Dual Enrollment Efficacy on College Readiness as Perceived by High School Dual Enrollment Teachers and Counselors in South Alabama

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DUAL ENROLLMENT EFFICACY ON COLLEGE READINESS AS PERCEIVED
BY HIGH SCHOOL DUAL ENROLLMENT TEACHERS AND
COUNSELORS IN SOUTH ALABAMA

by
Shulanda Stallworth Franks

Abstract of a Dissertation
Submitted to the Graduate School
and the Department of Educational Leadership and School Counseling
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

May 2016
ABSTRACT

DUAL ENROLLMENT EFFICACY ON COLLEGE READINESS AS PERCEIVED
BY HIGH SCHOOL DUAL ENROLLMENT TEACHERS AND
COUNSELORS IN SOUTH ALABAMA

by Shulanda Stallworth Franks

May 2016

The purpose of this study was to examine the perceptions of Dual Enrollment (DE) teachers and high school counselors on Dual Enrollment to compare and determine whether there are significant differences between their perceptions of college readiness among Dual Enrollment participants in South Alabama. Data were analyzed and presented based on relevance to effectiveness. This study is relevant because scholars are unclear about the effects of Dual Enrollment on college readiness.

This research was designed to close some of the gaps in the literature and help education stakeholders continue developing and promoting effective mechanisms to the Dual Enrollment program. This study examined the high school DE teachers’ and high school counselors’ perceptions of the efficacy of DE participation on college readiness in a school district in South Alabama. A survey instrument was utilized to understand the perceptions of the South Alabama high school DE teachers and high school counselors toward the efficacy of DE participation on student success in college. Quantitative measures were applied to this study.

The findings of this study support other studies conducted in this area. Specifically, Gatlin’s Perception study found that the overall Dual Enrollment experience is perceived to be beneficial for many of its participants when they enter college.
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May 2016
DEDICATION

“But, the Lord stood with me and strengthened me, so that the message might be preached fully through me” (2 Timothy 4:17). I feel God called me to this task to encourage and inspire others who do not believe in the power of God and His promises. This research study was no easy task. I wanted to quit so many days and nights, but God would always step in and give me what I needed to continue my journey. Sometimes, I would see my son’s face and quickly remember that I had to show him that with God he could be victorious in all his endeavors. I wanted my son to have an example of victory through adversity.

I am eternally grateful to my husband, Terrow Franks, and my son, Terrow Franks II—my two handsome cheerleaders. Terrow, God put you in my life to be the “Wind Beneath My Wings.” I dedicate this to you for all of the love, support, catering, and chauffeuring services you rendered over the years.

To my parents, Pastor Rudolph Pugh, Jr. and Henrietta Pugh, I love you both individually and collectively. My mother never allowed anyone or anything to take her focus away from us. The things I struggled to do with one child she did with finesse with three children. She always made sure homework was done and my siblings and I were in bed early each school night. My father taught us how to love and serve the Lord, a scholarly man with great wisdom. I always wanted to make my parents proud of me.
ACKNOWLEDGMENTS

I have to thank the committee members, Dr. David Lee and Dr. Myron Labat, for their services. Dr. James Fox and Dr. James King, I really appreciate you coming aboard at the very end of this journey. Dr. King, I cannot thank you enough for all of the statistical help you provided. You are a great instructor and a man of great patience. I am so grateful for your help.

It would be remiss of me not to acknowledge the following people for all of their help in one way or another:

Dr. Shanta Rhodes and the entire “Stats Crew” and “Dave’s Chics.” Those weekend study sessions were good academically as well as emotionally.

I must also acknowledge Dr. Patrice Williams-Shuford for having a gentle hand and always being available for me.

Dr. Toni Ramey, your assistance and encouragement helped me early in this process.

Dr. Ty Stone, you were my dissertation mother. Thank you for being an inspiration and truly an example of having the best of both worlds—career and family.
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CHAPTER I
INTRODUCTION

In 2009, President Obama introduced an educational reform movement referred to as the 20/20 Plan. The 20/20 Plan was designed and implemented as a tool to help the United States (U.S.) regain its position as a leader in the global market (Kuntz, Gildersleeve, & Pasque, 2011). Kuntz et al. (2011) stated that the goal of the plan is to increase college graduation rates in the U.S. by 50% in < 10 years. The President is expecting secondary and postsecondary institutions to collaborate on reaching the goal of the 20/20 Plan. Dual Enrollment (DE) is an accelerated learning program for high school students in the U.S., often referred to as dual credit (Karp, Bailey, Hughes, & Fermin, 2004). The DE programs could possibly serve as the pathway to increase the number of college graduates, thus meeting the goal of the 20/20 Plan. Kuntz et al. (2011) also emphasized that DE programs were designed to (a) assist students with the transition from high school to college and (b) increase college graduation rates.

As stated in a recent report, high schools would need over a half million more graduates in 2020 in comparison to 2009 (Kuntz et al., 2011). Since the class of 2020 is now at the elementary stage of education, changes in elementary education should have begun 3 years ago. The 20/20 Plan basically equates to a 90% graduation rate for all U.S. schools (National Center for Education Statistics [NCES], 2010). Kuntz et al. (2011) implied that the education system is currently too slow to meet the target date. Once 90% of students enrolled in high school transition to college, the goal of the 20/20 Plan will be deemed successful (NCES, 2010). DE offers a curriculum of higher academic rigor than the regular high school curriculum (Bragg, Barnett, & Kim, 2006). As stated by Karp
and Hughes (2007), there are various models of DE offered to high school students in an effort to assist students with the transition from secondary to postsecondary education. DE has been regarded as the most rapidly increasing accelerated learning model (Gehrig, 2010).

DE programs were created in the 1970s to offer high school students an opportunity to earn high school and college credits simultaneously and as a strategy to make the secondary to postsecondary transition easier for students (Bailey, Hughes, & Karp, 2003). Local school districts and postsecondary institutions partner to offer the program to high school students (Boswell, 2001). DE offers students skills that are beneficial in high school, college, and even in the workforce through increased academic rigor (Kleiner & Lewis, 2005). As an added benefit, DE provides a real-world college experience to high school students, which usually results in an increased interest in postsecondary education (Boswell, 2001). Students usually enter into college after DE experiences with an added measure of confidence in their academic abilities (Kleiner & Lewis, 2005). As stated by Hoffman, Vargas, and Santos (2009), the program can be viewed as a strategy to improve students’ graduation rates in both high school and college, thus reducing the amount of time to degree completion. By reducing the time to degree completion DE reduces the amount of funding required for postsecondary education for students, parents, and even the federal government (Adelman, 2006).

According to Puyear (2001), the concept of allowing high school students to earn high school and college credits simultaneously was derived from J. W. Osborn in 1928. Osborn avowed that this concept would abolish mediocre level curriculum which offered little challenge to more academically advanced high school students. Bailey et al. (2003)
stated initially that the program was implemented to give above average students more challenging coursework beyond the normal high school courses. However, DE courses are no longer just for the higher academically achieving students; DE students are currently from all levels of intellect and backgrounds (Hughes, 2010).

DE is designed to enhance the participants’ transition from high school to college by offering more academic rigor equivalent to that of a higher learning institution (Gehrig, 2010). The transition from high school to college is not as easy for some students as it is for other students (Hoffman et al., 2009). There are numerous components that influence an individual’s decision to attend an institution of higher learning (Early College High School Initiative, 2010). Karp et al. (2004) declared that most often students are not academically prepared with the academic skills needed for college. Also, there are students lacking the motivation and the maturity needed for the academic and social responsibilities of college (Adelman, 2008). Education policymakers have viewed DE programs as a means of addressing academic as well as the social issues contributing to high school and college dropout rates (Adelman, 2008).

Callan and Finley (2003) asserted that education policymakers are taking measures to increase accountability in classrooms as it pertains to the level of knowledge and skills of high school students. DE allows high schools and colleges to collaborate on educational standards and pathways to reach the nation’s educational goals (Callan & Finley, 2003). Krueger’s (2006) study asserted that educators and legislators are encouraging student participation in DE as an effort to reduce college expenses of students and their families. Most DE students enter college their first year with the classification as a sophomore (Karp & Hughes, 2007). Students who enter college with
only 3 years to degree completion reduce their out-of-pocket expense and student loan
debt by at least 25% (Schworm, 2008).

Educators view the shortened degree completion time and the reduced amount of
education expense as motivational tools for student participation in the DE program
(Plucker, Chien, & Zaman, 2006). Policymakers see the motivation for learning as well
as the eagerness of earning college credit while still in high school as a driving force of
the DE program (Schworm, 2008). State and federal policymakers are taking notice of
the DE program as an essential component to increase college attendance and completion
(Adelman, 2008). Adelman (2008) also affirmed that in the last decade the number of
college students who earn a college degree in 4 years from an institution of higher
learning has decreased. Students who take remedial courses their first year and those
who fail the lower-level college courses are most likely to require an extended stay at the
institution (Andrews, 2004).

Researchers have yet to identify the sole culprit of this phenomenon; however, the
alleged disconnection between the prek-12 system and the institutions of higher learning
is receiving most of the blame (Amos, 2008). Postsecondary education leaders are
blaming the prek-12 system for not preparing the students for the academic rigor of
college. Aud et al. (2011) declared that the school systems are defending the accusations
with the premise of limited resources and other challenges plaguing many school districts
throughout the nation. Some of the challenges teachers are facing include overcrowding
in the classroom, lack of parental support, and constant curriculum changes. The preK-
12 systems proclaim that they are doing their best considering the circumstances
(Adelman, 2008).
Students who are not adequately prepared academically or financially often choose to attend community college after high school as a means to a higher level of education (Boswell, 2001). Community colleges have been known to be more accessible for all students seeking postsecondary education. Community colleges have more of an “open door” policy for all who are interested in continuing their education beyond high school (Bragg, 2006). Community colleges are more affordable than most other colleges and universities offering financial relief to many high school graduates (Bragg et al., 2006; Harnish & Lynch, 2005). There are more community colleges partnering with school districts than any other institutions of higher learning for DE programs (Hoffman et al., 2009).

Boswell (2001) claims that DE participants often continue their college education with their high school partnering institution. The students have a sense of familiarity which provides comfort and increased levels of motivation and achievement (Kleiner & Lewis, 2005). The collaboration between community colleges and a local district offers a benefit to some students that universities would not offer. Blanco, Prescott, and Taylor (2007) and Hoffman et al. (2009) affirmed that students attending DE courses with a partnering community college have the choice of either earning college credit to continue their education or learning much needed skills essential for the workforce. Students who are not planning to continue their academic experience gain valuable skills that will lead to immediate job opportunities and stable careers (Zusman, 2005).

Community colleges are essential to postsecondary education since they serve as a gateway for nearly half of the undergraduate population in the U.S. (Zusman, 2005). Policymakers have noticed that over a million students gain entry to postsecondary
education via community colleges each year (Dynarski, 2008). As policymakers throughout the nation search for avenues for the states individually and collectively to regain its position as the global leader, DE participation has been a major topic of discussion (Bragg et al., 2006). Amos (2008) contended that many policymakers believe the educational disparities among the citizens in the U.S. can be narrowed with programs such as DE. Although DE standards and policies vary among the districts and states, it could definitely serve as a significant part of the solution of education reform in the U.S. (Struhl & Vargas, 2012).

DE can possibly serve as a bridge to the gap between issues regarding education on the secondary and postsecondary levels, addressing such issues as uneducated individuals entering the work force, untrained individuals without work, and reduction in unpaid student loan rates (Adelman, 2008). These programs also provide students with more advanced and rigorous coursework in order to improve high school education; students are also prepared for the academic and behavioral expectations of college (Adelman, 2008). Additionally, the program enhances students’ motivation and engagement in their learning through more interesting classes and real-world experiences (Karp, 2008).

DE programs should have three intended purposes for its participants. The first purpose of DE should be to reduce the amount of irrelevant courses many high school students take during the senior year of high school (Hughes, 2010). Next, the program should reduce the amount of money students and their parents spend on remedial and repeated courses throughout their time toward degree completion (Hughes, 2010). The
third purpose of the program should result in more students adapting in a more positive manner to the academic and social atmosphere of a postsecondary institution.

Students are leaving college without a degree and massive amounts of student loans (Osher, Amos, & Gonsoulin, 2012). Roderick (2008) reported that more than 5 million students will drop out of school within the next 10 years. It is estimated that this could cost the U.S. over a trillion dollars in unemployment compensation, healthcare, food, and housing subsidy programs (Roderick, 2008). Winters and Greene (2012) reported that college dropouts are much more likely to become financial burdens, thus putting a serious strain on the economy based on the way high school dropouts have done in previous generations.

Statement of the Problem

Although DE could be viewed as an essential tool to education reform in the U.S., there are problems that plague the programs. Student accessibility to DE programs and the quality of DE courses are unparalleled in many districts resulting in the credit worthiness of some programs being challenged among some policymakers (Dougherty & Reid, 2007). The standards and policies of DE programs vary across the nation (Plucker et al., 2006). There are districts within a state where the DE program does not mirror other programs in the same state and even more so in lower funded districts. Guidelines and standards of a majority of the programs’ standards and guidelines are incongruent pertaining to student eligibility, course content, and delivery to participants (Karp et al., 2004). As stated by Lee and Rawles (2010), DE programs should all adhere to the same standards and guidelines for eligibility, course content, and delivery regardless of
demographics. Some opponents of the programs may have developed their opinion based on the irregularities of the program across the nation (Ewell, 2008).

Policymakers who argue against the program believe that some of the inadequately funded districts simply cannot offer the academic rigor and relevance of college-level material to high school students in a non-collegiate environment (Blanco et al., 2007). Other opponents of the program argue that the high school teachers are not capable of doing the job of a college professor and the students are not actually having a true college experience (Andrews, 2004). Some states have combated the negative accusations pertaining to course validity by incorporating the National Alliance for Concurrent Enrollment Partnership (NACEP) into their respective states’ DE policies. NACEP has lucidly defined assessment and evaluation measures for high school teachers in DE courses.

There are states where the DE programs are not supported as well as others as defined by state policy, making participation rates very low (Krueger, 2006). States where DE participation is high are areas of the state where DE is promoted and demonstrated as a true benefit for all students to enhance their futures (Karp et al., 2004). There are many pros and cons of the benefits and relevance of DE on education reform in the U.S.

Education stakeholders are searching for innovative ways to attract more high school seniors to college as well as ways to help the students acclimate to a postsecondary education environment (Camblin, 2003). According to Adelman (2006), DE has been proven as an effective tool in cultivating higher levels of college preparedness among high school students. The program’s goal is to also make secondary
and postsecondary education more parallel to all students, as it relates to curriculum instruction and design (Castellano, Stringfield, & Stone, 2003). As stated by Andrews (2004), all high school students should be prepared for the transition to college by the time they graduate from high school regardless of their locale. Policymakers are looking for more effective ways for DE programs and other similarly designed programs to assist with increasing college attendance and graduation rates (Karp, 2008). An increase in awareness of DE programs among high school students could possibly be the much-needed positive impact on education reform in this country, especially for students with limited resources.

Purpose of the Study

The purpose of this study was to examine the perceptions of DE teachers and high school counselors to compare and determine whether there are significant differences between their perceptions of college readiness among DE participants in South Alabama. Data were analyzed and presented based on its relevance to effectiveness. This study is relevant because scholars are unclear about the effects of DE on college readiness. Examination of the reasons, needs, and benefits becomes increasingly more important as DE programs gain in popularity among students (Karp & Hughes, 2007). The national and local interest and focus on DE participation has increased—specifically with students who are considered at risk. DE could be an option for all students who are willing to work hard to get to college and obtain a degree. However, many education stakeholders raise the question of the program’s accessibility, exposure, and benefits of DE programs to all students.
Statistics on secondary and postsecondary education enrollment are often bleak, forcing educational stakeholders to search for causes and solutions for issues in education. Examining the perceptions of DE teachers and the high school counselors may help policymakers understand the value of this program on the future of our students and this country. The policymakers will be more cognizant to the benefits of this program and the importance of continued and increased funding.

Optimal results of DE participation could possibly lead to an increase in students who are better prepared academically and socially when entering college for the first time. The first-time college students will be capable of withstanding the academic rigor of postsecondary education (Karp & Hughes, 2007). Another benefit to DE participation, as declared by Wise (2010), is the decrease in the amount of time to degree completion, thus a reduction in the cost of a college education. Wise (2010) claims that student loan debt has increased significantly over the last decade. As stated by Denhart (2013), “Student loan debt counts for nearly 10% of this nation’s debt” (p. 23). This debt could eventually cripple the U.S. economy since people will delay or forego major purchases, such as automobiles and homes, and even investing and saving (Denhart, 2013). Better prepared college students could lead to students completing their degrees in a shorter timeframe which could even equate to a reduction in student loan debt among students.

