacy would be the student's belief or confidence in their ability

to succeed in college. The goal of the study was to see if the students possessed college and academic self-efficacy prior to enrollment in dual credit courses or if dual credit courses shaped their motivation to succeed.

The findings showed that the majority of the students, 73.7%, decided to enroll in dual credit courses on their own, while others indicated they were influenced by parents, high school teachers, and high school counselors. Sixty-five percent reported to be straight A students, and 34% were B students. Eighty-nine percent of the students had plans to attend a 4-year university after graduation, while the rest planned to attend a 2-year college. Based on 33 items from CASES and the 19 items on CSEI, the students indicated low levels of confidence when it came to tasks associated with college attendance. These tasks would include communicating with faculty, writing papers, taking assessments, and attending classes. The overall mean on CASES was 2.22 on a 5.0 scale, with the only area scoring above a 3.0 being “running for a student government office” and writing a high-quality term paper scoring a 2.92. The lowest area reported was “attending class regularly,” scoring a 1.23. “Unlike the CASES, the CSEI assessed a broader range of ‘college’ activities, encompassing both academic and social tasks such as getting a date, living with others, and making friends at college” (Ozmun, 2013, p. 4). The overall mean of CSEI was 2.79 on an 8-point scale, which mirrored the scores on CASES; and the highest response on the survey was for researching a term paper, scoring a 3.26. The areas scoring the least amount of confidence dealt with socializing with roommates and getting along with roommates.

The second research question in Ozmun’s (2013) study focused on the relationship among academic success and college and academic self-efficacy. Because

the students went to varying schools with varied grading techniques, overall letter grades were used instead of grade point averages. Academic grades were mildly correlated to college and academic self-efficacy in the following areas: answering a question in a small class, tutoring another student, explaining a concept to another student, earning good marks in most courses, performing simple math computations, and applying lecture content to a laboratory session. No other correlations of significance were noted after several correlational analyses of the surveys. Research Question 3 focused on the student's academic motivation. Student data showed high levels of academic motivation.

On the first item, "I am willing to work hard in a course to learn the material even if it won't lead to a higher grade," the mean score was 3.73. The second item, "When I do well on a test it is usually because I am well prepared, not because the test was easy," scored a 4.00. The third item was "I frequently do more reading in class than is required simply because it interests me," had a mean score of 3.06. The fourth item, "I frequently talk to faculty outside of class about ideas presented during class," scored 3.18. The fifth item was "Getting the best grades I can is very important to me," and it was the highest scorer, at 4.59. The next item, "I enjoy the challenge of learning complicated new material," was scored at a 3.57. The last two items were similar. Seventh was "My academic experiences (i.e., courses, labs, studying, discussions with faculty) will be the most important part of college," which scored high at 4.22 while the last item, "My academic experiences (i.e., courses, labs, studying, discussions with faculty) will be the most enjoyable part of college," scored only a 3.29.

(Ozmun, 2013, p. 6)

This study concluded that students who were introduced to dual credit courses while in high school possessed higher levels of college and academic self-efficacy. Ozmun (2013) concluded that students who participated in dual enrollment programs were ready for college and transitioned easily because they possessed the necessary belief in their ability. The data showed that the students did not possess high levels of self-efficacy prior to enrollment in dual credit courses, which led researchers to conclude that the ingredients for college success lay in their participation in dual enrollment programs more than the researchers originally expected.

Martinez, Baker, and Young (2017) conducted a study to address the need for better career and college readiness using a classroom guidance curriculum aimed to improve the career and college readiness of high school students from low socioeconomic backgrounds by improving their college readiness knowledge, assess aspirations, and self-efficacy. Students in the study were 163 ninth graders from either Title I schools or schools that were designated as low performing by the state board of education. Two conditions were employed for the study to include a treatment group and a control group. The treatment group received a classroom approach for the intervention, while the control group's intervention was individualized. The classroom guidance curriculum, comprised of eight modules, was delivered to the treatment group with a structured approach that was utilized by trained school counselors for ninth graders enrolled in English courses for 5 weeks. "The content of the curriculum focused on specific information that

students needed to know (knowledge) and requisite behaviors and cognitions/ attitudes (aspirations; self-efficacy)” (Martinez et al., 2017, p. 176). The control group received independent learning led by trainers.

During the process, Martinez et al. (2017) focused on core themes of readiness, access, affordability, preparedness, and career and college readiness self-efficacy. College and career self-efficacy was assessed using the College and Career Readiness Self-Efficacy Inventory (CCRSI) by Baker and Parikh Foxx supported by a four-factor model.

The four factors are (a) dealing with procedural and financial challenges associated with postsecondary education and future careers, (b) possessing positive personal characteristics that will enhance readiness, (c) believing that one possesses the competencies needed to be successful in the future, and (d) believing that one has the potential to set and achieve future goals. (Martinez et al., 2017, p. 178)

The data revealed that the curriculum delivered by a school counselor proved to be superior to individualized learning. Martinez et al. (2017) found the guidance curriculum contributed positively to the student’s self-efficacy and readiness for college. The classroom guidance model specifically showed significant increase for career and college readiness goals for first-generation and low-income students. Similar to previous studies, student self-efficacy towards career and college readiness was improved from a supportive environment.

Another study conducted by Lee, Song, and Kim (2018) looked at self-efficacy, attribution, and adjustment to college life. Seventy-eight college

students from Texas A & M University who volunteered and were mostly nontraditional were used in the study. Nontraditional students were defined as, delays enrollment, attends part-time for at least part of the academic year, works full time while enrolled, is considered financially independent for purposes of determining eligibility for financial aid, has dependents other than a spouse, is a single parent, or does not have a high school diploma. (Lee et al., 2018, p. 576)

The purpose of the study was to see if there was a correlation between a student's self-efficacy and attributions on their adjustments to college. Lee et al. described self-efficacy as the fuel to behaviors that individual performs and what drives our lives (p. 576). The research question stated, "What is the direct relationships of self-efficacy and college students' perceptions of their adjustment to college" (Lee et al., 2018, p. 580).

To measure self-efficacy in this study, the New General Self-Efficacy (NGSE) scale developed by Chen, Gully, and Eden (2001) was used to gather the student's self-reported self-efficacy using a 5-point Likert-type scale with ranges from strongly disagree to strongly agree. The results showed that self-efficacy had a direct positive relationship with adjustment to college. Lee et al. (2018) concluded that students with high self-efficacy had adjustment scores higher than those with low self-efficacy. The researchers also recommended that orientation and other college programs may need to specifically include opportunities to build success experiences into their programs and resources. According to the data presented, bolstering a student's self-efficacy will assist with adjustment to

college.

Martin, Goldwasser, and Harris (2017) conducted a study to determine if students enrolling in developmental courses in college had an impact on their academic self-concept and self-efficacy. “Nationwide, one third of students entering college for the first time require remediation prior to enrollment in college-level classes and at some schools as many as 60% of students are required to take remedial courses” (Martin et al., 2017, p. 401). A small institution in the rural southeast with just over 1,000 students was used in this study.

Approximately one third of its freshmen require remedial courses. Academic self-efficacy was measured using CASES by Owen and Froman (1988). The scale required participants to rank items on a 5-point Likert scale from not confident at all to very confident, consisted of 33 questions, and took approximately 25 minutes to complete.

The survey was given to students at the beginning and the end of their first semester as a freshman during freshman seminar. Martin et al. (2017) concluded that being enrolled in two or more developmental classes did not have a significant effect on a student’s academic self-concept when compared with enrollment in less than two developmental classes. The researchers were surprised that the self-efficacy of the students in the study did not change over the semester. However, the researchers did determine that although student self-efficacy did not change, students in multiple developmental courses had a lower self-concept than their peers. Self-concept is defined as how an individual feels about him or herself and their ability. Since academic self-concept is a factor in

retention, Martin et al. recommended that colleges develop mentorship programs or counseling to assist students.

Numerous studies have been conducted regarding self-efficacy and adjustment to complex work environments. Chen et al. (2001) revised the scale created by Sherer et al. (1982) to make it shorter and able to have a broader measurement of self-efficacy to be adapted and utilized in varied situations. Just as Chen et al. argued that self-efficacy may assist employees with adjusting to complex work environments, the same is suggested through research about the transition to college. Coffman and Gilligan (2002/2003) looked at the relationship of self-efficacy as a factor of student satisfaction with life as a first-year college student. Self-efficacy had a positive correlation to a higher satisfaction of life for the 94 college students surveyed. Similarly, Chemers, Hu, and Garcia (2001) found a relationship in their data for the role of self-efficacy and optimism in the success and adjustment of first year college students. These researchers followed a sample of 256 college freshmen during their first year with data being collected during the winter and spring terms. Chemers et al. found a relationship between academic self-efficacy and challenge-threat appraisals and stress. Although a direct relationship may not be shown in multiple studies with college adjustments, research reveals indirectly that self-efficacy is positively correlated to college adjustment.

Perception of Value of Curriculum/Relevance

Earning a college education is thought to yield a more successful life. Gary Becker is a theorist who received heavy backlash for his work on increasing learning to

improve the economy. Becker (1962) believed that individuals who pursued higher education usually enjoy a more successful life than those who simply work hard and do not give up. Becker's human capital refers to the abilities and qualities of people that make them productive ("Gary Becker's concept of human capital," 2017). This theory encapsulates all the benefits of a dual enrollment program. High school is no longer viewed as the end of learning and the beginning of work life. Dual enrollment programs allow students to begin to attain the desire to become lifelong learners by promoting postsecondary education. Students are recruited to participate based on the understanding that having a college degree will increase the amount of money one would make after graduating. The earnings of well-educated individuals are generally higher than those of the wider population ("Gary Becker's concept of human capital," 2017). Investing in people is what Becker hoped would be gained by his work with human capital. Schools investing in dual enrollment programs understand that creating a society of educated people will make the economy better as well as create an environment to support continuous growth and improvement.

Colleges and universities also understand student retention depends heavily on perceived value and relevance of coursework and degree attainment. Rosenbaum, Becker, Cepa, and Zapata-Gietl (2016) conducted a study to see if colleges met student expectations. "Students expect college to provide: (1) dependable progress to credentials, (2) relevant courses, and (3) job contacts" (Rosenbaum et al., 2016, p. 519). The authors investigated how institutional confidence varied by college program and its relationship to students' overall expectations. Interview and survey participants were from eight community colleges and two occupational colleges in Illinois and California. The

selected colleges were matched by size and the local socioeconomic composition serving a wide variety of students from different communities. The 65 participants were either BA transfers or students concentrating in the areas of business, computer networking, or health fields.

The findings provided an understanding of institutional frustrations. The first finding focused on timely completion of degree. Students reported that the colleges did not meet their expectation for timely progress because of remedial courses, delayed goal setting, and confusion. Students stated that little emphasis was placed on the placement exam, yet the consequences of not scoring high would be the requirement to take courses that offered no credit. This caused frustration because the students were paying tuition for courses they related to high school courses because they were not receiving credit for them. Second, goal setting was delayed due to career exploration requirements where students wanted to choose a major more quickly. Students interviewed stated that delayed choice felt like they were wasting time. Third, confusion about requirements caused a student to quit. She stated, "I didn't know what to do, so the first semester ... I quit" (Rosenbaum et al., 2016, p. 532). These three challenges cause students to end up with a bunch of courses that led to no credentials and increased frustrations with college.