DE participation provides students with the essential tools for college readiness (Wise, 2010). Increased levels of college readiness will lessen the need for remedial and or repeat courses, ultimately leading to on-time graduation and possibly early graduation from college.
Denhart (2013) affirmed with the two aforementioned benefits to DE participation there should have been a surge in student enrollment in DE programs across the nation. However, it appears that DE programs are not receiving the support from policymakers and local districts to ignite the program. There is minimum research on DE and the benefits associated with DE participation. Proponents agree that policymakers and the public do not have the necessary data to increase support and funding for DE programs. Throughout years of research and thousands of studies pertaining to education reform, the literature on DE is still minuscule in comparison to other education phenomenon (Kleiner & Lewis, 2005).

This study analyzed the perceptions of high school DE teachers and counselors regarding the benefits provided by the DE program to all educational stakeholders in Alabama. Policymakers could utilize the findings of this study to support their efforts to encourage more support and participation of DE programs as an essential tool for education reform. It is assumed that most DE teachers and high school counselors are knowledgeable and experienced enough with DE programs to know what is or is not working with students. The high school DE teachers and counselors deal with the efficiencies and deficiencies of students and can provide valuable insight into the benefits of the program.

Research Questions

This study examined the perceptions of DE teachers and high school counselors to compare and determine whether there are significant differences between their perceptions of college readiness among DE participants in South Alabama. This study sought to answer the following research questions:
Research Question 1 – Is there a statistically significant difference between the perceptions of high school Dual Enrollment teachers and high school counselors on Dual Enrollment efficacy on college readiness based on gender and years of teaching or counseling experience in South Alabama?

Research Question 2 – Is there a statistically significant difference in South Alabama Dual Enrollment teachers’ perceptions of the level of college readiness among Dual Enrollment students in multiple subject areas when compared to South Alabama high school counselors’ perceptions of the level of college readiness among Dual Enrollment students in multiple subject areas?

Research Question 3 – Is there a statistically significant difference in the perceptions of high school Dual Enrollment teachers regarding how often should specific assignments be given to contribute to Dual Enrollment participants’ level of college readiness when compared to the perceptions of high school counselors in South Alabama?

Hypotheses

The hypotheses are as follows:

\( NH_1 \) – There will not be a statistically significant difference between the perceptions of high school Dual Enrollment teachers and high school counselors on Dual Enrollment efficacy on college readiness based on gender and years of teaching or counseling experience in South Alabama.

\( NH_2 \) – There will not be a statistically significant difference in the perceptions of the Dual Enrollment high school teachers and high school counselors regarding Dual
Enrollment participants’ level of college readiness in multiple subject areas in South Alabama.

NH₃ – There will be no statistically significant difference in the perceptions about how often specific assignments should be given to contribute to Dual Enrollment participants’ level of college readiness among high school Dual Enrollment teachers and high school counselors in South Alabama.

Definition of Terms

The terms in the research questions were defined theoretically and operationally:

1. *At-risk student* – A high school student identified as having one or more of characteristics believed to be associated with withdrawal from school (Roueche & Jones, 2005).

2. *College-qualified* – A high school student who has taken and passed the required courses for minimal college entrance standards is considered to be college qualified (Marks & Diaz, 2009).

3. *Completion rate* – The completion rate is the ratio of students from a class of ninth graders who graduated from high school (Karp & Hughes, 2007).

4. *Dropout rate* – A measure of students who leave a school during a four-year cohort period (Tinto, 1997).

5. *Dual enrollment* – An academic program designed to help students excel in the academic world as well as in the workforce by allowing high school students to earn high school and college credits simultaneously, thus reducing time and money spent on postsecondary courses (Boswell, 2001).
6. *Education policymakers* – Individuals and groups utilizing the laws of the education systems to identify and adopt the best practices for education goals and education improvement for now and in the future (“Educator Effectiveness,” 2012).

7. *Education stakeholders* – Individuals and groups who have an interest in education policies and practices (e.g., parents, students, employers, colleges, etc.), (“Educator Effectiveness,” 2012).

**Delimitations**

This study was delimited by the following: (a) institution selection, (b) Dual Enrollment high school teacher and high school counselor selection, and (c) the examination of the DE leaders’ perceptions. This study was conducted throughout high schools in a large South Alabama school district. This study was delimited to self-reported data and perceptions of DE high school teachers and high school counselors on the efficacy of the DE program on college success among DE participants.

**Assumptions**

There were several assumptions for this study. The first assumption was that all participants had teaching and or leadership experience. The second assumption was that all participating DE high school teachers and high school counselors completed the questionnaire with honesty and accuracy.

**Justification**

This quantitative study is relevant because it examined the perceptions of high school DE teachers and high school counselors on the efficacy of DE participation on college success among students in South Alabama. The DE high school teachers and high school counselors shared their insight of the program through a survey instrument.
The survey was relevant in identifying the perceptions of the DE high school teachers and high school counselors. Examination of the reasons, needs, and benefits becomes increasingly more important as DE programs gain in popularity among students. Existing research is unclear as to the efficacy for students who choose to enroll in DE programs. Whether DE programs prepare students for higher education or merely demonstrate a student’s determination to complete a degree program is still debatable (Hoyt, 1999; Karp & Hughes, 2007).

DE has transpired as a practical effort to better prepare high school students for college-level work as well as the work force (Conley, 2007). Recent studies compared the benefits of DE programs to non-DE programs; however, studies in Alabama were very minimal. Although this area of study is still open to further research, many researchers support DE as a solution to many of the deficiencies throughout the educational system in the U.S. (Hughes, 2010).

Effective DE programs could possibly provide a win-win for students with successful completion of high school and college in South Alabama. The DE program has also been viewed as a key component to improving graduation rates in the U.S. (Adelman, 2006). DE participation was also viable for the current workforce in the U.S. DE benefits are not only limited to the academic world, but the program also provides valuable career technical education (Adelman, 2006). Career technical education prepares students with the skills essential to enter various areas of the workforce (Wise, 2008).
Summary

DE is a strategy designed to improve both high school and college graduation rates (Bragg et al., 2006). According to Hunt and Carol (2006), DE provides an outlet for all students to comprehensively learn specified accelerated course material. By allowing opportunities for higher-achieving students to take advanced courses earlier than normally permitted, DE courses may possibly lead to the U.S. regaining its position as a leader in a global industry by producing more highly qualified citizens.

Qualified citizens will be able to make significant contributions to the country through the sharing of knowledge and skills acquired through DE programs. The Commission on Reorganization of Secondary Education, a committee introduced by the National Education Association, developed the Cardinal Principles of Secondary Education (Ramey, 2009). This report stated that the educational process should incorporate curricula resulting in productive citizens who will be prepared to contribute to society (Ramey, 2009). DE programs meet these criteria by providing an accelerated and challenging pathway to both postsecondary education and careers for students.

Existing research is unclear as to the effects for students who choose to enroll in DE programs; whether DE programs prepare students for higher education or merely demonstrate a student’s determination to complete a degree program is still debatable (Hoyt, 1999; Karp & Hughes, 2007). Karp and Hughes (2007) claimed motivated students are more academically competent than their cohorts who have little to no interest in school. However, Adelman (2006) argued that DE participation may simply better prepare students for postsecondary education. Existing studies are not clear on whether
or not DE drives college readiness or motivation and readiness drives DE (Karp & Hughes, 2007).

Since the premise of this study was to examine the perceptions of high school DE teachers and high school counselors, quantitative methods of research were utilized. As the U.S. prepares to reach the goals of President Obama’s 20/20 Plan, the demand for DE programs will continue to rise (“Educator Effectiveness,” 2012). DE appears to offer a positive solution to many of the issues plaguing the next generation of leaders. Nonetheless, more research is needed, specifically in the southern region, in order to determine the DE effectiveness on college readiness.

In an effort to become the world leader once again in a global market, the U.S. is seeking to reform education. Policymakers have realized that the citizens of this country need to be better educated and trained to not only keep up with other countries but to also lead in all aspects of the global market (Adelman, 2006). The pathway to this goal may lie in DE programs which will allow the future leaders to enter into postsecondary education equipped with the necessary tools to excel in the learning environment. Early entry into the workforce, with the latest proven techniques of performance, is also a possible benefit (Harnish & Lynch, 2005). As stated by Adelman (2006), the students of today may become the most innovative and resilient leaders of tomorrow. Overall, DE programs were designed to serve our students and provide a gateway into a more promising academic future.
CHAPTER II
REVIEW OF LITERATURE

This quantitative study examined the perceptions of Dual Enrollment (DE) teachers and high school counselors in relation to DE efficacy on college readiness of high school participants in a South Alabama school district. DE is an accelerated learning program for high school students in the U.S., often referred to as “dual credit” (Karp et al., 2004). As an effort to better understand the need for DE programs and their effectiveness, this chapter will conduct a review of precisely what DE programs are and the research used to develop the concept of the programs. This chapter will rely on the work of the leading researchers to guide this study. This review of relevant literature provided support for this research study.

Specifically, the selected Alabama school district’s DE teachers and high school counselors’ perceptions were analyzed in relation to college readiness among DE participants. There are three components of this review of the literature from the leading researchers of the topic. The first section will define the theory base of this review of the literature. The second section will introduce the development, purpose, and effects of DE. The third section will focus on some of the causes and issues associated with DE participation and college readiness.

This literature review was designed to assist the reader in understanding the dire need for this type of study. There are opposing policymakers arguing and questioning the validity of DE programs. The policymakers who oppose continuing and increasing funding for DE programs have implied that there is little proof of DE participation on college readiness (Wise, 2010). The quality of the courses and the transferability of the
program’s courses have been under fire as well. Specifically, research on the benefits of DE based on the perceptions of the education practitioners in South Alabama was addressed to fill the gaps in literature.

**Theoretical Framework**

This study was theoretically driven by Vincent Tinto’s theory of student departure coupled with Becker’s human capital theory. Tinto’s theory identified academic and social issues as the leading causes of dropout in learning institutions. According to Tinto (1987), students’ progression levels and willingness to succeed are correlated to academic and social conformity of education. Astin (2012) stated that students’ tenacity is fueled by involvement and a sense of belonging. Typically, when a person possesses a sense of belonging in any domain, there is more equity which yields a value in achievement.

DE programs present students with a unique cohort, sometimes a school within a school. DE provides students with a more engaging and accelerated learning experience (Karp, 2008). Engagement is conducive to learning and self-efficacy which promotes a positive value of the individual’s ability (Zusman, 2009). DE programs involve school personnel that most students will not routinely encounter during their four years of high school (Harnish & Lynch, 2005). The DE programs require more guidance from high school counselors, which results in students receiving the assistance needed to persevere through common education related obstacles (Bailey et al., 2003). Students’ lack of self-esteem, parental support, and financial resources are obstacles many students have to overcome in order to continue their education.

Tinto’s (1987) theory emphasized the value of guidance from high school counselors and student involvement and its effects on the collegiate transition. Proper
guidance from counselors is just as relative to students’ ability to continue their education beyond the secondary level as academic skills acquired from classroom learning. This theory implies that programs based on higher levels of student involvement academically, as well as sociably, grant students a greater chance of success. A successful experience for some individuals is often very rewarding. The human capital theory explains the results of positive experiences to a higher level of academic success and personal rewards (Becker, 1962). Becker’s (1962) theory advocates that some individuals work hard to earn an education to enjoy certain privileges and rewards.

In a society where there are benefits for hard work and tenacity, individuals who pursue higher levels of education usually enjoy a more rewarding life. Becker’s human capital theory basically encapsulates the benefits of DE. DE provides an opportunity of great rewards for those who successfully complete the program (Castellano et al., 2003). The participants are rewarded with earning high school and college credits simultaneously, as well as reducing the amount of time and money associated with degree completion (Rouche & Jones, 2005).

Theory of Student Persistence

Tinto’s model examined the persistence of first-year college students in a community college and coupled it with prior research in a study conducted by Halpin (2014). In this study persistence was defined as a second-semester college student (Halpin, 2014). There were 29 full-time college freshmen in this study. Halpin found that the faculty contributed greatly to the tenacity of the students. DE students who took classes on the college campus had more frequent contact with faculty when compared to the DE students who remained on the high school campus to take the college courses
This outcome was in spite of the fact that high school classes met five days a week, while the college course classes met only two or three days a week.

Institutional records and questionnaires were utilized to compare college readiness levels of first-time community college students in learning communities to a cohort who were outside the learning community (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). During the second semester, researchers examined institutional records of enrollment data for each term, number of credits earned, and students’ grade point averages (Kuh et al., 2008). Kuh et al. (2008) asserted that the study revealed there were factors, including grade point average, students’ perception of faculty, peer connection, and the amount of time designated for outside study each week, that contributed to students who were more capable of handling college-level coursework.

“...The evaluation of Dual Enrollment programs in Georgia identified strong relationships between the high schools and technical colleges and indicated that student motivation was based primarily on the opportunity to earn college credit and improve job skills” (Harnish & Lynch, 2005, p. 172). This study does not provide quantitative data; however, the administrators of the technical college reported a 10% increase in enrollment of students who had recently graduated from high school (Harnish & Lynch, 2005). The study revealed that when students gained an interest in their postsecondary education while they were in DE their motivation would assist them in persevering through the college program and graduation (Harnish & Lynch, 2005). The DE experience allows the participants to actually know what is expected from a college student via trial and error or real-world experience.
Tinto’s (1997) model of student persistence theorizes that social and academic components of higher education interface inside and outside of the classroom walls, and both impact students’ academic abilities. Additionally, Tinto identified several factors that support student education achievement. “These include high expectations; academic, financial, family, and social support; mentoring; consistent feedback; and peer interaction” (p. 31). DE programs’ premise is parallel to Tinto’s model based on the high expectations of the DE program for the high school students as it requires that the secondary school students perform at the postsecondary academic level.

The DE programs on high school campuses provide participants benefits. Students pay no out-of-pocket expenses, have easily accessible support from high school instructors who teach the college courses, and have valuable peer support (Reis, 2004). More feedback regarding academic progress is of high value to all students, especially DE students. “Every instructor may approach feedback differently, but research suggests that qualified high school instructors may be especially effective in communicating with students in DE” (Reis, 2004, p. 14.). According to Reis (2004), involvement in postsecondary courses as a secondary school student may engage students into a college-going culture, thereby setting the stage for a student who is ready for college academically with greater persistence later.

Development of Dual Enrollment

DE programs were created in the 1970s to offer high school students an opportunity to earn high school and college credits simultaneously (Bailey et al., 2003). Local school districts and postsecondary institutions partner to offer the program to high school students. DE offers students skills that are beneficial in high school, college, and
even in the workforce through increased academic rigor (Kleiner & Lewis, 2005). The program can be viewed as a tool to help many students successfully complete high school and increase college readiness (Adelman, 2008); thus, reducing the amount of time to degree completion as well as significantly reducing funding for education, DE is a viable option for many students.

DE provides a pathway for all students to have academic success in a postsecondary learning institution (Andrews, 2004). According to Hunt and Carol (2006), DE provides an outlet for all students to comprehensively learn specified accelerated course material. By allowing opportunities for higher-achieving students to take advanced courses earlier than normally permitted, DE courses may possibly lead to the U.S. regaining its position as a leader in a global industry by producing more highly qualified citizens.

DE can possibly serve as a bridge to fill the gap for issues regarding education on the secondary and postsecondary levels, addressing such issues as insufficiently educated individuals entering the work force, untrained individuals without work, and even a significant reduction in student loan rates (Adelman, 2008). These programs also provide students with more advanced, rigorous coursework in order to improve high school education and prepare students for the academic and behavioral expectations of college (Adelman, 2006). Also, the programs can promote high school student motivation and engagement in their learning through more interesting classes, the opportunity to attend classes on a college campus, and the experience of higher expectations and success (Karp, 2008). DE is also offered as a part of career and technical education programs as a way to (a) increase the program’s rigor, (b) prepare students for college as well as the
workforce, (c) enable high schools to offer career and technical education programs without purchasing expensive equipment, and (d) more generally build college awareness in students who may not typically consider enrolling in college (Adelman, 2008).

These citizens, then, will be able to make significant contributions to the country through knowledge and skills acquired through DE programs (“Educator Effectiveness,” 2012). The Commission on Reorganization of Secondary Education, a committee introduced by the National Education Association, developed the *Cardinal Principles of Secondary Education* (Ramey, 2009). This report stated that the educational process should incorporate curricula resulting in productive citizens who will be prepared to contribute to society (Ramey, 2009). DE programs meet these criteria by providing an accelerated and challenging pathway to both postsecondary education and careers for students.