Second, the authors examined the fact that students expected college courses to be relevant. In 2004, virtually all (97%) high school graduates plan to attend college, including many with poor grades and poor attendance. The student's expectations were not met as many stated that their courses did not seem to help them in life or future work. The authors concluded that students felt that expectation of relevant courses were being ignored and that no one explained the need for general education coursework. A student

in a paramedic program said, “I don’t see why I need to know World History to get a job to drive an ambulance” (Rosenbaum et al., 2016, p. 533). Students expect college courses to be relevant to them once they graduate, and the failure to have that need met made students question if their time in college was worthwhile.

Third, Rosenbaum et al. (2016) examined student expectations for college to connect them to employers. Students entered college expecting that college will aid in attaining a good job. However, when there is no job search or career support afforded to college students, they lose confidence in college leading to a better life as Becker (1962) described. The students interviewed expected colleges to make connections for them that would lead to entry into the labor market. Disappointments were expressed with inadequate support or opportunities being afforded to students, and most commented that they conducted their own job searches to support their career goals.

From the interviews conducted by the researchers, a 10-item survey was created. The survey results contributed to understanding the impact of college programs based on student expectations. The data showed that occupational programs and occupational colleges had higher levels of institutional confidence because of course relevance and job payoffs. Recommendations were given to BA transfer programs to increase student confidence in degree progress while still meeting the requirements of the college. “Instead of beginning with remediation, ... emulate the occupational colleges we studied and include some career-relevant classes, which require minimal academic skills, provide career-relevant tasks, and can even provide job payoffs” (Rosenbaum et al., 2016, p. 540). Transforming degree programs in this manner will give students the confidence needed to persist due to course relevance and progress towards degree completion.

Rosenbaum et al. (2016) noted recommendations given to colleges led to a redesign of the BA transfer programs. Counselors began to meet with all new students to help them set goals and used a new software program that would show career relevance for coursework at every stage of their degree program. These types of redesign measures work to improve a student's confidence in their institution and commit to the process towards degree completion, which is a win for the student and the institution. Additional recommendations looked at President Obama's college scorecard which evaluated colleges on several student outcomes that included degree completion, job placement, and earnings.

As in Tinto's (2017) model, students are motivated to continue when they can find relevance and value during their matriculation towards a degree. Fedesco, Ketner, and Natt (2017) examined relevancy of course assignments for introductory coursework for communication majors. The study compared student perceptions of coursework for an introductory public speaking course at a large Midwestern university in the spring semester of 2015 to fall semester of 2015 after course assignments were made relevant to students. Students consistently complained about the course and the speaking assignments having nothing to do with their major. Surveys and course evaluations were used to measure "perceived course relevance, motivation for participating in the course, course satisfaction, and perceptions of learning" (Fedesco et al., 2017, p. 202). Pre and post data were analyzed to determine impact of changes.

The findings showed that the alterations to the course assignments did increase perceived relevance and perceived learning. Students reported increased levels of intrinsic motivation and the ability to identify with the curriculum because they deemed

the material personally important. However, it was interesting to learn that extrinsic motivation was not impacted although the course is required. The authors noted that the results of the study were in alignment with the ARCS model developed in the 1980s by John Keller. The ARCS model is an instructional design that focuses on motivation in the learning environment. The acronym stands for attention, relevance, confidence, and satisfaction which Keller determined to be the four major categories for motivating learners. Fedesco et al. (2017) also reported correlations between perceived usefulness and learning after interventions were made with the course. The authors recommended that courses should have relevant assignments in order to recruit and retain communication majors.

Course directors can enhance the degree to which students perceive a course to be relevant by simply implementing assignments that will allow students to develop and practice skills that they will more likely use in their future classes and careers. (Fedesco et al., 2017, p. 206)

When coursework is connected to preparation for future learning and career goals, students found value and were motivated to continue, as confirmed by the authors of this research.

Another study conducted by Walters and Bockorny (2018) examined the relevance to general education courses for undergraduate business students. Zaichkowsky's personal involvement inventory, comprised of 20 questions, was used to assess personal relevance of both cognitive and affective domains for undergraduate business students at a Midwest university. Surveys were administered in core business classes to ensure that all business majors had an opportunity to participate. Participation

was not required, and no incentives were given; yet, 169 surveys were completed. Descriptive statistics were used to examine the dimensions of relevance for general education courses.

The findings revealed that the business majors found general education courses to be important, useful, valuable, and beneficial based on the highest mean values. However, the lowest mean scores were reported in the dimensions of exciting, interesting, and fascinating respectively. The authors concluded that the students perceived their general education courses relevant in the cognitive dimension but not by the affective dimension. Students understood the purpose of the coursework based on the findings but were not emotionally connected or motivated in the courses. Recommendations were given to the departments associated with general education courses that encouraged presenting topics in more interesting and appealing ways as well as communicating the key attributes and benefits of general education courses.

Summary

This review of the literature examines theories emphasized by Tinto (1987, 1997), Maslow (1943) and Becker (1962), all of which are integral in understanding the motivation to attend and complete college. Tinto's (1987) theory identified academic and social issues as the main cause of college departure. Tinto (1987) also identified that the levels of progression of students and their will to succeed are positively correlated to the social and academic conventionalities offered by the institution. Maslow's hierarchy of needs explains how certain needs must be met in order for humans to persist towards a goal. Becker's human capital theory investigates how positive experiences relate to increased academic and personal gains. Becker's theory supports the belief that people

strive to earn a college degree to gain opportunities and rewards in life. Becker's theory captures the essence of dual enrollment program participation since students are often motivated to participate because of the rewards that are associated with participation and completion.

There were gaps in the literature. Some of the gaps relate to the age of the theories and the timeline of dual enrollment programs. The review of the literature contributes to the credibility of this study and can assist school districts with ensuring that students who participate in dual enrollment programs are being prepared to attend and excel in college. Replications of dual enrollment programs with associate degree attainment must meet student expectations and needs in order to improve enrollment in postsecondary education and completion statistics, thus producing a greater number of educated and trained citizens who are competitive in a global market. Chapter 3 describes in detail the methodology of this research project.

Chapter 3: Methodology

Transitioning during any stage of schooling brings about challenges and is a critical time for students. In all stages, being prepared is key to the success of the transition. Students who take advantage of dual enrollment opportunities benefit from graduating high school with both a high school diploma and an associate degree or at least college credits earned tuition free that can be applied toward a baccalaureate degree (Jobs for the Future, 2015). Although these students have had a jumpstart on college, the transition from home to college is still a major adjustment that must be prepared for in order for the students to thrive and be successful. There is an abundance of research regarding the success of dual enrollment students while they are in high school, but there is a critical need to evaluate the transition to college and whether being a dual enrollment student helped to prepare them for their college or university of choice. The major research question that guided this study was, “What is the impact of participation in a degree granting dual enrollment program while in high school on the transition to a 4-year institution?” Information gathered during this study will also help to enhance dual enrollment programs by informing educators on what is working and what must be added to better prepare and support students as they leave high school and matriculate to college.

Research Design

This study employed a qualitative research approach. Qualitative research is defined by Creswell (2009), as “a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (p. 22). Qualitative research methods are ideal for understanding phenomena with limited research available or

gaining insight into a specific experience (Creswell, 2009). Conducting a qualitative study for this topic was appropriate since there is little research investigating the transition of dual enrollment students who earn an associate degree in high school after they leave high school and enroll in 4-year institutions. According to Creswell (2009), “talking directly with people, going to their homes or places of work, [and] allowing them to tell the stories unencumbered by what we expect to find” (p. 48) is the most effective way to get a comprehensive understanding of multifaceted issues. A qualitative design was also selected for this study as it sought to explore the transition from high school to a 4-year institution and social and emotional experiences of students with varied backgrounds, personal characteristics, and academic goals. Utilizing a statistical approach would complicate the process and would not allow the researcher to gather the type of information desired; therefore, a qualitative approach was deemed a better fit (Creswell, 2009).

The objective of qualitative research is not to make predictions for the future but to strive to understand current phenomena based on participant experiences (Patton, 2002). The researcher used the social constructivist viewpoint. Creswell (2009) defined social constructivists as those who “hold assumptions that individuals seek understanding of the world in which they live and work” (p. 26). “The goal of this type of research is to rely as much as possible on the participants’ views of the situation being studied” (Creswell, 2009, p. 26). This research uses open-ended questioning to gather as much insight as possible from the participants and to understand the perspective of the participant.

The purpose of this qualitative interview study was to learn about the experiences

of dual enrollment students as they transition from high school to 4-year institutions. The researcher desires to understand their academic, social, and emotional preparedness based on already completing an associate degree while in high school. A narrative interview process, following a phenomenological approach, was employed. Creswell (2009) defined phenomenological research as a “strategy of inquiry where the researcher identifies the essence of human experiences about a phenomenon as described by participants” (p. 30). This approach is used to understand lived experiences, examining a small group of participants through extensive inquiry to gather information to develop patterns and relationships of meaning (Creswell, 2009). A qualitative interview approach provides the flexibility to research the phenomenon and develop a better understanding of current practices as well as understanding what can be improved (Ponelis, 2015).

Setting

The setting for the study was a small, rural public school district in South Carolina that is referred to as “Griffin School District” or “GSD” throughout this dissertation. The enrollment of this district is approximately 2,900 students with 600 employees. The district has one high school which graduates on average of 180 students each year. The percentage of students in poverty is 86.9. Although the district is in a high-poverty community, opportunities are afforded to students to assist with overcoming limitations and barriers that are naturally present in areas of high poverty. One opportunity is the STEM Early College Academy. The STEM Early College Academy is a partnership with a local technical institution that affords students the opportunity to graduate from high school with an associate degree. Students begin high school coursework for the program in seventh grade in order to begin college coursework in the

spring of their freshman year of high school. Interested students must apply for admission in sixth grade, participate in an interview process, and take assessments for acceptance into the program. Before college coursework can begin, students must also take the Accuplacer to assess readiness for college coursework. The students must meet the score requirements of the partnering technical school before enrollment in the courses takes place. Once students meet the requirements, the student is officially a dual enrollment student. The students take all coursework free of charge with lottery tuition assistance provided by our state and any remaining needs provided by the school district. All textbooks and materials needed to complete graduation requirements are provided for the students. Finally, GSD was selected because the researcher is familiar with the institutional structures and systems which is advantageous for this study. “Backyard research involves studying the researcher’s own organization, or friends, or immediate work setting” (Creswell, 2009, p. 165). However, the researcher understands the potential risks of backyard research and took necessary action, described later, to mitigate any impact.

Participants and Data Collection

The researcher purposely selected students from the class of 2018 who completed their Associate Degree in Science or Arts through dual enrollment, transitioned to a 4-year institution, and completed year one at the 4-year institution. Purposeful sampling is deliberate and requires the researcher to include individuals or situations that will provide a better understanding of the concept being studied leading to an understanding of the research problem (Creswell, 2009). The students were contacted via telephone and asked to participate. Nine students who met the criteria agreed to participate in the study. This

study used criterion sampling as well. Creswell (2009) noted that qualitative research often requires the researcher to use more than one sampling technique. Criterion sampling is applicable when all participants being studied meet the criteria specified and have experience with the phenomenon being studied (Creswell, 2009). Approval of the study was granted by the superintendent of the district as the data collected would be reflective of time spent in GSD (Appendix A). All necessary documentation was completed to conduct research in GSD according to board policy. Pseudonyms for the participants along with a brief description are included below:

1. Peyton – Black female, graduated with an Associate Degree in Arts, attending a 4-year institution out of state.
2. Susan – Black female, graduated with an Associate Degree in Arts, attending a 4-year institution in state.
3. Tracy – Black female, graduated with an Associate Degree in Science, attending a 4-year institution in state.
4. Robin – Black female, graduated with an Associate Degree in Science, attending a 4-year institution in state.
5. Karen – Biracial female, graduated with an Associate Degree in Science, attending a 4-year institution in state.
6. Laura – Biracial female, graduated with an Associate Degree in Science, attending a 4-year institution out of state.
7. Jalen – Black male, graduated with an Associate Degree in Arts, attending a 4-year institution out of state.
8. Steve – White male, graduated with an Associate Degree in Science with

Honors, attending a 4-year institution in state.

9. Erica – Black female, graduated with an Associate Degree in Science with Honors, attending a 4-year institution in state.

No monetary gifts or incentives were offered to the participants. The participants were explained the aims and goals of the study, the role they would play in the study, and that they would agree to participate willingly. The participants were given informed consent forms to complete. A more detailed description of the participants is included in Chapter 4.

Interviews

All interviews took place on the high school campus in GSD. The entire population meeting the criteria outlined above were interviewed. Before the interviews began, the researcher read the consent form aloud, answered any questions, and allowed the participants to sign if they wanted to proceed. A copy was given to the participants for their records, and a copy was kept by the researcher. Participants were asked to complete an information sheet that gathered demographic information, educational background of their immediate family, and other basic information to garner a better understanding of each participant. Participants were told that they were free to ask any questions during the process, skip any questions they did not wish to answer, or add any additional information they felt was pertinent to the research. The interviews were recorded digitally, and the researcher took field notes as well. The interviews did not exceed 1 hour.

The primary data source was semi-structured interviews with each participant individually. Semi-structured interviews allowed the participants to freely express

themselves based on their experiences while allowing the researcher to follow up on emerging ideas and common themes (Creswell, 2007). Each participant was asked a set of open-ended questions (Appendix B) that allowed the participant the opportunity to express their thoughts while decreasing the impact of the researcher's attitude and previous findings (Creswell, 2007). The validity of the questions was established using the Lawshe Method which included having experts in the field evaluate the questions. The Lawshe Method required the team to rate each item based on whether the question is essential, useful, or not necessary to the study. A team of five persons, who are experienced experts with dual enrollment programs, was used for validation. Three of the team members were at the collegiate level, and two were at the high school level. All questions were rated as essential to the research being conducted.

Data Analysis

Data analysis was used to develop meaning from the interviews conducted and to establish commonality and themes responsive to the research questions (Merriam, 2009). Open coding techniques were utilized around the three main themes outlined in the literature review while the researcher remained open to additional themes that may develop. Merriam (2009) described open coding as thoroughly reading through interview transcripts and making notes, questions, comments, observations about anything relevant to the research topic.

The interview recordings and the researcher's field notes were reviewed a second time before beginning to group common themes together. This process is referred to as axial coding. Creswell (2007) defined axial coding as examining the data to specifically provide understanding of the identified coding categories that explain the central

phenomenon being researched. The themes and patterns that were gleaned from the interviews set the stage for theoretical explanations by linking the thoughts and ideas expressed from the participants. Qualitative analysis of the data started by organizing the data into categories based on the theoretical framework outlined in Chapter 2 that grounded the study. Categories included self-efficacy, sense of belonging, perceived value, and relevance. These initial categories were developed based on the literature review. However, the researcher understood that other categories could have developed throughout the study and adjusted the categories and coding as needed. The process of coding and category establishment continued until all categories were saturated and no additional coding or categories were necessary (Creswell, 2007).

The data are displayed in a table format to help the reader follow the information being presented. The data are organized by themes with a focus on key points and ideas that were discovered during the interview process. The researcher reports the main findings while including any additional information that will answer the research question.

Trustworthiness

With all research, validation is key. Rich, thick detailed descriptions ensure external validity so anyone with an interest in the data gathered will have a well-founded structure to compare (Merriam, 2009). Creswell (2009) identified three techniques to ensure reliability: (a) the researcher will provide a thorough explanation of the study, the role of the researcher, how the participants were selected, and how the data will be collected, (b) triangulation or multiple data measure will be used to ensure internal validity, and (c) a detailed account of all data collection and data analysis will be

provided in order to postulate a precise understanding of the processes used in the study. Creswell (2007) suggested eight strategies for validation: (a) a lengthy time in the field of study to check information from the researcher and participants, (b) using triangulation, (c) peer review or debriefing, (d) adjusting or developing working hypothesis in light of evidence revealed, (e) clarifying researcher bias, (f) member checking, (g) providing rich, thick, detailed descriptions of transferability, and (h) external auditing.

Creswell (2007) recommended that the researcher utilize at least two validation strategies when conducting qualitative research. Creswell (2007) also noted that validation is a distinct strength of qualitative research due to the prolonged time spent in the field, the detailed and rich descriptions, and the intimacy of the researcher with the participants of the study. This research study used rich, thick, detailed descriptions, clarify researcher bias, and member checking to establish credibility of the study. Creswell (2007) defined member checking as having the participants check to see if a true representation was made of what they said during the interview. Ethically, this allowed the participants the opportunity to review what they said and make any corrections or edit any information that made them feel uneasy. Each participant was given a copy of their interview transcript once their interview was completed.

Providing rich, detailed descriptions of all aspects of the study relating to the transition of dual enrollment students who obtained an associate degree while in high school transitioning to a 4-year institution will add to establishing transferability. Lincoln and Guba (1985) defined transferability as giving the reader enough information and evidence that the findings of the research could apply to other circumstances, settings, phases, and people. Creswell (2007) believed that providing detailed

descriptions will allow the reader to transfer the findings shared to other environments due to similar characteristics.

Researcher Bias

In order to add to the validity of the study, it is important to clarify how the researcher's prior experiences, biases, and preconceived notions may shape the interpretation and approach to the study (Creswell, 2007). The main instrument for collecting data and analysis in qualitative research is the researcher (Merriam, 2009).

The researcher has worked in GSD for the last 6 years. The population for this study is the first group of students with whom the researcher worked all 4 years as principal. The relationships gained with these students while working with them all 4 years could cause some bias as to how they would respond to the questions. To overcome this bias, the researcher sought to stay focused on the scripted interview questions to prevent trying to sway students toward my thoughts.

The researcher used the detailed transcripts to guide the categories and themes in order to prevent personal thoughts regarding their transition to impact the data.

Summary

This chapter provided a detailed overview of the methodology chosen for the study. The researcher utilized a qualitative research approach with the data collection being semi-structured interviews. The participants were identified, and data collection and analysis procedures were established. This chapter also explained the steps to ensuring the validity and reliability of the data collection and analysis process. In order to establish trustworthiness, the researcher identified biases and preconceived opinions while including member checks and rich, detailed transcripts of the interviews to further

support transparency. Chapter 4 presents the data from this research study displayed by theme. Chapter 5 further analyzes the data in relation to studies presented in Chapter 2 and presents recommendations for practice in order to further enhance college readiness.

Chapter 4: Results

The purpose of this study was to examine the effects of degree granting dual enrollment programs on transitioning to 4-year institutions. There is a plethora of information regarding dual enrollment students while in high school, but not many studies show how these programs benefit students beyond high school. This study aims to gather feedback from students who are now enrolled in 4-year institutions after completing an associate degree while in high school. The feedback gathered will be used to assist high schools with similar programs and partnering colleges with ensuring that the students are prepared as best as possible to easily transition to a 4-year institution. The information will shed light on what is working well and what improvements are needed based on the experiences of nine students from a small, rural, high-poverty high school in South Carolina.

The research question that guided this study was, “What is the impact of a degree granting dual enrollment program on a student’s transition to a 4-year institution?”

Grounded in the theoretical framework of Tinto, this study specifically desired to understand the impact of the degree granting dual enrollment program on the student’s self-efficacy, sense of belonging, and perceived value. These themes were selected, as Tinto’s works showed that students were more likely to be motivated to persist if they were confident in their ability to succeed, believed they belonged at the chosen college/university, and found value in the coursework. Interviews were utilized to garner the sentiments of the nine students, listed in Table 1, who were the first graduates of the program and have completed their first year of college. Pseudonyms were used in identifying the participants.

Table 1

Brief Introduction to Participants Using Pseudonyms

Student	Ethnicity/Gender	State of College Attendance
1. Peyton	Black Female	Georgia
2. Susan	Black Female	North/South Carolina (transferred)
3. Tracy	Black Female	South Carolina
4. Robin	Black Female	South Carolina
5. Karen	Bi-racial Female	South Carolina
6. Laura	Bi-racial Female	Utah
7. Jalen	Black Male	Georgia
8. Steve	White Male	South Carolina
9. Erica	Black Female	South Carolina

Perceived Value/Relevance

Tinto (2017) believed that students are more apt to persist and complete a college degree if they find the coursework and curriculum relevant to their degree and career pursuit. The first question asked in the interview with the students was, “In what ways did the STEM Early College Academy Program prepare you to transition to a 4-year institution?” All of the students commented that the program and the coursework were beneficial and relevant. All students commented that they felt prepared for the college workload and rigor because of the exposure to college-level courses in high school. Tracy specifically talked about mental preparation and being exposed to various components of college which gave her a foundation of what to expect with regard to balancing the workload and understanding the college schedule. Tracy commented, “I feel that STEM provided me with great advantage over my peers because I had an idea of what college entailed which made the transition easier.” Tracy continued to discuss that because she had an idea of how things worked, learning new things like how to purchase books was easier because of the knowledge gained in high school.

Mental preparation for college was discussed by a few participants. The stressors of college often overwhelm freshmen students, but with the STEM Early College Academy, students stated that they felt better equipped to manage the stress that accompanies college as they had already had an idea of what to expect. Tracy discussed feeling that she had the “mindset of an upperclassman” although this was their first year officially on a college campus. Robin discussed her mental health struggles that she had in high school. She stated, “I often felt unable to manage and even had suicidal thoughts, but I am thankful that special people like you Mrs. Swilley, Ms. _____, and Mrs. _____, recognized that I needed help and I received help.” With the help, she explained, “I gained the coping skills that I needed to be successful and they are still assisting me today.” Robin also stated that she knows that she has people she can call if she needs help and assistance.

Time management was another skill that all participants stated they gathered by participating in the STEM Early College Program and found relevant to their transition. The participants discussed how the STEM program taught them how to study. Most students made all As throughout elementary and middle school without having to study. However, when initially faced with the demands of a college class, the students learned quickly that college provided a greater challenge, and they would be required to work harder and actually study. Steve discussed that he learned how to manage his time more wisely. He stated,

That’s helped me in college as I have five classes and I know how to balance my time for all of the classes and still do some of the things that I would like to do and have free time.

Peyton stated, “I learned the importance of not procrastinating and getting it done.” She continued to discuss how she used to procrastinate and not complete her best work prior to STEM and learned that last minute work would not be acceptable for a college student.

Every participant discussed the coursework and academic rigor as valuable and relevant. Most of the students entered college as a junior and had satisfied all of their general education course requirements. Susan specifically discussed how she felt academically prepared more than her peers:

My peers, those who entered college as freshmen in 2018, struggled with academics and things like how to read a college syllabus and meet deadlines. The transition to something new is already hard but some things we did not have to deal with because of our participation in the STEM program.

Peyton echoed that same sentiment and stated, “the courses in STEM really set the foundation for everything.” Peyton continued to discuss the coursework as being relevant to her studies as an education major, specifically referencing her public speaking and English classes:

The public speaking course helped me to learn how to use less of my hands when speaking, make eye contact, address your audience, and keep your audience engaged during the presentation to ensure that they are informed when it is done. I needed English 101 and 102 courses as they taught me how to write in MLA format, which I now use for my education courses in college.