*Dual Enrollment Access*

Wise (2008) asserted that the U.S. has failed to produce sufficient high school and college graduates to remain a leader among industrialized nations. Although the U.S. is no longer just an industrialized nation, but more of information and technology, “Dropping out is no longer an option,” as stated by President Obama (Kuntz et al., 2011). During the industrial age, many high school dropouts found a means to create a modest living for their families. Now, entry-level manufacturing jobs are performed by intricately designed machines. Salzman (2008) stated that most of the entry-level jobs once performed by union-represented labor workers have moved overseas.

Many of the jobs for U.S. citizens now command a higher level of education for the areas of information and technology (Salzman, 2008). India and Asia have
intensified their economic output and are challenging the U.S. in the global market (Ewell, 2008). The U.S. is currently ranked 18th in the world for educated citizens (U.S. Census Bureau, 2010). The U.S. usually subsidizes healthcare and housing, lost tax revenue, and even legal expenses for its citizens with little to no college education (Krueger, 2006). Darling-Hammond (2009) claimed people with only a high school education do not often have employment-related benefits for healthcare and do not take preventive maintenance measures to reduce costly hospital stays, surgical procedures, and prescription drug costs. Taxpayers pay for this through state Medicaid programs (Belfield & Levin, 2007). Vaughn (2007) suggested nonparticipation in postsecondary education, even in technical training, is a financial disadvantage for the individual as well as the nation.

Staff and Kreager (2008) claimed that not going to college is often a predictor of dependence on public assistance. Belfield and Levin (2007) stated that a single mother who does not have education and or training beyond high school is more likely to be on welfare than a single mother who has postsecondary education experience. Citizens who do not continue their education beyond high school do not gain home ownership at a rate comparable to college graduates (Astin, 2012). Undereducated citizens often look to the government for financial assistance for housing and utility expenses (Belfield & Levin, 2007). Also, people with minimal skills and education contribute significantly to the loss of tax revenue in communities throughout the nation (Marks & Diaz, 2009). Belfield and Levin (2007) argued that the high school dropouts usually do not earn enough taxable income to cover half the costs associated with their care.
People who are inadequately trained or educated either accept what is issued to them from the government and remain content with that or they turn to criminal activities to supplement the income as stated by Wise (2008). Most prison inmates do not have postsecondary experience, and many are even high school dropouts (Darling-Hammond, 2009). Vaughn (2007) found that criminal behavior and failure to complete high school are often behaviors passed throughout generations among some families. Belfield and Levin (2007) claimed every problem in the nation should be blamed on people with little to no education.

There is an indefinite list of the problems associated with people who have insufficient education and or skills to actively compete in the workforce. However, the policymakers have to create and identify means of reducing and even eliminating such a cancer in our nation’s economic future (Wise, 2008). Proponents of higher education often blame the K-12 education system for many of the nation’s problems because of the number of students who leave high school underprepared for college (Osher et al., 2012). Many stakeholders assert that the high schools are not cognizant of at-risk students in time to take preventive measures (Andrews, 2004). Adelman (2006) claimed early access and exposure to postsecondary education and training will increase the number of students who are prepared for college.

Adelman (2008) claimed that more collaboration among parents, schools, students, and the community is needed to better prepare students for life beyond high school. Lerner and Brand (2006) asserted that learning should be connected to technology since students are more engaged in technologically-delivered learning material. Technology is the foundation to everything in the future of education (Franklin,
According to Bowers and Sprott (2012), the personas of students who do not attend college or who do not persist through college must be identified prior to entering college in order to better understand the phenomenon. The personas are as follows:

- Academic ability
- Age
- Socioeconomic status
- Race
- Gender
- Familial origin
- Isolation
- Level of engagement
- Cohort influence
- Self-esteem

Students’ academic ability in high school is a key factor to consider when researchers are studying their ability to persist through college (Hoffman et al., 2009). According to Darling-Hammond (2009), when students have poor test grades early in their education due to many causes, the students are at a greater educational disadvantage. The greater the disadvantage the harder it seems for the student to catch up on concepts they either did not learn or were never exposed to (Darling-Hammond, 2009). A student’s socioeconomic status may affect his or her ability to learn when the financial resources are limited (Karp & Hughes, 2007). Limited financial resources are very common among families in certain minority groups and those with little to no educational success (Adelman, 2008).
Isolation and disengagement in the classroom can easily have a volatile effect on a student’s self-esteem (Franklin, 2010). The cohort influence on students performing poorly often is negative and leads to delinquent behavior and activities (Belfield & Levin, 2007). The above personas have been identified among researchers as common characteristics among students who choose not to further their education after high school. Adelman (2008) suggested that a student’s academic future is established by the student’s ability to meet the academic demands of the secondary curriculum. The secondary academic curriculum should provide adequate rigor to transition students to postsecondary education (Andrews, 2004).

Students who are not up to the high school academic challenge but choose to continue their education often take remedial college courses (National Center of Education Statistics (NCES), 2010). Sixty percent of all postsecondary students need at least one remedial course upon entering college (NCES, 2010). Remedial courses cost taxpayers and parents millions of dollars each year (Adelman, 2008). However, placing students in courses they are not academically ready for equates to instant failure and early withdrawal from college (Andrews, 2004).

Students who are from families with low socioeconomic status sometimes struggle in school simply because they do not have the resources needed (Karp et al., 2004). Basic school supplies and other added academic material can be costly for students, especially in the secondary education domain (Wise, 2010). The lack of resources often places a burden on the family, especially the student. These students will either work or turn to illegal activities to make up for the income deficits within their household (Wise, 2010).
Latinos and African Americans tend to leave school early (NCES, 2010). Male students drop out at two times the rate of females (Andrews, 2004). Males are twice more likely to drop out of high school than their female counterparts (Andrews, 2004). Males and females drop out of high school for different reasons. Females usually drop out of high school as a result of a teenage pregnancy (Karp & Hughes, 2007). Males tend to drop out of high school because of disengagement with school, financial hardships within their families, and behavioral problems (Karp & Hughes, 2007). All of these circumstances are variables that play a pivotal role in students’ desire and ability to attend and complete college.

First-generation college students struggle with being the family pioneer to education (Adelman, 2008). This situation may be because the family does not have the know-how to support the student in the areas needed. There are some families who still do not see the value of a college education and do not encourage their children to pursue anything higher than their achievements (Marks & Diaz, 2009). Students need guidance, understanding, and academic assistance as well as financial assistance to complete the journey of higher education. While some families fail to support their students due to their own shortcomings, some families vow to not allow their children to repeat their mistakes (Roueche & Jones, 2005). Some families will provide the support; however, it may be very limited because of the available resources (Hoffman et al., 2009).

The disparity is still present even with resources. This disparity among minorities is even more ubiquitous in some areas of the nation. Enrollment in higher learning institutions has increased more than 40% over the last decade (Adelman, 2006). However, < 30% of minorities has enrolled in postsecondary institutions since 2003.
Some research has shown that DE participation may lead to an increase in enrollment and college completion among minorities as well as students from lower income levels (Wise, 2008).

Waits, Setzer, and Lewis (2005) declared that DE programs are available at more suburban schools than rural schools in some parts of the U.S. There are some regions where DE is more prevalent in the rural communities according to a study published by the NCES (2010). Remote accessibility to partnering higher learning institutions and family lifestyle are variables possibly affecting the DE accessibility in some areas. Policymakers are attempting to bridge the gap in education quality throughout the entire country (Hoffman et al., 2009). More funds need to be available for cultivation of DE programs in all areas (Ewell, 2008). Karp et al. (2004) asserted there will be an increase in DE participation and college readiness when DE programs are adequately funded and made easily accessible to all students.

Students from different areas and socioeconomic status often face the challenges of higher education if not adequately prepared for the academic rigor of higher education (Karp et al., 2004). As accessibility of DE increases for all students, the rates of college attendance and completion will also increase among all students (Krueger, 2006). Proponents of DE will continue to propose more funding for DE programs as an effort to provide the opportunity of higher education at an affordable rate to all students (Boswell, 2001). Increased funding and accessibility of DE programs will provide the pillar most students need in order to excel in higher education because they will be better prepared for the academic environment of college (Karp et al., 2004).
DE participants have the advantage of experiencing the academic rigors of college while still in high school (“Early College High School Initiative,” 2010). DE participation provides students a real-world experience into higher learning, thus equipping them with the ability to meet the demands of a college curriculum (Franklin, 2010). An effective DE program will provide participants with all of the tools necessary to succeed in college as well as their careers (Boswell, 2001). Opponents of DE raise the issue of the program’s effectiveness on college success among minorities and lower income level students (Osher et al., 2012). Effectiveness is referred to as the program’s ability to improve college enrollment and retention rates (Krueger, 2006).

*Dual Enrollment Effectiveness*

DE effectiveness could be described as the impact of the program’s ability to meet the goals as it was designed (“Early College High School Initiative,” 2010). DE effectiveness has been regarded by some scholars as the impact on schools and students as beneficial to increasing student college preparedness (Karp, 2008). Still DE effectiveness is measured by the student’s ability to perform well in the DE courses and persist through college (Karp & Hughes, 2007). Studies have been conducted to measure DE students’ academic ability and rates of college enrollment against non-DE participants (Dougherty & Reid, 2007). The research of this consensus is not always parallel and clear considering the variables measured.

Assessment information for DE programs spans the spectrum from extremely limited data that could not produce any outcome information to a wealth of data that could provide insight regarding the impact of DE on college completion (Andrews, 2004). For example, some states report exact numbers of DE participants from each year,
yet other states do not have this information (Barnett, Gardner, & Bragg, 2004). Newer research has answered several questions regarding the number of students participating in DE (Jordan, Cavalluzzo, & Corallo, 2006).

DE has been shown to increase the likelihood that traditionally underserved students will succeed in college (Karp & Hughes, 2007). Underserved students are labelled as those less likely to finish high school based on socioeconomic levels, parents’ level of education, and academic standing in comparison to their cohorts (Wise, 2010). Further, DE holds the potential to offer a pathway to postsecondary success for traditionally underserved students (Karp & Hughes, 2007). Karp (2008) added that DE participants who were classified as traditionally underserved when entering college after graduation from high school were between 16% and 21% more likely to earn a bachelor’s degree than nonparticipants.

The effects of DE are noticeable when students enter college based on the students’ level of preparedness from DE programs for the academic rigor of college (Dougherty & Reid, 2007). This level of preparedness reduces the need for remedial courses associated with longer times to degree completion (Dougherty & Reid, 2007). Another added benefit is increasing the number of students who enter and succeed in postsecondary education. College graduates are more likely to contribute to the public good (e.g., paying taxes, voting, and the like) and less likely to require public resources (e.g., welfare, incarceration, etc.) (Dougherty & Reid, 2007).

Adelman (2008) claimed high schools that fostered college had an increased number of students who expressed an interest in continuing their education beyond high
school. DE programs give high school students first-hand exposure to the requirements of college-level work (Adelman, 2008). Researchers have implied that,

> It is all the more reason to begin the transition process in high school with expanded dual enrollment programs offering true postsecondary course work so that students enter higher education with a minimum of 6 additive credits to help them cross that 20-credit line. (Blanco et al., 2007)

Blanco et al. (2007) further stated that many students face barriers to college and the effort to reduce or eliminate the barriers should be studied closely to improve the program and the program’s viability. Blanco et al. recommended that high schools and colleges be allowed the flexibility to fund DE programs based on the school’s needs. Adelman (2008) asserted that DE is an opportunity for the schools to encourage students to pursue higher education through motivation and engagement. DE was a program initially designed for the highest academic achievers and later became known as a valuable tool for students who are also in need of credit recovery or remediation (Blanco et al., 2007). As stated by Adelman (2006), DE is an academic pathway to college success for its participants.

Scholars and policymakers contradict what an effective DE model should look like as well as its ability to meet its goals. There is neither a uniform standard of guidelines for DE programs across the nation nor a uniform standard of guidelines for DE programs across the states. The ability to measure DE will remain unclear as to the level of effectiveness until there is a universal standard for the program. A comprehensive model of an effective DE program has proven to be quite difficult to identify. Changes in the implementation of DE and its policies across the U.S. are needed before effectiveness
can really be measured. The current research has not proven to control for the many variables associated with the program and its participants. The variables not controlled are the following: (a) collaboration of the school districts and partnering institutions, (b) curriculum delivery methods, (c) student selection, and (d) faculty qualifications.

**Dual Enrollment Collaboration**

DE is collaboration between the school district and a college (Adelman, 2008). There are some regions of the country where policymakers ascertain the guidelines for collaboration (Adelman, 2008). For example, in Florida, community colleges are mandated to enter into agreements with their local districts to offer college courses (Adelman, 2008). The state of Florida examines the agreements for inconsistencies with statutes as well as best practices (Adelman, 2008). Yet, in many states, local schools, districts, and colleges have considerable flexibility in the provisions of the relationship (Spurling & Gabriner, 2004).

To formalize the partnership, schools or districts and colleges sign a Memorandum of Understanding (MOU) (Karp, 2008). The MOU outlines each partner’s responsibilities and typically covers issues related to the development, implementation, and sustainability of the DE program (Karp et al., 2004). Some MOUs are revised on an annual basis while others extend for several years (Karp, 2008). The process of developing the MOU, especially the first time, provides an opportunity for the partners to agree upon the intended goals of the program and engage faculty on both sides in the process (Karp et al., 2004). The MOU, a legally binding document, specifies the following: (a) how financial responsibilities will be shared across the institutions, (b) what courses will be offered, (c) where and how the courses will be offered, (d) who will
teach the courses, (e) if and how high school and college faculty will collaborate, and (f) how students access college facilities (Karp et al., 2004).

*Dual Enrollment Format*

There are typically three methods of delivery of DE to the high school student (Hughes, 2010). The first method of delivery takes place inside the high school classroom with qualified high school teachers delivering the curriculum (Hughes, 2010). The second method of delivery involves high school students actually attending class on the partnering college campus; this method can be done during the regular school day, during the evening, or on the weekends (Hughes, 2010). The third method of delivery involves online curriculum delivery (Hughes, 2010). Online DE recently began receiving attention among educators and policymakers as an educational model with potential for reaching a wide range of students (Krueger, 2006). There are 17 states where, in policy or practice, online DE programs exist (Krueger, 2006). However, beyond this, little is known about the actual incidence of online DE nationally (Wise, 2010).

DE courses that take place at the high school are taught by either a qualified high school teacher or a college professor who travels to the high school (Bailey & Karp, 2003). If the course is taught by a high school teacher, that high school teacher is required to meet the mandates of the partnering college (Astin, 2012). The teachers should possess a master’s degree in the area of instruction, but level of experience can vary. DE courses that are taught on the college campus can offer the student an added benefit of a real-world college experience (Marks & Diaz, 2009). The students either attend a class on the college campus during the regularly scheduled school day with traditional college students or during the evening or weekend (Callan, 2003).
Many high school students and their parents favor the latter method of delivery which is the online method (Marks & Diaz, 2009). The online method affords the advantage of the comforts and conveniences of learning at home. However, this method has proven to be the least effective with program success since the student does not experience college in a traditional classroom format (Marks & Diaz, 2009). Learning is independent at home and requires a high level of self-discipline and maturity (Callan, 2003).

_Dual Enrollment Program Policies_

DE programs are supported by legislators as an effort to improve access to college as well as increase both academic and career success in the U.S. (Krueger, 2006). Hunt and Carroll (2006) stated that, “DE courses have been viewed as a mechanism through which to address a wide number of state priorities” (p. 46). In some states, DE programs are of high priority when budgeting. Programs are funded and governed completely by local or state governments in most states (Kleiner & Lewis, 2005). In 2014, the Alabama House of Representatives passed a bill to increase DE funding by $10 million (Andrews, 2004).

The funds were derived from individuals and businesses looking for tax credits. Individuals and businesses were encouraged to make contributions to the DE scholarship fund up to $500,000, and a maximum of 50% of that was returned to the individual or business in the form of a tax credit. Some policymakers declared that the funding was not acceptable because there were no guarantees that individuals and businesses would choose to make these types of contributions according to Andrews (2004). There is no
proof that this money lightened the burden of the parents who would like for their students to participate in DE but simply could not as a result of their financial situation.

DE program terms and conditions vary from state to state and in some cases from district to district. A study conducted by the NCES (2010) found that 40 states have created policies or regulations concerning dual enrollment, but 17 states have actually mandated that DE opportunities be provided for high school students. Most state policies do not mandate the type of DE program to be offered, but they do suggest students should earn credit for the course (Marks & Diaz, 2009). Thirty-three states have policies regarding student eligibility for DE, which must be set by the postsecondary schools, secondary schools, or jointly (Hoffman et al., 2009). Some researchers have implied that there is room for serious improvement within the states’ guidelines for DE to update and strengthen their regulations. However, the students’ best interest should be considered in terms of such issues as transferability and funding issues along with many others (Hoffman et al., 2009).

Karp et al. (2004) found that “local demographics, teacher experience, cultural climate, and other factors contributed to the level of difficulty in comparing Dual Enrollment programs and outcomes” (p. 66). Karp et al. (2004) indicated that “state policies vary widely with regard to location, student mix, teacher qualifications, course content, program rigor, funding and state mandates” (p. 7). Bailey and Karp (2003) declared that efforts to increase the level of college and career readiness among high school students in the U.S. are becoming more and more of a challenge due to the present K-12 education system. Bailey and Karp (2003) also stated that education boards and
agencies set standards that are designed to give all students the education and skills needed in order to achieve academic success and compete in a global economy.

_Dual Enrollment Students_

DE programs were designed to give all students the resources they need for academic success in high school and college. Kleiner and Lewis (2005) declared that most programs have academic eligibility requirements for high school students interested in participating in DE. Kleiner and Lewis (2005) also reported “a higher percentage of public 4-year institutions than public 2-year and private 4-year institutions had academic requirements” (p. 18). Those academic requirements included minimum GPA, college placement test scores, and minimum high school class rank (Kleiner & Lewis, 2005). Kleiner and Lewis (2005) claimed that most students’ GPAs ranged from 2.75 to 3.24 and some were reported as low as 1.75. DE programs accepting students with GPAs < .75 threaten the program’s effectiveness. Often students with GPAs below the threshold are left behind or forgotten about, specifically in areas where resources are limited.

In some cases, students simply were not ready for the academic rigor of DE and typically allowed program participation beginning during the sophomore year of high school (Dougherty & Reid, 2007). As stated by Kleiner and Lewis (2005), “allowing students to take college courses prior to demonstrating ability to perform high school work sends the wrong message” (p. 20). Completion of college-level coursework requires students to possess attributes that support the academic rigor of college-level coursework. Attributes students should possess are a strong work ethic, efficient time management skills, and independent learning skills (Kleiner & Lewis, 2005). However, Bailey and Karp (2003) identified the need for DE among students who have lower grade
point averages or students who are considered at risk. At-risk students are often regarded as students with lower grade point averages (Kleiner & Lewis, 2005).

Hoffman et al. (2009) stated that, “DE programs should create new pathways for the diverse student population, specifically for those who are not thriving in high school” (p. 16). “DE is a useful strategy for encouraging postsecondary success for a broader range of students” (Bailey & Karp, 2003, p. 2). According to Krueger (2006), reducing the barriers of eligibility and expanding the outreach to students who do not meet the standard eligibility guidelines will give all students a chance at academic success in the secondary and postsecondary areas of education. Research has revealed that, “middle- and low-achieving students are best served if credit-based transition programs provide college preparation assistance that extends beyond traditional academic interventions” (Krueger, 2006, p. 4).

Existing research on DE raises questions in reference to the direction of effects for students who choose to enroll in DE courses (Hoyt, 1999; Karp & Hughes, 2007). Taking DE courses may prepare students for higher education or signify a student’s determination to complete a degree program (Karp & Hughes 2007). Sometimes the more motivated a student is academically, the more academically competent they are. Thus, they are more likely to participate in DE courses and would be more successful. However, DE prepares students for postsecondary education; it is not clear if DE participation increases college readiness or motivation and college readiness fuels DE participation (Karp & Hughes, 2007).

Students taking college courses while in high school may gain insight into their future career choices by taking introductory courses in their area(s) of interest (Karp &
Hughes, 2007). A qualitative study of urban minority DE students found that “7 of 12 students believed participation in DE had a significant impact on their decision to pursue a specific major of interest in college leading to a career pathway after college” (Medvide & Blustein, 2010, p. 8). Participants in the study noted a realization that success in school may correlate to career success in the future (Medvide & Blustein, 2010). While students sampling career options during high school in DE may be better equipped to persist in their career pursuit in comparison to their peers, a longitudinal study would be needed to determine if motivation is sustained more effectively for students who complete DE programs (Medvide & Blustein, 2010).

First-generation college students will gain exposure to the environment of college through DE. In a study of 12 urban high school students who participated in DE courses, interview findings revealed that exposure to college may help to dispel students’ perceptions of obstacles that prevent them from pursuing postsecondary education (Medvide & Blustein, 2010). Reinforcing the notion that the benefit of DE may be academic preparedness for full-time college work, Medvide and Blustein (2010) found that all 12 students articulated goals for continued academic education following high school completion and DE. One theme among DE respondents was increased confidence and a positive outlook about college due to skills they developed in the area of organization and time management, along with an increased understanding of the expectations of college professors.

*Dual Enrollment Faculty*

Kleiner and Lewis (2005) revealed that only one out of four high school DE classes are taught by a college instructor. The high school teachers teach more of the DE
courses in high school in comparison to college instructors (Lerner & Brand, 2006).

Most high school teachers are certified or required to meet the minimum qualifications of the DE program (Kleiner & Lewis, 2005). *Certified* is defined as meeting teaching credentials established by the region’s accrediting agencies (Kleiner & Lewis, 2005). However, DE programs require that teachers have a special certification according to the program’s guidelines (Kleiner & Lewis, 2005). The certifications for the high school teachers are equivalent to the minimum standards required for a college instructor. The minimum qualification for both the high school teacher and the college instructor is a master’s degree or a stated number of hours specific to the area of teaching (Karp & Hughes, 2007).

However, some of the specific qualifications required for teachers vary among DE programs (Kleiner & Lewis, 2005). Karp et al. (2004) found 12 states with no set policies for teacher qualifications for DE. DE programs without program specific policies for faculty most often utilize the standards set by the secondary school’s standards. Those standards are the standards defined by the No Child Left Behind (NCLB) Act of 2001. Under the NCLB Act of 2001, teachers should be “highly qualified.” The teacher should have a bachelor’s degree from an accredited institution of higher learning, a teaching license or certification issued by the state, and competence in the subject area (Wise, 2008). High school teachers are certified by the National Board for Professional Teaching Standards, the American Board for Certification of Teacher Excellence, among others (Wise, 2008). The certifications standards are parallel throughout the U.S.
As stated by Wise (2008), in accordance with the NCLB (2001), the state of Maryland deems a teacher as highly qualified only if the teacher meets the following criteria:

- Holds a bachelor’s degree or higher from a regionally accredited institution of higher education, and
- Holds a valid Maryland Advanced Professional Certificate and holds National Board Certification for regular education

OR

- Holds a bachelor’s degree or higher from a regional accredited institution of higher education, and
- Has passed the applicable state content test(s) in each of the core academic subjects in which he or she is assigned and or have completed an academic major or equivalent in each of the core academic subjects for which he or she is assigned.

NCLB allows each state to exercise its own discretion to develop standards of evaluation. The state must establish grade-appropriate academic subject matter knowledge and teaching skills aligned with challenging state academic content and student achievement standards and developed in consultation with core content specialists, teachers, principals, and school administrators. In addition, the state provides objective, coherent information about the teacher’s attainment of core content knowledge in the academic subjects in which a teacher teaches. Another facet required by NCLB is the state’s ability to apply uniformly to all teachers in the same academic subject and the same grade level throughout the state. There are also mandates for teaching experience
to be established by the experience the teacher possesses in the designated subject area (Wise, 2008).

The National Board for Professional Teaching Standards, the American Board of Teacher Excellence, and other state certification boards certify teachers (Wise, 2008). Although each state establishes its own license standards, the certification standards must be the same throughout the U.S. The certification standards define what teachers should be capable of doing and what the teachers are required to do (Wise, 2010).

College and university faculty qualifications are established by the institutions of higher learning in accordance with the accrediting agency of the institution (Wise, 2010). Each accrediting agency sets standards for the institutions as a guide for establishing principles. Wise (2010) asserted the standards address areas, such as funding, academic achievement, instruction and curriculum, community relations, and faculty services. Accreditation is granted to institutions by private nonprofit organizations, and those agencies are developed to ensure quality (Wise, 2010). Accreditation is also a necessity for institutions to access federal funding and guarantees transferability of courses from one institution to another.

Wise (2010) stated that U.S. colleges and universities are accredited by one of the following regional accrediting agencies: Middle States Association of College and Schools Commission on Higher Education, New England Association of Schools and Colleges Commission on Institutions of Higher Education, New England Association of Schools and Colleges Commission on Technical and Career Institutions, North Central Association of Colleges and Schools Higher Learning Commission, Northwest Commission on Colleges and Universities, Southern Association of Colleges and Schools
Commission on Colleges, Western Association of Schools and Colleges Accrediting Commission for Community and Junior Colleges, and Western Association for Senior Colleges and Universities.

The Southern Association of Colleges and Schools requires faculty qualifications be based on the level of degree earned by the teacher or instructor, experience in teaching, license and certifications, and other documented qualifications (Karp et al., 2004). The teacher’s credential verification process is done independently by the district. Policies of DE qualifications for faculty members are not consistent throughout the U.S. Some researchers argue that the inconsistencies in DE programs across the U.S. may limit the benefits of the DE program (Karp et al., 2004). Academic rigor of DE could possibly improve if the standards were the same across the board resulting in greater levels of success for the program and its participants (Karp & Hughes, 2007).

Hunt and Carroll (2006) identified key variables regarding an epidemic of teachers working out of the area of study or even their field of study. This phenomenon may be the result of the economic times of hardship in the U.S. A teacher working outside their area of study is teaching in an area that does not coincide with his or her educational background. Teacher shortages can also be the culprit for this (Karp et al., 2004). DE faculty may be highly qualified in accordance with the NCLB Act (2001) but lack the experience and credentials to teach students on a higher learning level (Karp et al., 2004). Hughes (2010) declared that college instructors may possess the credentials to instruct adult students but lack the insight to understand the younger, less experienced students when delivering the curriculum.
Out-of-area teaching leads to issues of the integrity of the DE program as it relates to teacher qualifications (Karp, 2008). Teacher quality is very difficult to define and measure (Wise, 2010). According to Karp (2008),

. . . There are two broad components that most observers agree characterize teacher quality: 1) teacher preparation and qualifications, and 2) teacher practices. Preparation refers to postsecondary education, certification, professional development, and mentoring. Practice is relative to behaviors teachers exhibit in the classroom. (p. 2)

Wise (2010) asserted there are circumstances when qualifications are parallel to the preparation but do not factor in the component of opportunities for teacher learning that influences how students learn. Most often teaching practices are created by both formal and informal learning of the teacher as well as their experience as a student (Wise, 2010).

Some teachers simply are not capable of acclimating their teaching practices to the student (Karp, 2008). Studies have shown an association between student achievements and certain teacher learning styles (Darling-Hammond, 2009). DE programs should present chances for both formal and informal learning and sharing through learning communities and professional development activities (Karp, 2008).

Bailey and Karp (2008) claimed that cognitive, behavioral, motivational, and emotional factors influence teaching on various levels. Wise (2008) stated that teachers sometimes conduct research in the classroom by applying the latest instructional techniques when teaching DE students. In some cases, the results are favorable toward the new technique and there are instances when those results are unfavorable of the
technique (Krueger, 2006). An example of this was provided by Kisker (2008) during a study conducted with high school students when the students did not respond to the teacher’s new attempts to induce a higher level of critical thinking skills among the students. This approach was an attempt to condition the high school students for their position as college students. Effective professional development should always address the “interrelatedness of cognitive, affective, motivational, and behavioral aspects in classroom teaching that lead to behavior change” (Halpin, 2014, p. 23).

Some researchers argued that, “College instructors do not always have a background in educational theory; thus professional development programs should also provide teachers an opportunity to examine teaching practices, philosophies, and goals” (Petress, 2003, p. 350). McNeil, Coppola, Radigan, and Heilig (2008) declared that teaching philosophies and goals can be an effective tool for evaluating DE teachers. McNeil et al. (2008) stated the teachers’ declaration provides a pivotal component for assessing teacher practices. It also allows the mentor or evaluator an opportunity to see the development of progress of the teacher. Petress (2003) found that a philosophy “constitutes a moral and social compass; behavioral, attitudinal, and value guide-posts; essential personal and professional prescriptions; and a consistent but alterable means for professional evaluation” (p. 120).

Halpin (2014) presented the following principles based upon research on teaching and learning practices in colleges: (a) encourages contact between students and faculty, (b) develops reciprocity and cooperation among students, (c) uses active learning techniques, (d) gives prompt feedback, (e) emphasizes time on task, (f) communicates high expectations, and (g) respects diverse talents and ways of learning. In an effort to
improve the transition from secondary to postsecondary, teachers’ professional lives require enrichment to be highly effective in the classroom (Halpin, 2014).

There is an abundance of professional support and development activities to further improve and enhance both teaching and learning (Halpin, 2014). When teachers are given the resources they need to do their jobs, they will be highly effective (Halpin, 2014). All educational stakeholders should invest in teacher qualifications and productiveness in the classroom as it pertains to student achievement (Halpin, 2014). Extensive research is available on teachers’ impact on student learning but very limited research on the teachers’ impact and perceptions of DE.

Benefits of Dual Enrollment

The benefits of DE vary significantly for participants (Adelman, 2008). Students participating in DE will have the chance to earn from one semester to two years of college work prior to high school graduation (Andrews, 2004). Each state has its own set of rules and governing regulations resulting in variations of the programs and its benefits (Andrews, 2004). Some of the DE programs allow students the opportunity to earn an associate’s degree at the culmination of two years of coursework, while others only earn two years of credit counting toward a bachelor’s degree (Andrews, 2004). One of the most beneficial attributes of DE would be the low-cost or in some areas free college tuition for students participating in DE programs.

Another benefit for DE participants would be the significant reduction in degree completion time. Research has also shown that DE decreases the time to completion of a college degree (Hughes, 2010). Specifically, a national study found that students who earned college credits in DE and similar programs completed their degree in 4.25 years
compared to 4.65 years for students with no previous credit (Adelman, 2008). Similarly, another study found that students save 1.2 semesters during their baccalaureate program because of their participation in DE (Spurling & Gabriner, 2004). Finally, compressing the time to a degree results in significant cost savings, with one study estimating savings of $5,000 to $24,000 for each full year of DE participation (Spurling & Gabriner, 2004).

DE programs afford high schools the benefit of offering college-level academic rigor to high school students. It appears that DE is an equitable solution for all of the educational stakeholders in the U.S. However, Dugan and Komives (2007) stated that “students are being misled by the promises of a fast-track educational opportunity” (p. 23). Students should focus solely on mastery of their current levels of academic achievement in order to be well-prepared for college (Dugan & Komives, 2007). Also, Dugan and Komives (2007) stated that “a program that encourages high-school students to proceed to college classes after a minimal high-school experience denies many well-established principles of effective learning” (p. 23). There is also the concern of the high school teachers’ level of capability for teaching a college course and express their concerns of cheating the students out of a quality education (Bailey & Karp, 2003).

Bailey and Karp (2003) argued that transferability of college credits is a significant concern of the DE program and would also be considered a limitation. Institutions reserve the right to refuse the transfer of credits whether the course content was delivered by a high school teacher or a college instructor (Lerner & Brand, 2006). The level of the faculty’s training and experience will play a significant role in the accreditation labels of any institution. However, the benefits of DE programs across the U.S. still seem to supersede the issues of course transferability for many students.
Lerner and Brand (2006) added that DE programs increase educational opportunities for high school students. According to Lerner and Brand (2006), DE programs should expand curriculum options available to high school students. It is also structured to increase the depth of study available for a particular subject, while offering a seamless transition between high school and postsecondary institutions. In addition to facilitating entry and shortening the time necessary for students to complete a postsecondary degree program, it promotes collaboration between secondary and postsecondary faculty.

Researchers have shown a momentous connection between DE students and their levels of elevated aspirations toward education (Smith, 2007). As stated by Smith (2007), students who participated in DE programs on a college campus had an even greater level of aspiration toward education. Some researchers have even shown a significant increase between the DE high school students when compared to their cohorts who were not in DE programs (Boswell, 2001). As a result, some states have seen a significant return on their investment in the respective state’s DE program (Karp & Hughes, 2007). The state of Iowa saved $52 million in funding for high schools and community colleges over a 10-year period as a result of contributions to the DE program (Karp & Hughes, 2007).

Chamberlain and Plucker (2008) claimed that DE programs in Ohio are a valuable asset to the recruitment process for colleges in Ohio. The students in DE programs in Ohio were “better prepared and experienced fewer transition difficulties than students who did not participate in DE” (Chamberlain & Plucker, 2008, p. 473). In another study at Columbia University, the researchers revealed that DE increased students’ level of
readiness for college as well as the completion rates for students participating in DE. The study was conducted on high school graduates in Florida who were male and low income (Chamberlain & Plucker, 2008).