As an exercise science major, Robin discussed how she entered college with her general education courses done and most of her major courses: “I just have to complete the anatomy coursework for my major.” Several other participants commented that due to

the courses in the STEM Early College Academy Program, they were able to select a minor or even double minor and still complete college in 2 years.

Although everyone agreed that the program was valuable and relevant, there still were some issues noted. Transitioning from high school with an associate degree meant that most students were ready for major courses. Tracy stated, “the STEM program cut off two years of college, but it also cut off two years of me deciding what I want to do with my life.” Many participants stated that they were not given the opportunity to explore (the STEM program only had a science focus initially before the arts option was added in the end). Steve discussed how not having a math his senior year left him with a dilemma with course selection. Because his general math and beginning engineering math courses were completed by the end of his junior year in high school, he had the choice of only upper level major math courses or to retake a course that he had already passed in high school when he met with his college advisor. Steve stated, “The course sequence needs to be fixed to make sure students have math in their 12th grade year as I had to make a choice to retake Calculus 2 or go right in to Vector Calc or Differential Equations.” There was also some overlapping of courses noted as students took courses that could count for general education requirements but were also a major requirement and could not count twice.

Another issue noted would be transfer credits. Erica discussed having trouble getting her university to accept all of her credits from the associate degree earned in high school: “We had to get copies of exams, syllabus, and other requested documents before my school would accept my credits.” Erica wants all students to ensure that they check with their school of choice to make sure that they will accept credits or at least know in

advance what documents they want to review in order to accept credits as it was tedious trying to contact former professors over the summer. Erica was the only student in the cohort to receive resistance to accepting credits.

Overall, participants found the STEM Early College Academy Program relevant and valuable to helping them transition successfully to a 4-year institution. The coursework did not have a direct correlation to some of the participants' majors but was beneficial for general education requirements which all students are required to complete. Karen stated, "I was pushed harder than other students and faster due to this program and I found the extra preparation valuable for the college classroom setting and college in general." Most students also have minors to accompany their majors due to the coursework completed while in high school. Most commented that their minor will either support their major or was a coursework that interested them. Erica stated, "I am minoring in Middle Eastern Islamic Studies because I was enlightened from a course that I took and wanted to find out more."

The experiences that the STEM Early College Academy provided to these nine students took away the "shock factor" of college. Jalen stated, "I knew exactly what to expect from college because I had done it already." He elaborated how some students do not go to college because they do not know what to expect or if they are ready: "With being a STEM student, I knew that I was ready for college and the only new part for me would be to leave home and my home state." Eliminating the unknown for the students allowed them to transfer successfully to college based on the exposure received in the comforts of their high school and with the supports provided to them at school and at home. All students commented that the relevant and valuable experiences gained through

participation in the STEM Early College Academy Program directly prepared them for life as a college student and equipped them with the skills to be successful. They understood that there would still be struggles ahead as a college student but felt that they were either prepared to handle them or knew who to contact to get assistance.

Self-Efficacy

Self-efficacy was defined in Chapter 2 as a person's belief in his/her ability to succeed in a specific situation or at a specific task. The second question in the interview asked the student, "How did the dual enrollment program contribute to your confidence in transitioning to a 4-year institution?" Each participant had specific stories to share regarding overcoming an obstacle throughout completion of the associate degree and realizing that, in fact, they could do more than they initially thought they could. Tracy specifically discussed her senior year and being placed on academic probation by the partnering technical college: "I wanted to quit so bad because that way I could say that I quit and not that I got kicked out." She wanted to be in control of her destiny and not have a school determine that for her. However, after finding a letter from the college that talked about the Associate of Arts option, her fire was rekindled to finish. She stated, "I felt God was giving me a second chance and I could not quit." Ms. _____ evaluated the arts track and presented the new options to Mrs. Swilley and Dr. _____ and the Associate in Arts track was approved and used for those students who were not on track to successfully complete the Associate in Science. This new track included online coursework and also required the students to commit to a summer course even after participating in graduation. Tracy stated, "I knew then that if I can get through that, I can get through anything. My confidence in my ability and belief that I could do all things

through Christ was solidified at that moment.”

The students all seemed to recall a specific moment when their confidence was tested. Peyton discussed having low confidence in the areas of math and physics: “My confidence was always tested when I went to math or physics classes. I always doubted my ability in those areas and often felt defeated.” She discussed crying many nights because of calculus and the information “not clicking”: “I remember crying in your conference room a lot during my junior year Mrs. Swilley and you constantly telling me that we could vent and get it out but that we could not quit.” She learned that she had to study in order to be successful and she committed to not giving up. She elaborated on how she started to attend tutoring sessions, asked for help, studied with peers, took breaks when needed, and then came back to try again. Peyton stated, “because I did not quit, I am confident now to face rigorous math courses in college without fear because I faced my fears in high school through the STEM program.” Her confidence and belief in her ability were boosted because she attempted it and was successful in the end. “I went to college knowing that I could do it because I did it in high school,” stated Peyton.

Susan shared similar sentiments: “I wanted to quit so many times, but I did not want to disappoint myself or others.” However, she discussed that the support system at school and home gave her the will to succeed when her confidence was low:

My school family and my family at home would comfort and encourage me when I struggled or failed. The moment when I walked across the stage to the cheers of everyone, I knew I could do it because I DID IT!

Susan discussed how graduating from college while in high school and proving the naysayers wrong contributed to her confidence now: “I felt like if I could do it in high

school, I know I can do college. I now plan to pursue a master's or PhD because a bachelor's will not be enough." Susan talked about her career goals with public relations and how her belief in herself now motivates her to strive for greatness in all that she does.

Erica's belief in her abilities was challenged throughout the STEM program. Erica had always made As throughout elementary, middle, and most of high school with ease. She rarely had to study because things came to her easily. However, the rigor of the junior year of STEM tested her belief in her ability. She stated, "I had to really study for the first time EVER and I felt like a failure when I made a bad grade." Perfection was her desire, and anything less than an A was a struggle for her. "STEM normalized failure for me and taught me how to evaluate what I did wrong and try again." Erica ultimately graduated with honors from the partnering technical school but stated that the first semester of college she made a D in chemistry: "I was crushed but I knew nothing could stop me because I had done this before. The next semester I took the course over and bounced back with an A." Erica stated that perfection is no longer her goal but making sure that she has done her best at anything she undertakes: "I know that I do not have to make all As and now I can accept whatever grade I get when I know I have tried my best." She discussed recognizing her limits and being happy with maintaining a 3.0 or better to keep her scholarships and ultimately doing her best: "Participating in STEM is what allowed me to recognize my ability and know that I can do whatever I set my mind to do and that I do not have to have an A to be successful."

Senioritis in high school was discussed by some students as a struggle that they overcame. Karen stated, "I had to push through senioritis and wanting the easy course load like some of my classmates in high school." She discussed being envious at times at

how easy high school seemed for her peers who were not in STEM: “They all seemed to be chilling while I was struggling.” She laughed about that feeling now but at the time, she remembered wanting what seemed to be easy. Although Karen wanted to quit, she persevered through the hard times and attributes her confidence boost to never quitting: “I know that I can do hard things if I try. My junior and senior years were really hard but when I graduated, I knew I could do it because I did it.” Those tough times allowed Karen to recognize that she was able to do things that once seemed impossible. She discussed how she often thought about the fact that not many people could say that they had a college degree when they left high school but that she could. She described just being in awe of what she and her classmates had done from a small rural town that did not have the best academic reputation:

As I talk to my friends in college now, they are shocked at what me and my high school classmates accomplished. My high school gave me way more opportunities than many of my friends from South Carolina and other states. STEM was the confidence boost I needed.

Jalen described his struggle was online courses: “Online science classes were very difficult for me and made me want to quit.” The relationship with him and his peers, however, would not let him quit. He talked about how STEM Cohort 1 would stick together and support each other when they were struggling. He described studying sessions together and talking on the phone late nights after sporting/school events to get the necessary work completed. Online courses were harder than face-to-face coursework, as it was less personable. “You really did not get to know the professor and the professor really did not get to know you.” He described this being a difficult concept as he had

never taken a course without a teacher physically present in front of him. With more colleges using online courses to fulfill degree requirements, Jalen stated that he was thankful for his first opportunity experiencing online courses to be in a supportive environment with the support of his peers and family: “I knew that if I could get over that, then everything else would be easier. After successfully completing that class, I knew that I could do anything.”

Conversely, some students described moments when their confidence was destroyed during the STEM program. Several students discussed comments of teachers and professors that contributed to low confidence. The students who completed the Associate in Arts degree discussed how they had a teacher who stated that they should not be in STEM if they are going to get an alternate track. They stated that this teacher often told them that they were not as smart as they were said to be, and they should not be classified as a STEM student. Peyton, Robin, and Erica all stated that this teacher made them want to quit, damaged their confidence, and made them question their ability to be successful in STEM. Peyton stated, “I felt less than” because she attained an Associate in Arts and not an Associate in Science. When asked why they did not tell this while in school, they all stated that they thought it was a part of the process; and at the time, they felt it was true of their ability. The students commented when they saw that their degree afforded them with the same outcomes as their peers with an Associate in Science, they again were proud of themselves and did not let the comments of some ruin their accomplishment.

All nine students left high school with confidence in their ability to complete a college degree at a 4-year institution because they had already gained one degree. Every

student used their struggles and experiences to motivate them to continue to strive and set new goals to attain. Most have goals beyond a bachelor's degree and are excited about the opportunities ahead of them. Their belief in themselves was strengthened through adversity and overcoming obstacles that they faced while still in a familiar environment. Every student stated that they are glad they experienced their first college struggles in high school so that they were prepared for what was to come. Steve commented, "at the very least, I was given an idea of what college would be like and that made the transition a little easier." As a mechanical engineering major, he recognized that he would have many new struggles but knows that he will be able to navigate them better because of his experiences with the STEM Early College Academy. Tracy commented, "my work ethic is different because of my experiences and knowing that I can do anything I set my mind to do." Overall, every student felt that their self-efficacy was increased by their participation in a degree granting dual enrollment program.

Sense of Belonging

Maslow's hierarchy of needs, discussed in Chapter 2, tells of the need for humans to fit in or belong and how humans hunger for relationships in order to thrive. The third question of the interview asked the students, "How did dual enrollment participation and the relationships and involvement in high school help you with forming relationships with faculty, staff, and peers and getting involved at the 4-year institution?" This question was often broken down with each relationship being discussed separately and then campus involvement described. All of the students immediately commented about the differences between college professors and their public school teachers. Several of the college professors were first time teachers of high school students and so adjustments

were made on both sides because of assumptions.

Relationships with Professors and College Staff

Communicating effectively with college professors and staff was a major asset of participation in the STEM Early College Academy. Peyton described learning how to appropriately address professors: “I learned quickly to address my professors with Dr. if they had earned their doctorate because they deserved, and some demanded, to be addressed that way.” She compared that experience to having teachers in high school who had their doctorate but did not make you say it when you addressed them or never even knowing that they had the credential. Tracy discussed the professionalism required when speaking to professors or college staff:

You knew you had to approach them with respect because they were used to dealing with older kids and adults. Although I never disrespected my regular teachers, I approached my professors differently because I was expected to be a college student.

Susan discussed maturity as a major factor with relationships with college professors: “These professors are here to teach and as a college student I was expected to be ready to learn. College professors are not going to address behaviors that our regular teachers in regular high school classes did.” Susan described some of the students in her college classes now being asked to leave for talking and being disruptive:

I find that I gained the maturity during high school to be quiet even if I do not want to be in the class or if I did not understand what was happening. Some students now are just rude, and professors have zero tolerance for it.

As a college student in high school, Susan stated that she matured, and that maturity

helped her nurture a conducive relationship with professors.