Models of Dual Enrollment

Over half of postsecondary institutions in the U.S. have DE programs (Hoffman et al., 2009; Kleiner & Lewis, 2005; Waits et al., 2005). According to the Western Interstate Commission on Higher Education, as of January 2006, 40 states had legislation and or board policies regarding program eligibility, awarding of credit, the financially responsible party, need for counseling, program promotion, and execution of institutional accountability standards. Bragg et al. (2006) reported many states prescribe that the financial cost of the program be distributed between the institutions of higher learning and the DE participants.

The oldest state-sponsored academic acceleration program in the U.S. was Florida’s Accelerated Mechanism Program developed in 1979 by state statute (Hunt & Carroll, 2006). Hunt and Carroll (2006) stated that, “DE courses have been in existence in Florida public education since the 1970s, developed largely out of local articulation agreements that already existed between high school, community colleges, and universities” (p. 40). However, “Minnesota was the first to establish a state-wide DE program, called Postsecondary Enrollment Options (PSEO), in 1985” (Hunt & Carroll, 2006, p. 39). Students under this program complete two years of non-remedial college coursework at no cost to the participant or the parent, since total funding is provided by the state in an effort to improve educational opportunities.
Minimal contemporary data exist on national DE participation at this time (Blanco et al., 2007). Many researchers and administrators who are familiar with DE identify the benefits of the programs (Blanco et al., 2007; Hoffman et al., 2009; Karp et al., 2004). These proposed benefits include the following:

- Facilitating the transition between high school and college.
- Allowing students to complete a degree faster.
- Reducing costs for a college education.
- Reducing high school dropout rates.
- Preparing students for college work and reducing the need for remedial coursework.
- Enhancing the high school curriculum.
- Making more effective use of the senior year in high school.
- Developing the connection between high school and college curricula.
- Raising the student’s motivation and goal to attend college.
- Acclimatizing students to the college environment.
- Improving relationships between colleges and their communities.
- Easing recruitment of students to college.
- Enhancing opportunities for underserved student populations.

Roderick (2008) confirmed that a strong college culture is imperative to students’ positive perceptions of their future college experiences. Roderick observed that having a strong college culture seemed to make the biggest difference on students who barely meet the qualifying standards for college admissions. DE programs give high school students first-hand exposure to the requirements of college-level work, which provides a solid
foundation for academic success in college (Jordan et al., 2006; Kleiner & Lewis, 2005; Roderick, 2008; Smith, 2007; Swanson, 2008; Waits et al., 2005).

Adelman (2006) stated that the first year of college is critical for students attending college for the first time. When college students are aware of the college culture, the students are less likely to over-schedule their classes and are more likely to select the correct college classes needed for their major. DE programs not only offer the students a chance to earn college credit while in high school, but DE also provides students with a roadmap of how to navigate throughout the collegiate system (Adelman, 2006). The program helps students to identify and fully utilize all of the resources available to them during their course of study. As stated by Adelman (2006), the library and writing labs, tutors, and counselors are just some of the resources available to DE and traditional college students.

Lerner and Brand (2006) examined the barriers to college enrollment and degree completion that urban students face and measures for those students to gain access to programs and the necessary support for DE implementation. Urban is defined as of or related to the city (Lerner & Brand, 2006). This study also recommended that high schools and colleges be allowed the flexibility to fund DE programs. Lerner and Brand (2006) asserted that DE is a unique experience which allows high school students to experience the academic rigor of college and campus life while those students are still in high school. DE programs are no longer solely for the academic elite; the programs could also be beneficial to students at risk of not completing high school (Andrews, 2004; Kisker, 2006). DE has the potential to be considered as an invaluable resource for the
higher education and high school communities to collaborate on the mutual goal of education reform (Blanco et al., 2007).

Jordan et al. (2006) declared that Rhode Island’s Commissioner of Higher Education Jack Warner stated in a 2009 article that the major challenge of DE is convincing the participants they are capable of handling the coursework. “We spend a lot of time in education trying to address the question of what predicts success in college, and the answer is nothing predicts success in college like success in college” (Jordan et al., 2006, p. 19). Warner also said, “So if you expose a student to college-level courses while they are still in high school, now they know they are college material; and there is no mystery (Jordan et al., 2006, p. 20). “They’ve proved it to their professors and to admissions officers. And they’ve proved it to themselves” (Jordan et al., 2006, p. 21).

DE program directors often garner data and analyze the data independently to determine and predict student outcomes upon program completion (Adelman, 2008). For instance, a psychology instructor in Iowa compared high school DE participants to traditional college students with an assessment exam. Both groups were assessed with a 100-point multiple-choice exam. The campus mean which represented the college students was 84.82. The class mean which represented the DE students was 84.3. Other similar studies were also conducted with no significant differences in the academic abilities of the DE students when compared to the traditional college students (Andrews, 2004). Running Start, Washington State’s dual credit program, implied that their DE participants perform just as well as college students in two-year institutions (Wise, 2010).

Shkolnik (2008) recently reported that most students in Early College High Schools (ECHS) valued their DE experience. ECHS is an innovative approach to
motivate students to work harder and look further into their future. ECHS couples high school students with college curriculum, resulting in the high school DE participants earning both a high school diploma and a two-year degree (Shkolnik, 2008). Eighty percent of the ECHS students said that if they could start over, they would choose the ECHS again. Winters and Greene (2012) conducted research on a cohort from the College Academy at Broward Community College, an intensive DE public high school in Florida. Winters and Greene (2012) also found DE students who valued their DE experience. The students were surveyed and their responses revealed the following:

1. The participants did miss the extracurricular activities offered in a traditional public high school.

2. The participants appreciated and were comfortable with the mature environment.

3. They felt privileged to earn college credit while still in high school.

The stated goals of many DE programs are parallel ranging from student readiness for college to students’ ability to complete a plan of study in college (Harnish & Lynch, 2005; Shkolnik, 2008). DE is regarded as a positive source impacting a wide range of students in a direct manner to prepare them for college success (Waits et al., 2005). College readiness is “the level of preparation a student needs in order to enroll and succeed—without remediation—in credit-bearing general education courses that meet requirements for a baccalaureate degree” (Smith, 2007, p. 80). Smith (2007) declared four key dimensions of college readiness: (a) key cognitive strategies (including problem solving), research, interpretation, and reasoning; (b) key foundational content knowledge from core subjects; (c) academic behavior, such as time management and study skills;
and (d) contextual skills and awareness, which refers to knowledge of admissions requirements, providing financing for college, and accessing professors and key resources. Likewise, Baker, Clay, and Gratama (2005) pointed to three necessary ingredients for college preparedness: college awareness, college eligibility, and the level of college commitment.

Bailey et al. (2003) observed the correlation between the DE students’ participation and location with the aspirations of students in high schools in Kansas. During this study 304 students from five high schools in rural Kansas were surveyed (Bailey et al., 2003). The participants in the study were 93% White. The results were based on self-reports and indicated positive relationships with educational aspirations (Karp et al., 2004). The findings further supported that location is also a relevant predictor of educational goals among DE participants.

In addition to increased educational aspirations, DE increases students’ level of understanding relevant to their role as a college student (Karp & Hughes, 2007). Karp (2008) conducted extensive research with detailed interviews and observations of first-time DE participants to identify how DE participants learn the roles of a college student. The sample \( (N = 26) \) came from the College Now program at the City University of New York. The City University of New York’s College Now program is a comprehensive high school with a large, well-established College Now program. Karp (2008) revealed the authentic college courses were strongly related to whether or not students shifted their role perceptions. Students who perceived their College Now course as similar to a college course were also more likely than their peers to change their understanding of the college student role.
Seventeen of the 26 DE participants’ perceptions of the role of college students shifted within one semester based on their responses at the end of the semester. High school students shifted their perceptions of the role of college students during their first semester in a college course, as indicated by their more accurate descriptions of the role at the end of the course when compared to their initial descriptions (Karp, 2008).

Many DE programs require that students take a “Gateway” course which provides students with the necessary skills of note-taking, test preparation, ability to access campus resources, and time management (Karp et al., 2004). Zeidenberg, Jenkins, and Calcagno (2007) studied the effects of those types of “student life skills” (SLS) courses offered in Florida. Using a multivariate analysis that controlled for the known differences between students (i.e., test scores, race, gender, age), there was a 9% increase among remedial students who took the Gateway course and completed the degree (Karp et al., 2004). For those who took remediation courses, SLS enrollment was associated with a 5% increase in the chances of completion (Karp & Hughes, 2007).

Kisker (2008) studied 1,141 high school graduates enrolled in a community college to determine any correlations between DE on college readiness in four community colleges in Ohio, Texas, Florida, and Oregon. The targeted areas were reading, writing, math, and the total college-level credit hours taken by each participant. Correlation analysis showed that academically DE was significantly related to college-readiness in math. DE participants who took more hours of math and more advanced math courses demonstrated an increased level of college readiness in math in all four consortia (Kisker, 2008).
Adelman (2004) conducted one of the first to studies to utilize a nationally represented sample of DE program participants. Swanson (2008) referred to Adelman’s work as restricted with less sophisticated statistical methods to control the participants’ behaviors. Swanson (2008) applied the same data set (213,000 DE graduates in 1992) to address these limitations by building on Adelman’s foundation. Logistic regression was applied to model the effects of DE participation and control for demographic and high school variables (i.e., gender, race, and first-generation student). Swanson’s (2008) findings suggested that DE students have a greater level of persistence toward degree attainment. Specifically, those students who enter college within a year of high school completion have a greater level of persistence. Students who acquired 20 or more college credits by the end of the first year of college and those who continued their enrollment in postsecondary education without a break of more than one semester through the second year of college demonstrated an even greater level of persistence.

Assessing Dual Enrollment

DE has offered a very practical approach toward ensuring better prepared high school students for college-level work as well as the work force (Bragg et al., 2006). As academic expectations and standards are increased for students (especially for DE students), the same must be applied to facilitator of the program. Recent studies have compared the benefits and the drawbacks of DE programs to non-DE programs. Researchers have declared DE as a solution to many of the deficiencies throughout the educational system in the U.S. (Bragg et al., 2006). This area of study is still open to further research to support or negate the previous statement.
According to Conley et al. (2010), the majority of dual enrollment programs in the U.S. focus on preparing students for college success. DE programs often equip the students with many tools for success, such as gateway courses (Conley et al, 2010). Zeidenberg et al. (2007) defined gateway courses as a course designed to assist students in utilizing available resources and orienting the student to college life. The premise of the course is resource and time management. Conley (2007) stated that, “College readiness is the level of preparation a student needs in order to enroll and succeed, without remediation in courses that will meet the requirement for a baccalaureate degree” (p. 23).

Conley et al. (2010) described college readiness in 4 dimensions: “key cognitive strategies, including problem solving, research, interpretation and reasoning; key foundational content knowledge from core subjects; academic behavior, such as time management and study skills” (p. 20). In contrast, Struhl and Vargas (2012) stated that there are three essential requirements for college readiness. Students should first be qualified for college with the appropriate number of credits and skills to ensure academic success upon high school graduation. Students should also have knowledge of the necessity for postsecondary success (Zeidenberg et al., 2007). Lastly, the student must be committed to work toward success in college (Conley et al., 2010).

Although the definition of success and college readiness will vary among individuals, “DE program success should be measured with a uniform benchmark standard throughout the nation” (Conley et al., 2010, p. 20). A uniformed measurement would give a fair assessment of the complete DE’s effectiveness on improving student achievement throughout the U.S. Recent studies have shown the effectiveness of DE
programs on student success in college and their levels of readiness for college after high school (Baker et al., 2005). Karp et al. (2004) revealed the lack of comprehensive data for outcome analyses as an area of deficiency in dual enrollment studies. Karp et al. (2004) also stated that the studies do not control for the individual characteristics of the participants and do not utilize enough rigorous statistical methods.

Conversely, Bragg et al. (2006) assert favorable results are often due to the factors that are unmeasured in the models and not the actual program. Bailey and Karp (2003) claimed more thorough studies need to be conducted accurately to measure the effectiveness of DE on participants’ college success. Karp and Hughes (2007) stated there are “sufficient, constructive findings to validate the support and further research of dual enrollment” (Karp & Hughes, 2007, p. 71).

Smith (2007) conducted a study in which he found that participants of DE programs are most likely to have a significant positive relationship with academic goals when parents’ highest level of education was factored. Some may view Smith’s study as limited since the participants were perceived to be predominantly white. This study only showed a correlation between DE enrollment and educational aspirations—cause and effect (Smith, 2007). Also, Karp and Hughes (2007) studied DE effectiveness by conducting detailed observations of participants as well as interviews. Students’ attitudes and perceptions of college often changed after the first true encounter with a college course. Karp and Hughes (2007) also found that the participants’ ambitions for academic success soared when they were in a DE program.

Museus, Lutovsky, and Colbeck (2007) examined a study conducted on the Kentucky Council of Postsecondary Education in 2006 and explored the influence of DE
on matriculation into four-year public institutions throughout the state of Kentucky during the fall of 2002. “Dual enrollment and dual credit programs did not appear to enhance college matriculation rates” (Museus et al., 2007 p. 18). No, statistically significant difference was found between the DE students and non-DE students. Scholars Karp (2008) and Swanson (2008) described the findings were the result of common problems associated with following students from high school to college transition. The difficulty of garnering data for such studies could possibly be the explanation for limited research in this area.

Swanson (2008) argued that Adelman’s (2006) work was limited because it did not control for student attributes and behaviors. Swanson (2008) also affirmed “the composite factors constitute academic momentum toward a degree and the participation only indicates statistically significant impacts upon students’ academic momentum” (Swanson, 2008, p. 10). Some researchers have expressed concern with the potential disparity between dual enrollment participants in high school and the non-participants. Medvide and Bluestein (2010) stated that a balance needs to be maintained between high school and their efforts to push students to college. DE programs might reduce the incentives to improve curriculum and instruction for non-DE students (Struhl & Vargas, 2012). Museus et al. (2007) asserted that, “DE should be utilized as a tool to help students enter college and succeed and not as a part of the secondary curriculum” (p. 71).

Despite the concerns, DE programs provide alternatives to students that may help increase student attendance and participation (Krueger, 2006). The effects of DE on recruitment and retention have been beneficial through increased applications to community colleges and universities (Karp, 2008). Boswell (2001) declared DE can
generate a positive image of higher education institutions throughout communities. Research has also supported claims that DE programs promote community colleges in a more prestigious image for students who are academically sound but focusing on a university (Boswell, 2001). Academically sound students often experience a four-year college or university when continuing their education immediately following high school (Karp, 2008). Community colleges have always had to compete for top academic performers and often are considered as later choices (Boswell, 2001). The growing popularity of DE has bridged that gap for some community colleges (Krueger, 2006). Barnett et al. (2004) found that DE is an effective tool in recruitment for the community colleges.

A student’s success in college is already predetermined by high school graduation; therefore, states should make it a priority to offer a variety of DE courses (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). Assortments of approaches are utilized to promote DE and its benefits to students and parents (Hughes, 2010). Makela (2005) studied the latest policies and practices on DE admissions at four-year institutions throughout the state of Illinois and concluded that people sharing information with each other was the most common and effective means of communicating the benefits of the program. Once students and parents hear about the opportunity, they seek information on the program (Kuh et al., 2007). Schools with DE programs most often utilize websites and program pamphlets to provide an interesting means of capturing the students’ attention (Makela, 2005). Outreach may be essential for the continued success of dual enrollment.
The call for more extensive studies of DE programs that identify positive outcomes for further research and policy is an ongoing issue according to Lerner and Brand (2006). Hughes (2010) stated that through future studies the gaps in understanding all of the contributing factors to student success in college could possibly be reduced. The existing gaps in the research causes difficulty in persuading policymakers to continue much needed funding for the DE program (Karp & Hughes, 2007). Research-based information that connects DE with increasing student retention and graduation is necessary for educators to justify the implementation of programs (Karp, 2008).

Blanco et al. (2007) examined data on DE in Rhode Island and identified several areas where the program needed improvement. Data were garnered from site visits to high schools across the state, and interviews were conducted with focus groups throughout Rhode Island. The focus groups consisted of high school administrators, teachers, guidance counselors, and students. Blanco et al. (2007) concluded DE offers three primary benefits:

1. An independent program for high-achieving students who have outgrown the standard high school curriculum; 2. A way to accelerate time to degree and decrease college costs; 3. A method to impact particular college-level skills among students who are otherwise intellectually ready for college. (Blanco et al., 2007, p. 4)

The study also revealed two other relevant benefits to the at-risk students. At-risk students are classified as students who are at risk of failing (Adelman, 2008). DE is a
way to cultivate college norms and bridge the gap between low-income students and those of more affluent communities (Adelman, 2008).

DE is not a benefit to just an elite group of students nor is it a benefit to just the so-called “at risk” student (Karp & Hughes, 2007). DE programs were designed to offer students an opportunity to have a better postsecondary experience through exposure and real-world experiences (Andrews, 2004; Blanco et al., 2007; Boswell, 2001; Bragg et al., 2006). These experiences could possibly yield a higher completion rate in high school as well as college, thus eliminating some of the nation’s problems related to the lower income population.

The DE program in Rhode Island’s inner-city high schools conditions the students for college with the pre-exposure to the collegiate atmosphere and rigor (Blanco et al., 2007). These students are most often considered at-risk and are first-generation college enrollees. A focus group of teachers and administrators reported that DE is preferred over Advanced Placement courses as noted by Blanco et al. (2007). Advanced Placement offers college level curriculum, instruction, and assessment to high school students, as stated by (Karp, 2008). Krueger (2006) stated district schools often lack the qualified personnel and funding needed for Advanced Placement courses, thereby resulting in DE as a better alternative. Blanco et al. (2007) support the claims that DE was favored based on the opportunity to evaluate student competence levels in a given area.

DE programs allow students to earn high school and college credit simultaneously in either a high school classroom setting or a classroom on the college campus (Struhl & Vargas, 2012). Advanced Placement programs require students to
pass an exam to demonstrate their level of mastery of the course content. Teacher qualification and standards vary between the two programs. As stated by Struhl and Vargas (2012), the quality of the course content is also un paralleled between the DE and Advanced Placement programs.

Bragg et al. (2006) noted that there are many factors, such as race and socioeconomic status, which shape attitudes and decisions on participating in DE programs. Those factors include “A lack of understanding about how high school, college, and career are connected; the role of family and community in shaping educational attitudes and behaviors; and, particularly for males, the lure of mostly non-normative alternatives to school” (Bragg et al., 2006, p. 18). Additionally, other obstacles may include lack of family and financial support. Smith (2007) described these same factors as contributors for poor performance among secondary students in the traditional high school setting. Struhl and Vargas (2012) concluded there is no lucid solution to the problem of students who are in dire need to take advantage of this opportunity.

Researchers have recognized concerns of policymakers about DE (Andrews, 2004; Johnstone & Del Genio, 2001). These include the following:

- Minimal quantitative data to support the claims of the benefits.
- Academic quality and rigor.
- Actual real time college experience.
- Ability of high school teacher to effectively deliver the curriculum.
- Uncertainty of funding.
- Lack of motivation among students and parents.
• Limited access for some students.

These concerns are valid because there is not enough current research to support the claims of the benefits of DE participation. The quality and the method of delivery of the college level curriculum have been challenged by opponents of the DE program. The opposition of the program and the lack of funding could negate a valuable resource for many at-risk students.

Other researchers (Blanco et al., 2007; Bragg et al., 2006; Karp, 2008) proposed that there are more positive benefits to DE than negative benefits to DE. DE program participation enhances opportunities for underserved students, eases college recruitment efforts, and provides significant savings to students and parents financially. Other benefits of the DE program include the improved college retention rates along with the reduced number of remedial courses incoming students take. DE programs throughout the country provide a window of opportunity to students who would otherwise pay a greater price for the benefits of DE (Barnett et al., 2004).

Students who are participating in DE save more education dollars than their non-DE cohorts (Hughes, 2010). Money is saved through reducing the need to take remedial college courses and the retaking of college courses. Students who participate in DE earn degrees faster since they transfer DE credits to college (Andrews, 2004; Karp et al., 2004). DE students know what to expect and know what is expected from them when entering an institution of higher learning (Andrews, 2004). Thus, improving their chances toward college completion, this is the overall premise of the program (Andrews, 2004; Blanco et al., 2007).
Kleiner and Lewis (2005) described the two factors that must be accounted for when students are taking the road to continue their education beyond high school. First, the students should be prepared for the academic rigor of college. The second factor is a support system from the institution of higher learning which includes resources of academic and financial assistance. Strategies for college success include supplying academic leaders with specific and concise information about the knowledge and skills needed for higher education (Roderick, 2008). Adelman (2006) concluded that students and their parents need more assistance with college planning, especially in the area of financial aid. According to Adelman (2006), there should be more assistance for schools with a large low-income population.

If the DE program operates in the manner in which it was designed—an effort to enhance the education experience and opportunities in the U.S.—the institutions of higher learning will collaborate with the secondary institutions to ensure consistent courses in both sectors (Dugan & Komives, 2007). According to Dugan and Komives (2007), DE programs will be referred to as a viable effort on education reform in the U.S. Karp et al. (2004) stated that, “authentic learning is an active process that requires prerequisites and knowledge; time spent in learning, understanding, and reflection; and targeted disciplined, and mature application” (p. 23).

Effective DE programs support prerequisite instructor training, continued learning through professional development programs, and collegial interaction while leading to change in teachers’ and instructors’ perceptions of DE (Cohen, 2008). Karp et al. (2004) revealed that the only states requiring DE teachers participate in professional development programs were Michigan and Missouri. Teacher professional development
is designed to create a pathway to keep teachers informed on the best practices available in curriculum and instruction to apply when teaching (Kisker, 2008). Struhl and Vargas (2012), professional development for teachers is to provide a model for professional advancement and the most recent criteria in the industry. Kisker (2008) explained that the relevance of professional development for teachers as an effective measure to ensure the highest quality of instruction is delivered into the classroom.

At the Salt Lake Community College (SLCC) in Salt Lake City, Utah, the focal point of the institution is quality instruction (Peterson, Anjewierden, & Corser, 2001). This focal point helps to maintain the standard of the institution as well as the DE program. The program’s features are “structured to maintain quality in the face of rapid growth” (Peterson et al., 2001, p. 39). Peterson et al. (2001) declared that the DE program at SLCC provides a solution to the states’ educational challenges. This program was designed to serve as a model for DE programs throughout the U.S. (Peterson et al., 2001).

The final criticism of DE is that “funding is especially pressing in lieu of the current budget cuts taking place in public education” (Jordan et al., 2006, p.730). Community colleges continue to reduce course sections on campus when faced with budgetary shortfalls, so why would a college continue to support DE courses? “The analysis of funding models for DE in Florida concluded that the funding structure by which both institutions collect apportionment encourages inter-organizational collaboration” (Jordan et al., 2007, p. 747). This cooperation in turn benefits the development of dual enrollment programs and, seemingly, the acceleration of students through higher education. There is a question, however, about whether DE and dual
funding models (such as that found in Florida and California) benefit students’ individual interests to the degree that institutions benefit financially (Jordan et al., 2007). Once again, more research is needed on the dual funding model to determine actual cost savings for students, institutions, and the state as a result of DE.

State Profile

Dougherty and Reid (2007) conducted an analysis on the DE programs across the nation. The 50-state analysis identified common components for each state’s program. Program basics were identified which consisted of the state DE governing policy, objective of the program, location of courses, number of secondary and postsecondary credit hours to be earned, developmental and remedial course options, and any unique characteristics (Dougherty & Reid, 2007). Access was another identified component relating to course offering, postsecondary partners, student eligibility, and advisement. Finance is also an identified component in the analysis which outlined where the financial resources originated. Program quality and transferability are the remaining two components. Dougherty and Reid (2007) asserted the program’s quality is pivotal to the overall effectiveness of DE in Alabama; the course standards and evaluating process were listed as a part of the analysis.

Dougherty and Reid (2007) revealed that DE in Alabama provides eligible high school students in Grades 10-12 a unique opportunity to earn both high school and college credit simultaneously. The students’ eligibility is based on the students’ ability to maintain a minimum of a 3.0 grade point average (Dougherty & Reid, 2007). Students who do not meet the minimum requirements may still be eligible for the program based on passing an assessment with the local partnering institution of higher learning. Once a
student is deemed eligible for program participation, the student is then eligible to take the approved DE courses. Dougherty and Reid (2007) affirmed students may take eligible courses in one of three available formats in Alabama: high school campus, partnering higher learning institution campus, or even online.

Course delivery is usually determined by each local district in Alabama as well as the federal program funding contributions. In some districts in Alabama students are fully responsible for tuition for the college-level courses (Dougherty & Reid, 2007). When students are responsible for tuition and fees for participating in the DE program, enrollment rates may be lower in those areas (Karp et al, 2004). As stated by Wise (2008), low-income students often regard DE as a “missed educational opportunity” unless there is an alternative source of funding made available to them. Alternative funding may range from Workforce Development grants to institutional scholarship funding (Wise, 2008).

The state of Alabama’s Dual Enrollment program was designed to meet the state’s workforce demands. In Alabama all eligible high school students are allowed to take college level courses in high school through most of Alabama community colleges. In the state of Alabama the Dual Enrollment program is governed by The State Board of Education Policies, the Department of Postsecondary Education Guidelines for policy, and the Alabama State Board of Education Administrative Code. Alabama’s Dual Enrollment programs have strong state policies to guarantee the credibility of the program. The state make certain that all Dual Enrollment courses offered on the high school campus are parallel to courses offered on a college campus. An Alabama high school teacher, teaching a
Dual Enrollment course must meet the hiring standards of an adjunct faculty member in the state college system. The college is responsible for overseeing the practices of the high school Dual Enrollment teachers. The courses taught by the high school Dual Enrollment teachers afford students with an opportunity to earn both high school and college credit simultaneously without leaving the high school campus. Student eligibility for Dual Enrollment in Alabama is based on an amalgamation of student academic performance (to demonstrate student’s capability), teacher recommendation, and the ability to meet state system institution standards. State institution standards are based on ACT/SAT scores and high school GPA of a 3.0 minimum. Both the Alabama Community Colleges and district boards of education mutually corroborate these standards. Although, the Alabama Community Colleges set the standards for Dual Enrollment in the state, there is not a “required annual reporting” for this program as it pertains to student participation, achievement, and demographics. Alabama does not require annual reporting on any acceleration programs and is one of only three states that have not sought federal funding for statewide longitudinal data systems. Dual Enrollees in Alabama do not have an in house liaison to provide any needed support while in the program through their high school. However, the state does require high schools and colleges to delineate how students will be supported when there is a need. In Alabama students’ financial need is not a deterring factor for participants of the Dual Enrollment program. Funding is derived from state and local funding for Dual Enrollment with the exception of textbooks and other class material. Students are responsible for textbooks and other associated
material cost for the Dual Enrollment course. However, there is often additional local or institutional funding to absorb those costs as well. (Dougherty & Reid, 2007, pp. 12-13)

The South Alabama school district selected for this study serves nearly 60,000 students (Dietz, 2010). There are 12 high schools and two career technical schools providing secondary education in the area (ASDE, 2013). In South Alabama an average of $8,000 is spent annually per student. Due to the minimal quantitative research in the study area, there is no evidence to support the impact of DE program participation on college readiness in South Alabama. This quantitative study is relevant because it examines the perceptions of high school DE teachers’ and high school counselors’ perceptions of the efficacy of DE participation on college success among students in South Alabama.

Summary

This review of the literature examined theories emphasized by Becker (1962) and Tinto (1987, 1997), both of whom have theories parallel to the premise of the DE program design. Tinto’s (1987) theory identified academic and social issues as the leading causes for dropouts in learning institutions. Tinto (1987) referred to students’ progression levels and willingness to succeed as a correlation to academic and social conformities of education. Becker’s (1962) human capital theory explains the results of positive experiences to a higher level of academic success and personal rewards. Becker’s (1962) theory advocates that some individuals work hard to earn an education to enjoy certain privileges and rewards. Becker’s theory encapsulates the benefits of DE, since the program is driven by the rewards of the program.
There were gaps revealed in the current available literature. Some of the gaps relates to the age of the research, the sample size and location, as well as the background of the participants. Most of the research is based on the program benefits to just minority students or the at-risk students and does not provide a lucid depiction of the total benefits of the program. Benefits of the DE programs are beneficial to all students and not just to a select group.

This review of the literature will contribute to the credibility of this study and assist policymakers in identifying the potential benefit for a model program across the U.S. Programs with proven academic success, such as DE programs, could be incorporated into every curriculum for students who are deemed at risk for not completing college. This program with more support and promotion can possibly improve higher education enrollment and completion statistics with more high school students attending college upon graduation and persisting to degree completion in college, thus producing a greater number of citizens who are educated and trained to compete in a global market. The next chapter will include a discussion of the methodology of this research project.
CHAPTER III

METHODOLOGY

The purpose of this chapter is to illustrate the research design, methodology, data collection, data analysis procedures, participant selection, and instrument selection that were utilized for this study. The purpose of this study was to compare and determine the perceptions of Dual Enrollment (DE) teachers and high school counselors in regard to college readiness among DE students. This study examined the perceptions of high school DE teachers and counselors toward the efficacy of DE participation on college readiness in a school district in South Alabama. A survey instrument was utilized to understand the perceptions of the South Alabama high school DE teachers and high school counselors toward the efficacy of DE participation on student success in college. Quantitative measures were applied to this study. A quantitative approach was the most effective way to garner numeric data on a population to succinct the outcomes to a broader population (Creswell, 2002). Such data have proven valuable for policymakers and stakeholders of the DE program.

This chapter will illustrate the procedures and methods performed in conducting this quantitative study. Due to minimal quantitative research in the study area, there was no evidence to support the claim of increased levels of college readiness among DE program participants in South Alabama. There were gaps in DE literature, specifically in South Alabama, on its effectiveness to have more students college-prepared upon graduating from high school. There was minimal evidence to support DE efficacy on college readiness in South Alabama. School policymakers often struggle to understand the actual difference of DE participation in the lives of students attending and finishing
college because of the gaps in the literature (Gatlin, 2009). This research was designed to close some of the gaps in the literature and help education stakeholders identify effective mechanisms to continue to develop and promote the DE program.

Research Questions

It was determined that minimal research had been conducted on teachers’ and high school counselors’ perspectives of DE and the benefits of the program. This study examined the perceptions of DE teachers and high school counselors to compare and determine whether there are significant differences between their perceptions of college readiness among DE participants in South Alabama. This study answered the following research questions:

Research Question 1 – Is there a statistically significant difference between the perceptions of high school Dual Enrollment teachers and high school counselors on Dual Enrollment efficacy on college readiness based on gender and years of teaching or counseling experience in South Alabama?

Research Question 2 – Is there a statistically significant difference in South Alabama Dual Enrollment teachers’ perceptions of the level of college readiness among Dual Enrollment students in multiple subject areas when compared to South Alabama high school counselors’ perceptions of the level of college readiness among Dual Enrollment students in multiple subject areas?

Research Question 3 – Is there a statistically significant difference in the perceptions of high school Dual Enrollment teachers regarding how often should specific assignments be given to contribute to Dual Enrollment participants’ level of college
readiness when compared to the perceptions of high school counselors in South Alabama?

Hypotheses

The hypotheses were as follows:

NH₁ – There will not be a statistically significant difference between the perceptions of high school Dual Enrollment teachers and high school counselors on Dual Enrollment efficacy on college readiness based on gender and years of teaching or counseling experience in South Alabama.

NH₂ – There will not be a statistically significant difference in the perceptions of the Dual Enrollment high school teachers and high school counselors regarding Dual Enrollment participants’ level of college readiness in multiple subject areas in South Alabama.

NH₃ – There will be no statistically significant difference in the perceptions about how often specific assignments should be given to contribute to Dual Enrollment participants’ level of college readiness among high school Dual Enrollment teachers and high school counselors in South Alabama.

Research Design

Quantitative research is appropriate when the researcher has access to data to draw conclusions and develop theories from data (Creswell, 2002). This approach provided increased knowledge of DE students’ level of college readiness upon completion of the DE program in the South Alabama school district. This study contributed to the relevance of the program to the component of all South Alabama high
school students being adequately prepared for the academic rigor of college. A survey was utilized from a DE study of the DE program in Tennessee.

Participants

The small and limited sample size ($N = 42$), consisting of DE teachers and high school counselors, does not generalize the overall larger population of DE teachers and high school counselors in the U.S. This study included high school teachers who are experienced in teaching DE courses and high school counselors in a South Alabama school district. In order for a high school teacher to be selected to teach DE courses in a high school, the teacher must meet certain criteria beyond that of a regular high school teacher in the district (Dougherty & Reid, 2007). The teacher must also meet the standards of partnering higher learning institution guidelines for hiring adjunct instructors. These guidelines include, but are not limited to, a master’s degree in the field he or she is teaching and or 18 graduate hours in the field. The high school counselors were surveyed based on their previous experience with counseling high school students, specifically DE students before and during their participation in DE.

There were 12 high schools contacted to participate in the study. The building leaders were asked to identify all teachers who teach DE courses and the high school counselors by name with school email addresses.