Other staff persons were mentioned by Susan as assisting with belongingness:

“The relationships with Ms. _____, STEM Advisor, and Ms. _____, Math Professor/High School Teacher, also helped with transition. Both prepared us by giving us various situations and scenarios and telling us how to handle them based on their experiences.” Susan described these tidbits of information made the transition to college better because their stories enlightened them about the college experience on the campus. Erica also discussed the times with Ms. _____ and Dr. _____ as helpful: “They both taught me that it was okay to ask professors for help. I learned how to email questions and to use office hours to get the help that I needed.” Several students talked about using the syllabus to know the professors’ office hours and the best way and times to contact the professors. Steve commented, “I learned to always ask my professors their preference for contact and to look at the syllabus for best times.”

The students related experiences with professors in high school to some of their professors now based on their mannerisms. Tracy stated, “I have a Spanish professor that reminded me of my art professor from high school. Those experiences from high school helped me with establishing a relationship with my professor now.” Laura stated, “I am not scared or intimidated to talk to professors or ask for help because of my experiences in high school. I used to be afraid to talk to them, but I am not anymore.” Jalen stated, “I learned that it is easier to talk to a professor than to struggle.”

Some students discussed that being in college in high school still protected them from some of the negative aspects of professors because the support overshadowed the negative. Susan commented, “some professors do not care if you learn, come to class, or

do your work. This was a different experience as I never experienced that in high school and our professors/teachers would always check on us.” At bigger universities, you do not even get to build a relationship with the professor, and the feel of support is not as genuine. Steve stated,

I do not get to ask my professors now for help. I have to talk to the student assistants to get help and that was a big adjustment. Being in college in high school protected us from a lot of the feelings of being alone.

Steve continued by explaining that he wants to make sure that future STEM students know how to survive without everyone being supportive: “They must know how to survive and use the resources gained in high school to compensate when the environment is different in college because it will be.” The experiences of all students with college staff and professors proved beneficial in their transition to a 4-year institution.

Relationships with Peers

STEM Cohort 1 students were often described as the “crew” in high school. They were always seen together and depended on each other throughout high school. All students described the relationship with their teammates as essential to their success. Peyton stated, “we were a unit, and nothing could come between us. We did everything together and encouraged each other and depended on each other throughout high school and even now.” Tracy said, “STEM 1 moved as a group and our support of each other was unmatched.” Jalen described learning to work with others: “We worked together on everything and I learned how to collaborate and embrace the ideas of others. This has been very beneficial as a dance major as I have to collaborate and choreograph with others daily.” All nine agreed that they felt that they belonged with their STEM 1 peers

and felt supported.

Conversely, because STEM 1 was always together since seventh grade, they felt that they also lost the ability to collaborate with those outside of STEM. Laura commented, “I had to learn how to make friends again and how to talk to other people because we were always together. I wish we had some classes with other people during high school.” Tracy echoed this sentiment when she stated, “I automatically had a group of people with me who had aligned goals. I now have to be intentional about surrounding myself with those who have the same goals as I do.” Several students commented regarding some students being in college for the wrong reasons and not understanding that college life and partying are not the main priorities. Peyton stated,

I was used to my STEM Family and knowing that we could have fun, but we had to get our work done. I had to learn to reestablish that support system with education majors who were just as focused as I was and that was difficult because the group was not made for me.

All nine students discussed missing their STEM family and the major adjustment with having two peer groups to now balance. The students described having the peer groups of those entering college in 2018 and the peer group of second- and third-year students as they entered college as sophomores or juniors and not freshmen. Jalen commented, “my peers were amazed and thought I was really smart.” Several others commented that their peers wanted to know how they earned a college degree in high school and some even wished they were afforded the same opportunities from their high school.

Several of the nine students talked about being prepared for the negativity because of the treatment by their peers from high school because of being in STEM. Peyton

stated, “we were hated for being in STEM by some of our high school peers because they said we thought we were better than them and we did not.” Karen stated, “I often wished my classmates from high school would know how hard we worked and would have celebrated with us instead of being mad at us.” The feeling of being an outcast among their peers in high school prepared them for some of the negativity from others in college, although most had positive interactions in college. Peyton said,

I remember my high school classmates rolling their eyes when we were recognized during graduation practice. This prepared me for some of the negative comments I received from peers in college because I entered college after them and would graduate before them.

Most of the nine students felt their accomplishments were embraced better by their peers in college than their peers in high school.

All nine students agreed that they had to find a support group once they matriculated to their college campus. Susan discussed her transfer from a university in North Carolina back to a university in South Carolina: “Although I felt I fit in better in North Carolina, my degree program and cost of tuition made the university in South Carolina a better fit financially for me and my family.” She discussed being a minority at the new university as one of the major reasons she did not feel like she fit in: “I had to find my group to fit in as minorities in my major are underrepresented at my new school. I am adjusting better since I have built those relationships.” All students agreed that relationships matter and are key to having and maintaining a sense of belonging on campus.

Campus Involvement

All nine students are actively involved on campus. The students all commented that their reason for being involved in college is different from when they were in high school. Steve stated, "I was told to be involved in a lot of things in high school to have a good resume and become well-rounded. In college, I have learned to pick what I wanted to do based on my future." Others agreed and commented about joining organizations and groups that were going to provide networking opportunities. Peyton said, "I choose to belong to organizations that match my core values and will help build my resume for education." Susan agreed and stated, "my organizations that I belong to on campus are aligned to my career path and provide networking opportunities to help me with getting a job." Tracy stated, "I joined organizations that will afford me the opportunity to travel. Since my opportunity from high school to travel abroad, I want to do more of that while in college to explore the world." All students feel that their involvement in college is purposeful and they feel that high school involvement set the foundation.

Two students felt that they had to make themselves belong in high school but now have found their niche in college. The other seven students were involved in sports or other clubs that fulfilled them or made them fit in with the general population in high school. Robin stated, "In high school, I made myself belong but now I feel right where I am, and I can be me." Laura stated, "I have now branched out in college and have better experiences because of it. Going to a college based on my religious beliefs gave me an automatic sense of belonging that boosted my self-esteem to get active on campus." All nine students felt that they were at a college or university that made them feel like they belonged and were immediately happy there or found an organization or group that made

them happy. Peyton stated, “I am at my university because they take care of me and I feel I belong there. I encourage everyone to visit their college to make sure it feels right.” All of the students agreed that in order to stay at a college or university and adjust to being away from home, they must feel a sense of belonging. Learning to be involved in high school helped the students seek to be involved in college.

Overall, the students seemed to gain a frame of reference to belongingness based on the experience gathered in high school. Recognizing the need to communicate effectively with professors and college staff, build and maintain a support group, and get involved on campus helped the students to fit in and ultimately be able to describe their college experiences with belonging as positive.

Additional Thoughts

The final question of the interview allowed the students to share anything else about their transition to a 4-year institution. The final question specifically asked, “Is there anything else you would like to share about your transition to your 4-year institution after being a member of the dual enrollment program and graduating from high school with an associate degree?” All nine students agreed that they were thankful for the opportunities afforded to them by participating in the STEM Early College Academy Program in high school. They believed that the sacrifices they made were all worth it in the end and helped them to develop and become better students who were ready for college. All of the students felt that their biggest transition was leaving home for the first time. “Getting accustomed to being away from home was the hardest for me,” commented Tracey. “Leaving the people who care for you the most was eye opening,” Peyton said. Peyton also shared that moving to another state was really a culture shock

coming from a small rural town: “The city was a culture shock to me. I saw so much that I had never seen before and at times I was afraid.” The crime near and around her school, one making national news, almost made her return home; but she persevered and is glad she did.

Academic advisement was a weakness of the STEM program. All of the students commented about having to figure out their schedule or being advised wrong. Peyton stated,

I was the first person my university ever enrolled as a first-year student with the amount of credits I had. My schedule was always given to me in the STEM program in high school, so I did not know how to properly select courses.

Because I was not advised properly and because I did not know what to select myself, I have to stay 3 years because I have to take an additional practicum when I could have been done in 2 years. Luckily, I love my school.

Peyton was not alone with advisement issues, as Karen talked about the same thing: “I did not know which classes to select and how to read the course catalog. I had to learn how to use a program of study to navigate my degree requirements.” Susan also stated that “Advisement can be hit or miss. You must check behind your advisor to ensure you are following the sequence of courses correctly.” The students understand now that they have to be invested in ensuring that they are taking the correct courses, as now they are paying for college unlike when they were in high school and things were free. They have also learned that they do not have the supports they had in high school and had to adapt to independence immediately.

Financial aid was another topic shared by some of the students. “I had help in

high school with completing the financial aid process but doing it on my own was stressful,” commented Karen: “My mom couldn’t really help me and so I had to figure it out.” Karen wants future students to know it is important to pay attention to the process in high school so that you can do it on your own in college. “Everything was paid for in high school, so I took things for granted. Now I make sure I keep my GPA up to keep my scholarships because I see how much things cost,” commented Erica. All nine students believed that students should be exposed to more of the financial obligations of college. Steve stated, “STEM students should see how much books cost so that they are not shocked in college.” None of them realized how expensive college was and that made them even more grateful for their high school experience afforded to them.

Other ideas shared included being prepared for cultures other than your own. Laura said, “I learned tolerance of others. Racism truly does exist, and you have to be aware of different types of people.” Karen described her experiences as a biracial student and not being accepted by either race in college: “It hurt, but I learned that I did not have to be accepted by everyone and that I was not going to let their hatred change me.” Karen said she found her niche on campus and was ultimately happy with her college choice. She encouraged others to make sure they picked the right college for their needs: “If you want a Historically Black College or University (HBCU) experience then go to a HBCU but don’t try to find that same experience at a Predominately White Institution (PWI) because you will not.” Selecting the right college is a big deal and should not be taken lightly. This will become your home away from home so choosing wisely was an adamant recommendation by all students.

Entering college as an upperclassman means that you take courses with second-

and sometimes third-year students. Steve stated, “College professors have different expectations for upperclassmen.” Steve continued to discuss that college professors who are teaching your major courses think you have already had the time to adjust to the university and expect that you perform at the level of a third-year student when you are actually new to the campus. Steve continued to say, “in high school you had mentors, parents, and teachers that gave you reminders, but now you are truly on your own.” Adjusting to the level of rigor and expectations of a junior in college came with trials but overall the students felt they were prepared.

All nine students’ final thoughts included being thankful for the experiences they were given as a member of the STEM Early College Academy. Tracey stated, “I can’t thank the district enough for this opportunity.” The opportunity to leave high school with an associate degree was a daunting task, but the rewards were worth the sacrifice. “I know that I was ready for college because of the STEM program,” stated Jalen. He continued by saying, “I encourage everyone I can to participate.” All students told of how they encourage their family members in the area to enroll in STEM when given the chance. Erica stated, “participating in STEM was one of the best decisions I ever made.”

Summary

This chapter presented the data received from students during the open-ended interview questions regarding their transition to a 4-year institution after graduating with an associate degree in high school. The students shared their experiences and preparation for college based on the themes identified in Chapter 2. In Chapter 2, the theoretical framework and literature revealed that students were more likely to be retained and graduate from college if they found the coursework to be relevant, had belief in their

ability to succeed, and had a sense of belonging on the campus of their choice. All nine of the participants in this study had positive experiences based on participation in the dual enrollment program in high school and are continuing to have positive experiences as they have transitioned to the 4-year college or institution of their choice.