Instrumentation

The instrument used for this study was from a 2009 study entitled, *The Perceptions of Regular High School and Dual Enrollment Teachers and Dual Enrollment Students Toward College Preparedness and Dual Enrollment Courses in Two Tennessee Public School Systems* (Gatlin, 2009). This instrument, The Perceptions of Regular High
School and Dual Enrollment Teachers and Dual Enrollment Students Toward College Preparedness and Dual Enrollment Courses in Two Tennessee Public School Systems (see Appendix A), was selected because Gatlin’s (2009) research paralleled the present study. The instrument consists of 25 Likert-scaled questions and one open-ended question. Dr. Gatlin used a panel of experts in the field to establish the validity of the instrument. The five-member panel included representatives from both secondary and postsecondary levels of education to provide feedback on the instrument. A pilot study was also conducted to test the instrument’s reliability. Cronbach’s alpha reliability coefficient was utilized for the internal consistency of the instrument (Gatlin, 2009). Three sections of the instrument produced reliability coefficients between .70 and .90. The multiple subject areas section of the Gatlin (2009) instrument yielded a value of .86. The DE assignment section of the instrument value was .73, and the benefits section was .94.

Permission to use and modify Gatlin’s instrument was obtained (see Appendix B). Modifications to the instrument included substituting the term regular high school teachers with high school counselors. The total number of questions was also reduced to 20 Likert-scaled questions. Three demographic questions were added. Questions numbered 23 and 24 from the original questionnaire were omitted since those questions were not relevant to this study.

Data Collection Procedures

Data collected for this study were compiled from the survey. High school DE teachers and high school counselors in the South Alabama school district were invited to participate in this study. Survey Monkey software hosted the survey for the respondents.
Before applying for approval from the Institutional Review Board (IRB) of The University of Southern Mississippi, the researcher applied to the South Alabama school district for permission to conduct the study in its district. The researcher completed the External Research Proposal Application, returned the package electronically to the Executive Director of Research, Assessments, Grants, and Acceptability of the district. The package consisted of an information cover sheet, signed research contract, written proposal, and the data instrument for review.

The proposal was reviewed by the Research, Assessment, Grants, and Accountability staff and other appropriate school system personnel. Approval was granted from the South Alabama school district for the research to be conducted (see Appendix C). Once permission was obtained from The University of Southern Mississippi’s Institutional Review Board (see Appendix D), the researcher then contacted the building representative from each high school to establish how the researcher was to proceed with the collection of data and obtain email addresses for the DE teachers and counselors. A request to allow the DE teachers and counselors permission to complete the survey during faculty meeting or professional development was made.

The researcher began contacting the DE teachers and counselors to request their participation in the study. The email informed the DE teachers and counselors of the purpose of the research, benefits, institutional affiliation, and contact information for the researcher. The content of the email also consisted of the measures that were to be taken to keep identities and responses anonymous and confidential. The participant was also advised of the 10-15 minutes required to complete the survey and the survey link to follow to access the survey online. The link to the survey remained open for 7 days in an
effort to yield the highest possible response rate for the most reliable data. Survey Monkey was utilized to export the data into Microsoft Excel. The data were then transferred from Microsoft Excel into SPSS, where the data were analyzed for the study.

Data Analysis

To examine the perceptions of the high school DE teachers and counselors on college readiness among DE participants in South Alabama, data collected from the survey instrument were analyzed. The first section of the instrument was composed of demographic questions on the high school DE teachers and high school counselors. Null Hypothesis 1 came from this first section. Survey questions 1-3 were demographic questions relevant to the respondents’ role and experience with DE. The respondents’ role and experience were relative because those questions identified the respondents and how their role and years of experience may impact their perceptions of the program. Research statements 20-23 identified the perceptions of the DE teachers and counselors toward the efficacy of DE on college readiness.

The second section of the survey was relative to the perceptions of the survey respondents regarding the students’ level of college readiness in multiple subject areas. This section hosted Null Hypothesis 2. Survey statements 4-12 proffered insight as to how well DE teachers and high school counselors perceive DE participants in multiple subject areas relative to college readiness. This section of the Gatlin instrument included perceptions of student preparedness in the multiple subject areas and had a value of .86.

The third section of the instrument pertained to the assignments the high school DE teachers assign the DE participants to measure their abilities with utilizing the acquired skills for specific assignments. Survey statements 13-19 from the third section
of the survey supported Null Hypothesis 3. Gatlin’s (2009) instrument identified the relevance of specific assignments and the effect on students’ level of college readiness and had a value of .73.

The last section, which consists of statements 20-23, was about the respondents’ perceptions of the current and long-term benefits of DE participation and college readiness which may also help to support Null Hypothesis 1. The final section of Gatlin’s (2009) instrument pertained to the DE classes and the association to college readiness and had a value of .94. The independent t test was utilized to examine perceptions of the variables of the DE teachers and counselors. The Analysis of Variance test (ANOVA) was used to compare the means based on gender and years of experience in Hypothesis 1. According to Gatlin (2009), all statistical tests were evaluated at a two-tailed significance level of .05. Hypotheses 2 and 3 were analyzed using a t test (see Table 1).

Table 1

Research Questions and Survey Statements

<table>
<thead>
<tr>
<th>No.</th>
<th>Research Question</th>
<th>Survey no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1</td>
<td>Is there a statistically significant difference between the perceptions</td>
<td>1, 2, 3, 20-23</td>
</tr>
<tr>
<td></td>
<td>of high school DE teachers and high school counselors on DE efficacy on college</td>
<td></td>
</tr>
<tr>
<td></td>
<td>readiness based on gender and years of teaching or counseling experience in South</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alabama?</td>
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<th>Survey statements</th>
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<td>RQ2</td>
<td>Is there a statistically significant difference in South Alabama DE teachers’ perceptions of the level of college readiness among DE students in multiple subject areas when compared to South Alabama high school counselors’ perceptions of the level of college readiness among DE students in multiple subject areas?</td>
<td>4-12</td>
</tr>
<tr>
<td>RQ3</td>
<td>Is there a statistically significant difference in the perceptions of high school DE teachers regarding how often should specific assignments be given to contribute to DE participants’ level of college readiness when compared to perceptions of high school counselors in South Alabama?</td>
<td>13-19</td>
</tr>
</tbody>
</table>

*Note. DE = Dual Enrollment.*

**Summary**

This chapter described the methodology and the role of the researcher for the current research study on a school district in South Alabama’s DE program. This study examined the perceptions of DE teachers and high school counselors in relation to DE efficacy on college readiness of high school participants in a South Alabama school district. The research design included the sequential details of the research components of the study. The participants of this study and the process of selecting a study site were
identified in this chapter, as well as the selection process and criteria for participation. The process of selecting the site to conduct the study was identified in Chapter III.

Another component of this chapter was instrumentation. The instrumentation section of the chapter described the survey instrument. The survey questions were guided by the research questions. The procedure section of this chapter described what the researcher did with data garnered from the surveys. The researcher ensured that all participants’ identities were protected and that there were minimal risks involved in the study. The responses were reported in aggregate to reduce the risks of compromising identities of the participants.

Data collected were processed in a confidential and accurate manner to ensure anonymity of all participants involved as well as the identity of the participating district and high schools. Collected data were analyzed as outlined in this chapter. The methods used for analysis were explained to support the validity, reliability, and trustworthiness of the researcher and the data. This methodology section provided the support needed for the study to reach its goal.
CHAPTER IV

RESULTS

The purpose of this research was to examine the perceptions of Dual Enrollment (DE) teachers and high school counselors of DE efficacy on college readiness. Chapter IV presents research results for the analysis of the data from responses of DE teachers and high school counselors from an online quantitative survey. The data were analyzed using an independent t test and a two-way ANOVA. Descriptive and inferential statistics were used to report the results.

Descriptive Statistics

Demographic Survey Statistics

The demographic survey data revealed there were 42 respondents to the survey. Fifty were invited to participate in the study, representing a return rate of 84%. The respondents were 71% males and 28% females. Years of experience were distributed between the two categories among DE teachers and high school counselors. DE teachers with 1-5 years of teaching experience accounted for 26%. The DE teachers with 5 or more years of teaching experience also accounted for 26% of respondents. High school counselors with 1-5 years of counseling experience totaled 9.5% of the respondents. The group of teachers with 5 or more years of teaching experience represented the largest group with a total of 64%. The DE teachers with 5 or more years of experience represented the largest group of respondents (see Table 2).
Table 2

Demographics of Respondents (N = 42)

<table>
<thead>
<tr>
<th>Variables</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>71.4</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>28.6</td>
</tr>
<tr>
<td>Years of experience</td>
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<tr>
<td>1-5</td>
<td>15</td>
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</tr>
<tr>
<td>5 or more</td>
<td>27</td>
<td>64.3</td>
</tr>
<tr>
<td>Type of experience</td>
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<td></td>
</tr>
<tr>
<td>Teaching</td>
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<td>52.4</td>
</tr>
<tr>
<td>Counseling</td>
<td>20</td>
<td>47.6</td>
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Reliability of the Instrument

The reliability analysis of the instrument was conducted using SPSS software. The reliability of the instrument on the perceptions of DE teachers and high school counselors in multiple subject areas was $\alpha = .92$. The reliability of the instrument on the perceptions regarding assignments was $\alpha = .59$, while the reliability of the instrument on the perceptions of overall readiness was $\alpha = .81$. 
**Survey Descriptive Statistics**

Along with demographic information, the survey included 21 statements. The survey responses were analyzed using descriptive statistics, such as mean and standard deviation. Perceptions of college readiness of DE teachers and high school counselors were quantified using a 4-point Likert scale in the second section of the survey. There were four values used to quantify the responses: 1 = *Not well*, 2 = *Somewhat well*, 3 = *Very well*, and 4 = *Extremely well*. The third section of the survey focused on assignments for DE efficacy on college readiness. There were four values used to quantify the responses: 1 = *Never*, 2 = *Less than once a month*, 3 = *One-two times a month*, and 4 = *Once a week or more*. The fourth section of the survey focused on perceptions of DE teachers and high school counselors of DE general efficacy on college readiness. There were five values used to quantify the responses: 1 = *Strongly disagree*, 2 = *Somewhat disagree*, 3 = *Neither agree nor disagree*, 4 = *Somewhat agree*, and 5 = *Strongly agree*. The last statement on the survey was open-ended for the respondents to make suggestions on how DE participation can increase college readiness (see Table 3).

**Table 3**

*Item Descriptives*

<table>
<thead>
<tr>
<th>Descriptive</th>
<th>$M$</th>
<th>$SD$</th>
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</thead>
<tbody>
<tr>
<td>Oral communication</td>
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<td>.69</td>
</tr>
<tr>
<td>Science</td>
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<td>.75</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3.23</td>
<td>.92</td>
</tr>
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Table 3 (continued).

<table>
<thead>
<tr>
<th>Descriptive</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing skills</td>
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<td>.81</td>
</tr>
<tr>
<td>Reading comprehension</td>
<td>3.35</td>
<td>.70</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>3.20</td>
<td>.82</td>
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<tr>
<td>Motivation</td>
<td>3.48</td>
<td>.71</td>
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<td>Research skills</td>
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<tr>
<td>Overall readiness</td>
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<tr>
<td>Writing research papers</td>
<td>2.60</td>
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<tr>
<td>Oral presentations</td>
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<td>.71</td>
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<tr>
<td>Participation in class</td>
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<tr>
<td>Memorization of facts</td>
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<td>.64</td>
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<tr>
<td>Team work</td>
<td>3.45</td>
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<tr>
<td>Applying theories</td>
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<td>Integrating technology</td>
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<tr>
<td>Challenging</td>
<td>4.73</td>
<td>.45</td>
</tr>
<tr>
<td>Increases confidence</td>
<td>4.63</td>
<td>.54</td>
</tr>
<tr>
<td>Motivation to stay in school</td>
<td>4.40</td>
<td>.78</td>
</tr>
<tr>
<td>Recommendations</td>
<td>4.80</td>
<td>.41</td>
</tr>
</tbody>
</table>
The highest mean \((M = 4.80, SD = .405)\) was in survey item 23, stating most respondents would recommend that students take DE while in high school. The lowest mean \((M = 2.60, SD = .632)\) was in survey item 13 regarding how often research papers should be assigned.

The guiding questions were as follows:

Research Question 1 – Is there a statistically significant difference between the perceptions of high school Dual Enrollment teachers and high school counselors on Dual Enrollment efficacy on college readiness based on gender and years of teaching or counseling experience in South Alabama?

Research Question 2 – Is there a statistically significant difference in South Alabama Dual Enrollment teachers’ perceptions of the level of college readiness among Dual Enrollment students in multiple subject areas when compared to South Alabama high school counselors’ perceptions of the level of college readiness among Dual Enrollment students in multiple subject areas?

Research Question 3 – Is there a statistically significant difference in the perceptions of high school Dual Enrollment teachers regarding how often should specific assignments be given to contribute to Dual Enrollment participants’ level of college readiness when compared to the perceptions of high school counselors in South Alabama?

*Research Question 1*

Survey statements 1, 2, 3, and 20-23 helped to identify perceptions of teachers and counselors. Participants rated DE efficacy on college readiness high. The highest rated mean value was 4.79 represented in survey statement 23. The lowest rated mean
value was 4.43 represented in survey statement 22. Survey statement 22 had the highest standard deviation ($SD = .770$), which represented the most variability (see Table 4).

Table 4

*Teachers’ and Counselors’ Perceptions Based on Experience (N = 42)*

<table>
<thead>
<tr>
<th>Statement number</th>
<th>Survey statement</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>The Dual Enrollment classes challenge students more than standard high school classes.</td>
<td>4.74</td>
<td>.45</td>
</tr>
<tr>
<td>21</td>
<td>I feel Dual Enrollment classes can increase a student’s confidence toward taking future college classes.</td>
<td>4.64</td>
<td>.53</td>
</tr>
<tr>
<td>22</td>
<td>Dual Enrollment classes keep students motivated in school.</td>
<td>4.43</td>
<td>.77</td>
</tr>
<tr>
<td>23</td>
<td>I would recommend that students take Dual Enrollment classes while in high school.</td>
<td>4.79</td>
<td>.42</td>
</tr>
</tbody>
</table>

*Research Question 2*

Eight perception statements (survey statements 4-12) were used to address the DE teachers’ and counselors’ perceptions of DE efficacy on college readiness in multiple
subject areas. Participants rated their perceptions of DE efficacy high. The highest rated mean value was 3.67 (survey statement 12). The lowest rated mean value was 2.90 (survey statement 9). Survey statement 6 had the highest standard deviation (.943) (see Table 5). There was a statistically significant difference, \( t(40) = 2.41, p < .05 \), in the perceptions of DE teachers and counselors regarding DE efficacy on college readiness in multiple subject areas. The significant difference was between the participants’ perceptions in the areas of Reading Comprehension, Critical Thinking, Research Skills, and Overall Readiness. The following data were reported by the DE teachers and school counselors via the survey instrument: Reading Skills–DE teachers \( (M = 3.55, SD = .60) \), high school counselors \( (M = 3.10, SD = .72) \); Critical Thinking–DE teachers \( (M = 3.45, SD = .67) \), high school counselors \( (M = 3.10, SD = .72) \); Research Skills–Dual Enrollment teachers \( (M = 3.59, SD = .50) \), high school counselors \( (M = 3.00, SD = .73) \); and Overall Readiness–DE teachers \( (M = 3.67, SD = .58) \), high school counselors \( (M = 3.15, SD = .67) \) (see Table 6).

Table 5

*Teachers’ and Counselors’ Perceptions Based on Multiple Subject Areas \((N = 42)\)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Teacher</th>
<th></th>
<th></th>
<th>Counselor</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>( M )</td>
<td>( SD )</td>
<td>( n )</td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>Oral communication</td>
<td>22</td>
<td>3.45</td>
<td>.671</td>
<td>20</td>
<td>3.15</td>
<td>.671</td>
</tr>
<tr>
<td>Science skills</td>
<td>22</td>
<td>3.41</td>
<td>.666</td>
<td>20</td>
<td>3.10</td>
<td>.788</td>
</tr>
<tr>
<td>Math skills</td>
<td>22</td>
<td>3.41</td>
<td>.854</td>
<td>20</td>
<td>3.00</td>
<td>.943</td>
</tr>
</tbody>
</table>
Table 5 (continued).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Teacher</th>
<th></th>
<th></th>
<th>Counselor</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Writing skills</td>
<td>22</td>
<td>3.36</td>
<td>.727</td>
<td>20</td>
<td>3.10</td>
<td>.852</td>
</tr>
<tr>
<td>Reading skills</td>
<td>22</td>
<td>3.55</td>
<td>.596</td>
<td>20</td>
<td>3.10</td>
<td>.718</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>22</td>
<td>3.45</td>
<td>.671</td>
<td>20</td>
<td>2.90</td>
<td>.852</td>
</tr>
<tr>
<td>Motivation</td>
<td>22</td>
<td>3.64</td>
<td>.581</td>
<td>20</td>
<td>3.30</td>
<td>.801</td>
</tr>
<tr>
<td>Research skills</td>
<td>22</td>
<td>3.59</td>
<td>.503</td>
<td>20</td>
<td>3.00</td>
<td>.725</td>
</tr>
<tr>
<td>Overall readiness</td>
<td>22</td>
<td>3.67</td>
<td>.577</td>
<td>20</td>
<td>3.15</td>
<td>.671</td>
</tr>
</tbody>
</table>

Table 6

*Teachers’ and Counselors’ Perceptions of the Level of College Readiness (N = 42)*

<table>
<thead>
<tr>
<th>Statement number</th>
<th>Survey statement</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Oral Communications</td>
<td>3.30</td>
<td>.69</td>
</tr>
<tr>
<td>5</td>
<td>Science</td>
<td>3.28</td>
<td>.75</td>
</tr>
<tr>
<td>6</td>
<td>Mathematics</td>
<td>3.23</td>
<td>.92</td>
</tr>
<tr>
<td>7</td>
<td>Writing Skills</td>
<td>3.25</td>
<td>.81</td>
</tr>
<tr>
<td>8</td>
<td>Reading Comp</td>
<td>3.35</td>
<td>.70</td>
</tr>
</tbody>
</table>
Table 6 (continued).