Although most of the experiences shared were positive, the students did share some adverse situations that happened in high school and as they transitioned to college. The students were also asked an additional question that allowed them to share any information they wanted to regarding their experiences as a dual enrollment student transitioning to a 4-year institution. Based on the experiences shared, Chapter 5 presents an analysis of the findings to the research question as it relates to the theoretical framework as well as any limitations recognized and recommendations for future research.

Chapter 5: Discussion

High schools all across this country have the daunting task of ensuring that students not only graduate but are college and/or career ready. Schools are given accountability measures that have been designated to determine if a student has met the standard to be deemed college and career ready. Many high schools have elected to partner with their local technical/community colleges to offer dual enrollment opportunities to their students to meet college readiness standards. This study sought to answer the question, “What is the impact of a degree granting dual enrollment program on a student’s transition to a 4-year institution?”

The purpose of this study was to examine the transition of dual enrollment students graduating with an associate degree and high school diploma from a rural high school to a 4-year college. Oftentimes, research has studied the impact of dual enrollment programs for students while in high school, but there is limited research to discuss postsecondary results. Although dual enrollment students take college courses while in high school, the transition to college entails more than the academic demands of rigorous coursework. This study sheds light on the emotional, social, and academic factors that accompany students as they transition into a 4-year institution. The information gathered during the study can inform partnering community/technical colleges about whether or not the coursework of their degree programs prepares students to transition into 4-year institutions. This qualitative study was designed to get feedback from nine students who participated in a degree granting dual enrollment program and who had completed 1 year of college.

Nine students who were members of the Class of 2018 participated in this study.

These students all graduated with a high school diploma and an Associate Degree in Science or Arts. The participants, using their pseudonyms, are described in further detail in Table 2.

Table 2

Detailed Description of Participants Using Pseudonyms

Participant	HS GPA	1 st Year College GPA	SAT/ACT Score	1 st Generation College Student	1 or 2 Parent Household	Major/Minor
Peyton	3.63	3.6	1090/19	Yes	Divorced	Early Childhood Education
Susan	3.96	3.2	1050/23	No	2 Parent	Public Relations
Tracy	4.56	3.32	1040/23	No	2 Parent	Political Science
Robin	4.37	3.21	1300/20	Yes	Mother only	Exercise Science
Karen	4.49	4.0	1200/27	No	Mother only	Communication/ Public Relations
Laura	3.92	3.43	1090/22	No	Mother deceased/ lives with dad	Sociology
Jalen	4.02	3.26	1010/23	Yes	Divorced/live with dad	Dance
Steve	4.48	3.216	1220/26	Yes	Both	Mechanical Engineering
Erica	4.86	3.108	1260/24	No	Divorced/lives with mom	Integrative Biology/ Pre-PA

There are a number of predictors of college success including but not limited to academic performance in high school, SAT or ACT score, and participation in dual enrollment courses. Other factors include familial environment, socioeconomic status, and life experiences. All participants agreed that they felt prepared for college because of their participation in the dual enrollment program. Most participants did not remember their SAT or ACT scores and stated that they only took those tests for college acceptance or scholarship requirements. Tracy emphatically stated, “participation in college courses

in high school let me know that I was ready for college and prepared me for the journey ahead.” Other participants echoed those same sentiments.

Discussion Regarding Findings

This study was grounded theoretically in the work of Tinto (2017). Tinto (1993) identified three factors that cause students to leave college prior to completing their degree: challenges with academics, internal conflicts concerning educational and occupational goals, and their failure to become or remain involved in the institution’s intellectual and social offerings. Tinto (2017) stated three factors that are significant to student motivation are student self-efficacy, their sense of belonging, and their perceived value of the curriculum. The open-ended interview questions, listed in Appendix B, were developed to address these areas. The purpose of this qualitative study was to learn about the experiences of dual enrollment students as they transitioned from high school to 4-year institutions. The researcher desired to understand their academic, social, and emotional preparedness based on already completing an associate degree while in high school.

Analysis of Findings

The findings of this study supported the findings of the other studies referenced in Chapter 2. The first interview question focused on perception of value of the curriculum and relevance of participation in the dual enrollment program to the transition to college. Rosenbaum et al. (2016) conducted a study to see if college met student expectations. The findings in that study revealed frustrations with timely degree completion, goal setting, and confusion regarding requirements. In the interview with the nine students, there was some discussion of these frustrations and transitioning to college. Peyton

discussed how poor academic advisement led to her having to stay at her college longer than necessary due to poor advising from the university: “I now have to stay one additional semester for student teaching.” Other students noted that they will be graduating in 2 years but discussed the rigor of jumping straight into major courses. Steve stated, “my professors expected me to be adjusted to college life based on my academic standing. I was able to maintain though because of my experiences in dual enrollment courses in high school.” All students wished that they had more experiences with the advisement process and selecting courses. Karen stated, “Selecting courses was new for me and my mom could not help me because she did not go to college. I figured it out but wished that I had more experience with it in high school.” The students recommended that dual enrollment students be included in the advisement process and not just given courses.

All nine students felt that completing their associate degree in high school was valuable to them and assisted them in transitioning to their 4-year institution. Jalen commented, “All my general education courses were completed with the exception of History and so I could focus on my major.” This aligned with research conducted by Walters and Bockorny (2018) which concluded that the business majors found general education courses to be important, useful, valuable, and beneficial based on the highest mean values. Being able to get right into their major courses assisted the students with feeling like the dual enrollment program was relevant to their career goals. However, Tracy also felt shortchanged regarding career exploration: “I immediately saw the relevance in my courses but coming in with so many credits also took time away from me trying to figure out life and what I wanted to do.” The students all felt prepared for the

transition to college because of the experiences from participating in the dual enrollment program in high school. Learning how to read a syllabus, talk to professors, be prepared for classes, write a paper, use time management, and study were some of the skills listed by participants as what made the dual enrollment program relevant and of value to their transition to college.

The second interview question focused on self-efficacy. “Self-efficacy is typically defined as a person’s belief in his/her ability to succeed in a specific situation or at a specific task” (Bandura, 1977, 1993, p. 192). Ozmun (2013) concluded that students who participated in dual enrollment programs were ready for college and transitioned easily because they possessed the necessary belief in their ability. The data showed that the students did not possess high levels of self-efficacy prior to enrollment in dual credit courses, which led researchers to conclude that the ingredients for college success lay in their participation in dual enrollment programs more than the researchers originally expected. The findings of this research are congruent with the nine students in this study, as they all agreed that they believed they could complete a college degree because they had already done it before. Peyton stated, “I went to college knowing that I could do it because I did it in high school.” All nine students were able to share specific memories of when their belief in their ability was tested and improved because of participation in the dual enrollment program.

Coffman and Gilligan (2002/2003) looked at the relationship of self-efficacy as a factor of student satisfaction with life as a first-year college student. Self-efficacy had a positive correlation to a higher satisfaction of life for the 94 college students surveyed.

Data collected from all students overwhelmingly support that self-efficacy has a direct impact on a student transitioning successfully to college. All students know that they can be successful in college, even if they face an obstacle. Erica was a perfectionist before participating in the dual enrollment program. Her belief in her ability was tested. She stated, “I had to really study for the first time EVER and I felt like a failure when I made a bad grade.” Erica ultimately graduated with honors from the partnering technical school but stated that the first semester of college she made a D in Chemistry: “I was crushed but I knew nothing could stop me because I had done this before. The next semester I took the course over and bounced back with an A.” She discussed recognizing her limits and being happy with maintaining a 3.0 or better to keep her scholarships and ultimately doing her best. “Participating in STEM is what allowed me to recognize my ability and know that I can do whatever I set my mind to do and that I do not have to have an A to be successful.” All nine students could describe a time in high school where their belief in their ability was questioned; but because they persevered, they were prepared to face any task in college and know that they were equipped to succeed.

The third question focused on a sense of belonging. Maslow (1943) asserted that an individual who has an unfilled need to fit in “will hunger for affectionate relations with people in general, namely for a place in his group, and ... strive with great intensity to achieve this goal” (p. 381). Goodenow (1993) defined student sense of belonging as “students’ sense of being accepted, valued, included, and encouraged by others (teachers and peers) in the department setting and of feeling oneself to be an important part of the life and activity of the department” (p. 25). The nine students all felt a sense of belonging in the dual enrollment program in high school and at their current college

campuses. The students discussed learning how to properly address and communicate with professors, appropriate behaviors in classes, and how to collaborate with their peers.

The students also discussed the feeling of not being valued or accepted by some teachers and peers in high school. Peyton stated, “we were hated for being in STEM by some of our high school peers because they said we thought we were better than them and we did not.” Karen stated, “I often wished my classmates from high school would know how hard we worked and would have celebrated with us instead of being mad at us.” The feeling of being an outcast among their peers in high school prepared them for some of the negativity from others in college, although most had positive interactions in college. The students also told stories about certain teachers saying that they were not “STEM” material when they were not successful on exams or had to pursue an Associate of Arts Degree instead of an Associate of Science Degree. Peyton stated, “that teacher almost made me give up because I did not feel like I belonged in STEM.” The sense of belonging with her peers and other members of the staff, however, helped her to stick with the program and not quit.

Possessing a sense of belonging is not optional; rather, it is fundamental to the success of the human being in that particular setting. Dunbar and Carter (2017) defined “place belongingness” as an attachment of individual experiences to a particular place and perception as being an integral part of the place. All students felt that they belonged on the college campus they currently attended. All nine students described their campus involvement. Steve stated, “I was told to be involved in a lot of things in high school to have a good resume and become well-rounded. In college, I have learned to pick what I wanted to do based on my future.” Susan agreed and stated, “my organizations that I

belong to on campus are aligned to my career path and provide networking opportunities to help me with getting a job.” The findings from Craggs and Kelly (2017) also disclosed that having the ability to participate in extracurricular activities and facilitation of peer relationships positively correlated to student feelings of belonging. All of the nine students felt that they were at a college or university that made them feel that they belonged and were immediately happy there or found an organization or group that made them happy.

The final interview question allowed the students to be able to share additional thoughts about their transition to college after participating in a dual enrollment program. The students shared feedback regarding leaving home, academic advisement, the financial aid process, tolerance of other cultures, and adjusting to the rigors of college as an upperclassman. All nine students’ final thoughts included being thankful for the experiences they were given as a member of the STEM Early College Academy. Tracey stated, “I can’t thank the district enough for this opportunity.” The opportunity to leave high school with an associate degree was a daunting task, but the rewards were worth the sacrifice. “I know that I was ready for college because of the STEM program,” stated Jalen. He continued by saying, “I encourage everyone I can to participate.” All students told of how they encourage their family members in the area to enroll in STEM when given the chance. Erica stated, “participating in STEM was one of the best decisions I ever made.”

Based on the review of the literature and the feedback from the student interviews, participation in a degree granting program in high school has a positive impact on a student transitions to a 4-year institution. Although the students’ experiences

were not free from negativity, their overall experience and benefits were positive. Based on Tinto's (2017) model, all nine students should continue with college and complete their degree because they possess a belief in their ability and sense of belonging and find value and relevance in their studies.

Implications for Practice

College and career readiness is the expectation set for students in the United States. "The goal for America's educational system is clear: Every student should graduate from high school ready for college or a career" (A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act, 2011, p. 4). College readiness indicates that students enrolling in college from high school are prepared for the rigor of such courses and do not need remedial courses. Dual enrollment is one of the strategies to provide such rigor. As cited by Kilgore and Wagner (2016), "Student participation in dual enrollment in the United States increased approximately 75% from 2002 to 2011, from approximately 1.16 million to 2.04 million students (Marken, Gray, Lewis 2013; Waits, Setzer and Lewis 2005)" (p. 57). The data collected have implications for high schools with dual enrollment programs and their partnering community/technical colleges.

There are several academic measures to assess student readiness for college. The SAT and ACT are administered to students with specific scores qualifying students to be college ready. According to the South Carolina Education Oversight Committee (2018), a student is college ready with a composite score of 20 or higher on the ACT or a 1020 or higher on the SAT. This score shows that the students are academically prepared for college, but the other factors of college readiness are not assessed. The nine students in

this study did not recall their SAT or ACT scores without looking them up, and all agreed that their college readiness had nothing to do with a score on the tests. These students agreed that the lessons learned by participating in dual enrollment courses in high school directly impacted their ability to succeed. These practical experiences with college while still being supported by school support staff and their families made the difference for these students with college readiness.

The following implications for practice were derived from this study:

- Dual enrollment opportunities should be provided to all students despite socioeconomic status. All students, regardless of postsecondary plans, can benefit from participation in dual enrollment opportunities. Karp et al. (2007) found that participation in dual enrollment programs is positively related to college GPA, persistence, and degree attainment. Findings from this study also revealed that all students benefitted from participation in dual enrollment in high school, and dual enrollment served as an effective tool for students to be college ready academically, emotionally, and socially upon graduating from high school.
- High schools and partnering community/technical colleges should provide preparatory sessions for students to help them transition to college courses. Expectations for college students should be identified to students. Students should be able to gain a sense of belonging, identify personal relevance, and believe that they are equipped to be successful upon completion of the sessions. Students should know supports provided to them and opportunities for career exploration.

- High schools and their partnering community/technical colleges should involve the students in the course selection and advisement process for degree completion. Students commented that they were unfamiliar with the advisement process because courses were selected for them with little or no input from the student. Conley (2012) suggested that students understand how to select appropriate courses in high school to prepare them for their college program; have a knowledge of financial requirements; be focused on a career pathway or major, college, or workforce norms; and know when and how to self-advocate. Pathways can be developed for students by allowing students to select courses or see what courses are needed for degree completion to help make certain that students understand the process when they leave high school.
- Students should also be informed about the financial cost associated with attending college. High schools and partnering colleges should provide opportunities for students to be exposed to the financial aid process and completion of the Free Application for Federal Student Aid (FAFSA). Several of the students commented that they needed more experiences with the financial aid process; understanding the different types of loans, grants, and work study options. A number of states and districts have made the dual enrollment programs free for students with programs such as lottery tuition assistance, leaving students with no real knowledge of the expense of college. Financial aid sessions and workshops with partnering colleges should be offered to students participating in dual enrollment programs to ensure

students are prepared for the financial costs of college.

- Degree granting dual enrollment programs should constantly review course sequencing as students are not only meeting the requirements of a degree but also a high school diploma. Students should be exposed to all core subject areas each year to ensure the readiness in all areas. Steve commented that he did not have math his final year of high school. This negatively impacted him as he was immediately placed in rigorous math courses as a mechanical engineering major. Schools must ensure that critical areas for students are not overlooked during the advisement process even if they have met the requirements needed for graduation.
- The emotional and social aspects of college are vital to student success. Schools must ensure that students are educated about selecting a college that will meet their needs socially and emotionally. Having a sense of belonging on a college campus is a necessity as is shown in Maslow's (1943) Hierarchy of Needs. Teaching students to be well-rounded by being involved in high school activities while participating in dual enrollment translated to campus involvement for the nine students in this study. The students also commented on their ability to build relationships with peers and faculty to increase their sense of belonging on campus. Building relationships is vital to student success as revealed in this study. Students should not be isolated to only certain groups of students, so they learn how to garner new relationships. The students studied commented that they had to learn to make friends after being with the same students since seventh grade. Isolation can breed intolerance

and negatively impact the transition to college.

Recommendations for Further Research

This study examined the impact of early college programs on transitioning to 4-year institutions for nine students. This study focused on the transition to a 4-year institution and completion of year one for nine students who graduated high school with an Associate Degree in Arts or Science. This study could be expanded by future researchers in other districts and states. Recommendations for further research include the following:

1. Further studies can include all dual enrollment students even if they did not complete an associate degree. This study was limited to only the students who earned an associate degree. The impact of dual enrollment courses for all students could be beneficial to study.
2. Further studies could include other members of the Class of 2018 who transitioned to college to see if they successfully transitioned and completed year one successfully without participation in dual enrollment opportunities. This study is limited to the perspectives of those who participated in the program and not inclusive of all students who graduated high school and enrolled in college.
3. Further studies could include more geographical areas in South Carolina or other states. This study was only focused on one small rural district in South Carolina.
4. Further studies could examine college professors as first time dual enrollment instructors and their experiences with dual enrollment students. This study

only focused on the impact based on the feedback from students. First time college professors could share their perceptions regarding working with high school students and preparing them for college.

5. Further studies could examine the impact of other academic measures of college readiness in comparison to dual enrollment participation. This study focused on degree granting dual enrollment programs, but other measures are used to predict college readiness and could be investigated for impact on transition.
6. Further studies could investigate how college professors at 4-year colleges/universities describe the readiness of dual enrollment completers. This study focused on the readiness for college/university from the perspective of the dual enrollment student.
7. Further studies could investigate dual enrollment programs in high-poverty settings versus more affluent communities. This study focused on a rural, high poverty district with one high school.
8. Further studies could investigate the completion rate of college degrees for students who participated in dual enrollment programs. This study focused on the transition to college and the completion of the first year only.

Limitations/Delimitations of the Study

As with all research, this study has its limitations. This study purposely focused on the nine graduates of the Class of 2018 from the only high school in Griffin School District who graduated from high school with an Associate Degree in Science or Arts and matriculated to a 4-year institution. This study did not include other students who

graduated with college credits but not an associate degree from the Class of 2018 of the high school in GSD and entered a 4-year institution; thus, the findings of this study are not generalizable to all students who take college courses in high school and attend a 4-year institution. Generalization is not the ultimate goal in qualitative inquiry, as concluded by Patton (2002). Patton stated that the purpose of qualitative research is to provide multiple viewpoints so the results can be attributed back to a framework that will allow generalizations to be made. This study provided a deeper look into the experiences of this student population.

The setting of this study is a limitation, as the study was conducted in a rural, high poverty school district with one high school. This study only included students who were members of the Class of 2018 and were participants in the degree granting dual enrollment program. This study did not include students from other schools or districts. Due to the setting, only nine students met the requirement for the study. Open-ended interview questions were used to mediate restrictions of a small population. Semi-structured interviews allowed the participants to freely express themselves based on their experiences while allowing the researcher to follow up on emerging ideas and common themes (Creswell, 2007). Providing rich, detailed descriptions of all aspects of the study relating to the transition of dual enrollment students who obtained an associate degree while in high school transitioning to a 4-year institution will add to establishing transferability. Lincoln and Guba (1985) defined transferability as giving the reader enough information and evidence that the findings of the research could apply to other circumstances, settings, phases, and people.

The researcher recognizes that there could be bias because the researcher was the

former principal of the students and has established relationships. To overcome this bias, the researcher used scripted interview questions to prevent trying to sway student thoughts. The researcher used the detailed transcripts to guide the categories and themes in order to prevent personal thoughts regarding student transitions to 4-year institutions impacting the data.

The researcher acknowledges the fact that she is a novice researcher. Prior to this dissertation, the researcher has not conducted independent research. The coursework the researcher took and the review of the literature provided the researcher with the basis to conduct a thorough and well-prepared research study. With the guidance of other researchers, the researcher was prepared to conduct the data collection and analyze the data. The researcher used the qualitative research methods to garner feedback from the students as to not limit information gathered. The researcher also gave the students the opportunity to share any additional thoughts as to not control the feedback given.

Conclusion

This study fills in a gap in the literature on degree granting dual enrollment programs in a rural school district and how students transition to college. Specifically, the feedback demonstrated an overall positive impact of the degree granting dual enrollment program and transitioning to a 4-year institution successfully. All students successfully completed year one in good academic standing and found their niche on campus. Student feedback is aligned to benefits of dual enrollment programs as outlined by other studies. Bibo (2016) explained that research and experience show that students who are in dual enrollment programs are more likely to graduate high school, enroll in college, and persist in college. “By spending time in a college classroom environment

while still in the relatively safe place of home and high school, students gain a real understanding of what is required to succeed” (Bibo, 2016, p. 21). The nine students in this study echoed these sentiments in their reflections on their experiences with their degree granting dual enrollment process.

References

- ACT. (2012). Catching up to college and career readiness. Retrieved from <https://www.act.org/content/dam/act/unsecured/documents/Catching-Up-To-College-and-Career-Readiness.pdf>
- Allen, D. (2010). *A comprehensive literature review & bibliography*. New York, NY: CUNY Collaborative Programs.
- Allen, D., & Dadgar M. (2012). Does dual enrollment increase students' success in college? Evidence from a quasi-experimental analysis of dual enrollment in New York City. *New Directions for Higher Education*, 158, 11-19. <https://doi.org.ezproxy.gardner-webb.edu/10.1002/he.20010>
- Allen, J., & Radunzel, J. (2017). What are the ACT college readiness benchmarks? *ACT Research & Policy*, 1-5. Retrieved from <https://www.act.org/content/dam/act/unsecured/documents/pdfs/R1670-college-readiness-benchmarks-2017-11.pdf>
- An, B. (2012). The impact of dual enrollment on college degree attainment: Do low-SES student benefit? *Educational Evaluation and Policy Analysis*, 35(1), 57-75. doi:10.3102/0162373712461933
- Balonen-Rosen, P. (2019, April 29). College credit in high school is all the rage, but what's the payoff? Retrieved June 1, 2019, from <https://www.marketplace.org/2018/01/19/college-credit-high-school-all-rage-whats-payoff/>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. doi:10.1037//0033-295x.84.2.191

- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148. doi:10.1207/s15326985ep2802_3
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, 9-49. Retrieved from https://www-jstor-org.ezproxy.gardner-webb.edu/stable/1829103?pq-origsite=summon&seq=1#metadata_info_tab_contents
- Bibo, E. W. (2016). Dual enrollment: A tool to raise college preparedness. *School Administrator*, 73(7), 21. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/1812612043?accountid=11041>
- A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act. (2011, May 27). Retrieved June 1, 2019, from https://www2.ed.gov/policy/elsec/leg/blueprint/publication_pg4.html
- Chemers, M. M., Hu, L.-T., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55–64. doi:10.1037//0022-0663.93.1.55
- Chen, X. (2016). *Remedial course taking at U.S. Public 2- and 4-Year Institutions: Scope, experiences, and outcomes. Statistical Analysis Report* (pp. 1–162). Jessup, MD: National Center for Education Statistics.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62-83. <https://doi.org/10.1177/109442810141004>

- Coffman, D. L., & Gilligan, T. D. (2002/2003). Social support, stress, self-efficacy: Effects on students' satisfaction. *Journal of College Student Retention: Research, Theory, & Practice*, 4(1), 53-66. <https://doi.org/10.2190/BV7X-F87X-2MXL-2B3L>
- Conley, D. T. (2008). Rethinking college readiness. *The New England Journal of Higher Education*, 22(5), 24-26. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/196922620?accountid=11041>
- Conley, D. T. (2012). *A complete definition of college and career readiness*. Educational Policy Improvement Center. Retrieved from <https://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED537876&site=ehost-live&scope=site>
- Connolly, C. (2016, September 20). Student retention literature – Tinto's model. Retrieved June 1, 2019, from <https://corneliathinks.wordpress.com/2016/09/20/tintos-model/>
- Cowan, J., & Goldhaber, D. (2015). How much of a "running start" do dual enrollment programs provide students? *The Review of Higher Education*, 38(3), spring, 425-460. Retrieved May 19, 2018, from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/1664923405?accountid=11041>
- Craggs, H., & Kelly, C. (2017). School belonging: Listening to the voices of secondary school students who have undergone managed moves. *School Psychology International*, 39(1), 56–73. <https://doi.org/10.1177/0143034317741936>

- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks: Sage.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Dictionary.com (2019). Self-actualization. Retrieved September 5, 2019, from <https://www.dictionary.com/browse/self-actualization?s=ts>
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Bloomington, IN: National Educational Service.
- Dunbar, H., & Carter, B. (2017). A sense of belonging: The importance of fostering student nurses' affective bonds. *Journal of Child Health Care, 21*(4), 367–369. <https://doi.org/10.1177/1367493517739977>
- Fedesco, H. N., Ketner, A., & Natt, J. (2017) The effect of relevance strategies on student perceptions of introductory courses. *Communication Education, 66*(2), 196-209. <https://doi.org/10.1080/03634523.2016.1268697>
- Franks, S. S. (2016). *Dual enrollment efficacy on college readiness as perceived by high school dual enrollment teachers and counselors in South Alabama*. (Doctoral dissertation). Retrieved from <https://aquila.usm.edu/cgi/viewcontent.cgi?article=1228&context=dissertations> (211)
- Gary Becker's concept of human capital. (2017, August 3). Retrieved June 1, 2019, from <https://www.economist.com/economics-brief/2017/08/03/gary-beckers-concept-of-human-capital>

- Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*(1), 79-90. doi:10.1002/1520-6807(199301)30:1<79::AID-PITS2310300113>3.0.CO;2-X
- Hausmann, L., Schofield, J., & Woods, R. (2007). Sense of belonging as a predictor of intentions to persist Among African American and White first year college students. *Research in Higher Education, 48*(7), 803–839.
- Hofmann, E. (2012). Why dual enrollment? *New Directions for Higher Education, 2012*(158), 1-19. doi:10.1002/he.20009
- Iland, E., & Iland, T. W. (2015). The benefits of dual enrollment. *EP Magazine, 45*(9), 30-32.
- Jobs for the Future. (2015). Retrieved from <http://www.jff.org/initiatives/early-college-designs>
- Johnson, T. E., & Brophy, M. (2006). Dual enrollment: Measuring Factors for rural high school student participation. *Rural Educator, 28*(1), 25-32. Retrieved May 19, 2018, from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/220981425?accountid=11041>
- Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The post-secondary achievement of participants in dual enrollment: An analysis of student outcomes in two states*. New York, NY: Community College Research Center, Columbia University.

- Kilgore, W., & Wagner, E. (2016). Dual enrollment from two points of view: Higher education and K-12. *Research in Brief*, 57-62. Retrieved May 19, 2018, from https://www.aacrao.org/docs/default-source/research-docs/cuj9203ar-kilgore.pdf?Status=Temp&sfvrsn=601f7c9b_4
- Kirst, M., & Venezia, A. (2001). Bridging the great divide between secondary school and postsecondary education. *Phi Delta Kappan*, 83, 92-97. <https://doi.org/10.1177/003172170108300118>
- Klein, A. (2016, March 31). The every student succeeds act: An ESSA overview. *Education Week*. Retrieved June 1, 2019, from <http://www.edweek.org/ew/issues/every-student-succeeds-act/>
- Knekta, E., & McCartney, M. (2018). What can departments do to increase students' retention? A case study of students' sense of belonging and involvement in a biology department. *Journal of College Student Retention: Research, Theory & Practice*. <https://doi.org/10.1177/1521025118788351>
- Kronholz, J. (2011). High schoolers in college. *Education Next*, 11(3), summer 2011, 1-9. Retrieved May 19, 2018, from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/1237831662?accountid=11041>
- Lee, J., Song, K., & Kim, D. (2018). Self-efficacy, attribution, and adjustment to college life. *North American Journal of Psychology*, 20(3), 575-599. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/2172620638?accountid=11041>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalist inquiry*. Thousand Oaks, CA: Sage.

- Malin, J. R., Bragg, D. D., & Hackmann, D. G. (2017). College and career readiness and the every student succeeds act. *Educational Administration Quarterly*, *53*(5), 809–838. <https://doi.org/10.1177/0013161X17714845>
- Marken, S., Gray, L., & Lewis, L. (2013). *Dual enrollment programs and courses for high school students at postsecondary institutions: 2010-2011*. National Center for Education Statistics. Retrieved May 19, 2018, from <https://nces.ed.gov/pubs2013/2013002.pdf>
- Martin, K., Goldwasser, M., & Harris, E. (2017). Developmental education’s impact on students’ academic self-concept and self-efficacy. *Journal of College Student Retention: Research, Theory & Practice*, *18*(4), 401–414. <https://doi.org/10.1177/1521025115604850>
- Martinez, R. R., Baker, S. B., & Young, T. (2017). Promoting career and college readiness, aspirations, and self-efficacy: Curriculum field test. *The Career Development Quarterly*, *65*(2), 173–188. doi:10.1002/cdq.12090
- Marzano, R. J. (2001). *A handbook for classroom instruction that works*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370-396. doi:10.1037/h0054346
- Maslow's Hierarchy of Needs. (2016, September 2). Retrieved September 5, 2019, from <https://www.learning-theories.com/maslows-hierarchy-of-needs.html>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.

- Mondal, P. (2014, March 25). Educational system: What are the expectations of people about the educational system? Retrieved June 1, 2019, from <http://www.yourarticlelibrary.com/essay/educational-system-what-are-the-expectations-of-people-about-the-educational-system/31376>
- National High School Center. (2007). *Findings from the early college high school initiative: A look at the best practices and lessons learned regarding a dual enrollment program*. Retrieved from <https://files.eric.ed.gov/fulltext/ED501071.pdf>
- Owen, S. V., & Froman, R. D. (1988). *Development of a college academic self-efficacy scale*. Presented at the Annual Meeting of the National Council on Measurement in Education, New Orleans, LA.
- Ozmun, C. D. (2013). College and academic self-efficacy as antecedents for high school dual-credit enrollment. *The Community College Enterprise*, 19(1), 61-72. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/1416739024?accountid=11041>
- Pascarella, E. T., & Terenzini, P. T., & Wolfe, L.M. (1986) Orientation to college and freshman year persistence/withdrawal decisions. *Journal of Higher Education*, 57(2), 155-175.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

- Petcu, S., Frakes, S. J., Hoffman, D. E., & Young, D. G. (2016). *Report on the state of college and career readiness in South Carolina: National Resource Center for The First-Year Experience and Students in Transition, Under the direction of Center of Excellence for College and Career Readiness* (Vol. 1, pp. 1–29). Columbia, SC: South Carolina Commission on Higher Education.
- Pierce, D. (2017). The rise of dual enrollment. *Community College Journal*, 87(5), 16-18,20-24. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/1934949099?accountid=11041>
- Ponelis, S. (2015). Using interpretive qualitative case studies for exploratory research in doctoral studies: A case of information systems research in small and medium enterprises. *International Journal of Doctoral Studies*, 10, 535-550. doi:10.28945/2339
- Rosenbaum, J. E., Becker, K. I., Cepa, K. A. & Zapata-Gietl, C. E. (2016). Turning the question around: Do colleges fail to meet students' expectations? *Research in Higher Education*, 57, 519-543. <https://doi-org.ezproxy.gardner-webb.edu/10.1007/s11162-015-9398-3>
- Rosenberg, M. (2018). Early access to college. *School Administrator*, 75(10), 16-18,20-23. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/2138540143?accountid=11041>
- Santelises, S. (2016, April 6). Are high schools preparing students to be college- and career-ready? Retrieved June 1, 2019, from <https://hechingerreport.org/are-high-schools-preparing-students-to-be-college-and-career-ready/>

- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports, 51*(2), 663-671.
- Simon, D. L. (2017). *Dual enrollment and its impact on college freshman persistence: A modification of Tinto's model of student departure* (Order No. 10252611). Available from ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection. (1872280696). Retrieved from <http://ezproxy.gardnerwebb.edu/login?url=https://search-proquest-com.ezproxy.gardnerwebb.edu/docview/1872280696?accountid=11041>
- South Carolina Commission on Higher Education. (2014). HS students taking college classes [Data file]. Retrieved from <http://www.che.sc.gov/DataPublications.aspx>
- South Carolina Education Oversight Committee. (2013, January 1). 2020 vision. Retrieved June 1, 2019, from <https://dc.statelibrary.sc.gov/handle/10827/5127>
- South Carolina Education Oversight Committee. (2015, February 15). Profile of the SC graduate: Focus on building successful graduates through innovation. Retrieved June 1, 2019, from <https://www.scstatehouse.gov/reports/EducationOversightComm/March12015ReportToGeneralAssembly.pdf>
- South Carolina Education Oversight Committee. (2018, September 4). Accountability manual. Retrieved June 1, 2019, from <https://ed.sc.gov/data/report-cards/sc-school-report-card/files/accountability-manual/>

- Supiano, B. (2018). How colleges can cultivate students' sense of belonging. *The Chronical of Higher Education*, 64(32, A32. Retrieved from <https://bi-gale-com.ezproxy.gardner-webb.edu/essentials/article/GALE%7CA539388780?u=nclivegwu&sid=summon>
- Thomas, N., Marken, S., Gray, L., & Lewis, L. (2013). *Dual credit and exam-based courses in S.S. public high schools: 2010–11*. Washington, DC: National Center for Education Statistics.
- Tinto, V. (1975) Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education*, 599-623. doi:10.2307/2959965
- Tinto, V. (2017). Through the eyes of students. *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 254-269.
<https://doi.org/10.1177/1521025115621917>
- United States Department of Education. (2010). *College-and career-ready standards and assessments* [PDF file]. Retrieved from <https://www2.ed.gov/policy/elsec/leg/blueprint/faq/college-career.pdf>

- Waits, T., Setzer, J. C., & Lewis, L. (2005). *Dual credit and exam-based courses in U.S. public high schools: 2002-TAB. NCES 2005-009*. Washington, DC: National Center for Education Statistics.
- Walters, H. D., & Bockorny, K. M. (2018). Relevance of general education: An assessment of undergraduate business students. *The e - Journal of Business Education & Scholarship of Teaching*, 12(3), 34-43. Retrieved from <http://ezproxy.gardner-webb.edu/login?url=https://search-proquest-com.ezproxy.gardner-webb.edu/docview/2173461405?accountid=11041>
- Wikipedia. (n.d.). Maslow's hierarchy of needs. Retrieved September 5, 2019, from https://en.wikipedia.org/wiki/Maslow's_hierarchy_of_needs

Appendix A
Permission to Conduct Study

Permission

Tue, Nov 5, 2019 at 5:15 PM

To: Tracie Swilley

Please allow this email to confirm that I grant you (Tracie H. Swilley) permission to conduct research relating to students who are/ or have participated in the District STEM Early College Academy.

XXXX, Ph.D.
Superintendent

Appendix B

Interview Questions

1. In what ways did the STEM Early College Academy Program prepare you to transition to a 4-year institution? (Perceived Value/Relevance)
2. How did the Dual Enrollment Program contribute to your confidence in transitioning to a 4-year institution? (Self-efficacy)
3. How did Dual Enrollment participation and the relationships and involvement in high school help you with forming relationships with faculty, staff, and peers and get involved at the 4-year institution? (Sense of Belonging)
4. Is there anything else you would like to share about your transition to your 4-year institution after being a member of the DE program and graduating from high school with an associate degree?