<table>
<thead>
<tr>
<th>Statement number</th>
<th>Survey statement</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Critical Thinking</td>
<td>3.20</td>
<td>.82</td>
</tr>
<tr>
<td>10</td>
<td>Motivation</td>
<td>3.48</td>
<td>.72</td>
</tr>
<tr>
<td>11</td>
<td>Research Skills</td>
<td>3.33</td>
<td>.69</td>
</tr>
<tr>
<td>12</td>
<td>Overall Readiness</td>
<td>3.43</td>
<td>.68</td>
</tr>
</tbody>
</table>

**Research Question 3**

There were six survey statements used to describe DE teachers’ and counselors’ perceptions of DE efficacy on college readiness with specific assignments. Survey statements 13-19 were used to describe DE teachers’ and counselors’ perceptions of DE efficacy on college readiness with specific assignments. Participants rated their perceptions of DE high. The highest rated mean value was 3.95 (survey statement 15). The lowest rated mean value was 2.55 (survey statement 13). Survey statement 17 had the highest standard deviation ($SD = .87$) (see Table 7).
Table 7

Teachers’ and Counselors’ Perceptions of Frequency of Assignments (N = 42)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Research papers</td>
<td>2.61</td>
<td>.63</td>
</tr>
<tr>
<td>14</td>
<td>Oral presentations</td>
<td>2.95</td>
<td>.71</td>
</tr>
<tr>
<td>15</td>
<td>Class participation</td>
<td>3.93</td>
<td>.26</td>
</tr>
<tr>
<td>16</td>
<td>Memorization of facts</td>
<td>3.68</td>
<td>.65</td>
</tr>
<tr>
<td>17</td>
<td>Team work</td>
<td>3.44</td>
<td>.74</td>
</tr>
<tr>
<td>18</td>
<td>Theories</td>
<td>3.51</td>
<td>.60</td>
</tr>
<tr>
<td>19</td>
<td>Technology</td>
<td>3.56</td>
<td>.59</td>
</tr>
</tbody>
</table>

Statistical Analysis

Hypothesis 1

NH₁ – There will not be a statistically significant difference between the perceptions of high school Dual Enrollment teachers and high school counselors on Dual Enrollment efficacy on college readiness based on gender and years of teaching or counseling experience in South Alabama.

An ANOVA was used to test the null hypothesis to see if there was a statistical difference in the teachers’ and counselors’ perceptions based on years of experience. The mean of the DE teachers with 5 or more years of experience was $M = 4.70$, $SD = .48$. The mean of the high school counselor with 5 or more years of experience was $M = 4.59$,.
The results indicated that there was no statistically significant difference in how DE teachers and high school counselors perceived DE efficacy on college readiness based on years of experience (see Table 9).

Table 8
*Teachers’ and Counselors’ Perceptions Based on Specific Assignments (N = 42)*

<table>
<thead>
<tr>
<th>Perceptions and role</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often should research papers be assigned?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>2.55</td>
<td>.510</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>2.65</td>
<td>.745</td>
</tr>
<tr>
<td>How often should oral presentations be given?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>2.86</td>
<td>.560</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>3.05</td>
<td>.826</td>
</tr>
<tr>
<td>How often should there be class discussions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>3.91</td>
<td>.294</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>3.95</td>
<td>.224</td>
</tr>
<tr>
<td>How often should there be memorization of facts?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>3.73</td>
<td>.703</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>3.65</td>
<td>.587</td>
</tr>
<tr>
<td>How often should there be team work?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>3.50</td>
<td>.598</td>
</tr>
<tr>
<td>Counselor</td>
<td>22</td>
<td>3.35</td>
<td>.875</td>
</tr>
</tbody>
</table>
Table 8 (continued).

<table>
<thead>
<tr>
<th>Perceptions and role</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often should new theories be applied?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>3.50</td>
<td>.512</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>3.50</td>
<td>.688</td>
</tr>
<tr>
<td>How often should there be integration of technology?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>22</td>
<td>3.57</td>
<td>.507</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>3.55</td>
<td>.686</td>
</tr>
</tbody>
</table>

Table 9

*Descriptives of Teachers and Counselors with 5 or More Years of Experience*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>22</td>
<td>3.37</td>
<td>.22</td>
</tr>
<tr>
<td>Counselor</td>
<td>20</td>
<td>3.39</td>
<td>.43</td>
</tr>
</tbody>
</table>

Therefore, the results of Hypothesis 1 indicated a fail to reject the null hypothesis. There was no significant main effect experience between the groups with 1-5 years of experience and 5 or more years of experience, $F(3, 34) = 1.61, p > .05, \eta^2 = .124$. The main effect gender revealed was not significant, $F(1, 34) = 1.42, p > .05, \eta^2 = .040$. 
There was no significant interaction between experience and gender, $F(3, 34) = 1.24, p > .05, \eta^2 = .099$.

**Hypothesis 2**

$NH_2$ – *There will not be a statistically significant difference in the perceptions of the Dual Enrollment high school teachers and high school counselors regarding Dual Enrollment participants’ level of college readiness in multiple subject areas in South Alabama.*

An independent sample $t$ test was used to test the null hypothesis to determine if there was a statistically significant difference in teachers’ and counselors’ perceptions of DE efficacy on college readiness based on multiple subject areas. The subscales were condensed to a single variable of overall to reduce type I error. The overall mean of the DE teachers was $M = 3.67, SD = .78$. The overall mean of the high school counselor was $M = 3.15, SD = .67$. The mean for the DE teachers was slightly higher, which revealed a difference in the perceptions. There was a statistically significant difference, $t(40) = 2.41, p < .05$, in how DE teachers and high school counselors perceived DE efficacy on college readiness in multiple subject areas (see Table 10). Therefore, the results of hypothesis 2 rejected the null. It is assumed that all participants accurately reported their perceptions with the most appropriate response on the instrument.
Table 10

ANOVA of Multiple Subjects

<table>
<thead>
<tr>
<th>Variables</th>
<th>DE teacher</th>
<th></th>
<th>Counselor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Oral Communications</td>
<td>3.45</td>
<td>.68</td>
<td>3.15</td>
<td>.67</td>
</tr>
<tr>
<td>Science</td>
<td>3.41</td>
<td>.67</td>
<td>3.15</td>
<td>.79</td>
</tr>
<tr>
<td>Math</td>
<td>3.41</td>
<td>.67</td>
<td>3.00</td>
<td>.94</td>
</tr>
<tr>
<td>Writing</td>
<td>3.36</td>
<td>.67</td>
<td>3.10</td>
<td>.85</td>
</tr>
<tr>
<td>Reading</td>
<td>3.55</td>
<td>.80</td>
<td>3.10</td>
<td>.72</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>3.45</td>
<td>.68</td>
<td>2.90</td>
<td>.85</td>
</tr>
<tr>
<td>Motivation</td>
<td>3.64</td>
<td>.78</td>
<td>3.30</td>
<td>.80</td>
</tr>
<tr>
<td>Research</td>
<td>3.59</td>
<td>.75</td>
<td>3.00</td>
<td>.72</td>
</tr>
<tr>
<td>Overall</td>
<td>3.67</td>
<td>.78</td>
<td>3.15</td>
<td>.67</td>
</tr>
</tbody>
</table>

Hypothesis 3

\(NH_3\) – There will be no statistically significant difference in the perceptions about how often specific assignments should be given to contribute to Dual Enrollment participants’ level of college readiness among high school Dual Enrollment teachers and high school counselors in South Alabama.

An independent samples \(t\) test was used to test the null hypothesis to determine if there was a statistically significant difference in DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness relative to how often specific
assignments should be given. The highest mean of the DE teachers was $M = 3.91, SD = .294$ in the class discussion area. The highest mean of the high school counselor was also in the area of class discussion ($M = 3.95, SD = .224$). The research papers yielded the lowest mean among DE teachers ($M = 2.55, SD = .510$) and high school counselors ($M = 2.65, SD = .745$). The results revealed that there was not a statistically significant difference in the perceptions of DE teachers and high school counselors relative to the frequency of specific assignments, $t(40) = -.137, p > .05$. Therefore, the results of Hypothesis 3 indicated a fail to reject the null (see Table 11).

Table 11

\textit{ANOVA of Specific Assignments}

<table>
<thead>
<tr>
<th>Variables</th>
<th>DE teacher</th>
<th>Counselor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Research papers</td>
<td>2.55</td>
<td>5.10</td>
</tr>
<tr>
<td>Oral presentations</td>
<td>2.86</td>
<td>5.60</td>
</tr>
<tr>
<td>Class discussions</td>
<td>3.91</td>
<td>2.94</td>
</tr>
<tr>
<td>Memorization of facts</td>
<td>3.73</td>
<td>.703</td>
</tr>
<tr>
<td>Team research</td>
<td>3.50</td>
<td>.598</td>
</tr>
<tr>
<td>Application of theory</td>
<td>3.58</td>
<td>.512</td>
</tr>
<tr>
<td>Integration of technology</td>
<td>3.57</td>
<td>.507</td>
</tr>
</tbody>
</table>
**Open-Ended Question**

In the last section of the survey, participants were asked for suggestions for improvement on DE programs’ efficacy on college readiness. The researcher wanted to gain more insight about the participants’ thoughts of the program and its future. There were no suggestions provided by the participants for further enhancement of DE efficacy on college readiness. There were no data to be examined.

**Summary**

This chapter presented the descriptive and statistical data for DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness. Forty-two teachers from a school district in South Alabama participated in the study. Collectively, the DE teachers and high school counselors perceived DE as effective on college readiness. The hypotheses were tested using independent samples t test. The first and third null hypotheses were not rejected because there was no statistically significant difference between the DE teachers’ and high school counselors’ perceptions based on years of experience and frequency of specific assignments. The second null hypothesis was rejected based on the significant difference in the perceptions of DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness relative to multiple subject areas. There were no data to examine from the open-ended statement. Multiple subjects and specific assignments subscales were condensed to a single variable to reduce Type I error.
Chapter V

Summary, Conclusions, and Recommendations

This chapter presents a summary of findings, limitations of the study, and recommendations for further research. This study sought to answer three questions about the perceptions of DE teachers and high school counselors in a South Alabama school district. This study also sought to determine if there was a significant difference in the perceptions of DE teachers and high school counselors pertaining to the following demographic information: gender, years of teaching, or counseling experience.

Summary of Findings

The finding of this study supported the findings of the other studies referenced in Chapter II. Specifically, Gatlin’s (2009) study on perception found that the overall DE experience was perceived as beneficial for many of its participants when they entered college. Other studies have been parallel with these findings but are limited because of the relevance to this study. Many studies have not been quantified and have not addressed the perceptions of the DE teachers and or high school counselors. After reviewing these studies in addition to performing the research for this study, the conclusion was that DE is an effective program to prepare students for the academic rigor of college.

In order for the researcher to examine the efficacy of DE on college readiness in South Alabama, data were collected from DE teachers and high school counselors in the selected school district. Based on the analysis of these data, DE has a statistically significant impact on students’ level of college readiness upon program completion. DE
participants were perceived to be better prepared for college by their DE teachers and high school counselors.

Seven perception statements helped to determine the DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness in South Alabama based on their years of experience. Overall, most DE teachers and high school counselors perceived DE participation as an effective tool for college readiness among participants with one to 5 years of experience as well as the participants with 5 or more years of experience. The teachers and counselors also provided their agreement to statements of the benefits of DE for future students.

The findings from the study indicated there was no statistically significant difference among the perceptions of DE teachers and high school counselors relative to years of experience and gender. Eight perception statements addressed DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness in multiple subject areas. The majority of the survey statements supported this research question. Most of the DE teachers and high school counselors responded positively to all of the statements regarding students’ level of college readiness in multiple subject areas as a result of DE participation. However, a significant difference was found between DE teachers’ and high school counselors’ perceptions in the areas of reading comprehension, critical thinking, research skills, and overall readiness. The perception differences in these areas could possibly be attributed to the DE teachers’ position in the classroom.

The DE teachers have more experience assessing students’ abilities through assignments and regular testing than high school counselors. However, the results still
concluded that high school counselors are supportive of the statements relative to DE efficacy on college readiness in multiple subject areas.

Eight survey statements were used to describe DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness relative to assignments given to DE participants. The perceptions of DE teachers and high school counselors were parallel according to the responses on the survey. There were no statistically significant differences in the DE teachers’ and high school counselors’ perceptions of DE efficacy on college readiness regarding specific assignments. Overall, the respondents to the survey were supportive of DE efficacy on college readiness.

The review of literature revealed differences of perceptions and even opposition of education stakeholders relative to DE. Research suggested these differences may be the result of various formats and goals of the program throughout the nation (Hughes, 2010). However, DE teachers and high school counselors who responded to this study agreed that DE efficacy on college readiness is positive. This research aligned with Tinto’s theory of how well students perform when they are connected to or more experienced with a task (Tinto, 1987). This section of the survey was parallel to the theory as DE provides the students with the experiences of skills and tasks of college-level coursework while still in high school, thus better performance from the student while in college.

Conclusions

This study concluded that DE is an effective program on college readiness in South Alabama based on the perceptions of DE teachers and high school counselors. This study found that the perceptions of DE teachers and high school counselors were
positive and could have a favorable impact on how DE is promoted and funded in South Alabama. If evidence of DE efficacy is shown to policymakers, then these data could possibly result in more funding. Increased funding for DE could result in more students earning college credit while still in high school. Thus, more high school students earning college credit result in an increase of students successfully completing college with less student loan debt in less time.

According to the findings of the study, no significant differences were found in the perceptions of DE teachers and high school counselors of DE efficacy on college readiness based on years of experience or gender. However, a significant difference was found in the perceptions based on multiple subject areas. Overall, the perceptions of DE teachers and counselors were supportive of the positive effects of DE efficacy on college readiness in South Alabama. The comparisons did not identify any significant differences of the perceptions between the two groups of respondents.

The responses of DE teachers and high school counselors to perceptions in the first multiple-response section of the survey pertaining to multiple subject areas revealed a recurring theme. The recurring theme of students excelling in multiple subject areas as a result of DE participation on college readiness is the reason for the program (Gatlin, 2009). Blanco et al. (2007) found that DE programs are designed to benefit high school students as well as college students. Over 80% of the survey respondents perceived that DE students were ready for college in multiple subject areas as a result of DE participation.

In the second multiple-response section of the survey, the responses revealed that the DE teachers’ and high school counselors’ perceptions were slightly different
regarding the assignments on college readiness. More DE teachers perceived the assignments as a contributing factor to college readiness when compared to the high school counselors. The high school counselors’ perception responses could have been the result of their limited classroom experience with the students and specific assignments. There were no recurring themes identified by the responses from the second section of the survey.

The final multiple response section of the survey revealed that > 90% of the DE teachers and high school counselors were supportive and would recommend the DE program. Gatlin (2009) revealed that > 80% of the teacher and parent respondents were supportive and would recommend DE participation. The theme in this section was consistent with Gatlin’s (2009) study. According to Karp (2008), the effects of DE have been beneficial to students through increased applications to community colleges and universities. DE participation provides students a real-world experience into higher learning, thus equipping them with the ability to meet the demands of a college curriculum (Franklin, 2010).

Limitations

This study had limitations. First, the study was limited to the perceptions of DE teachers and high school counselors. The sample size of 42 was small and limited and did not generalize the entire population of DE teachers and high school counselors. A total of 50 combined DE teachers and high school counselors qualified to participate in the study. Fifty surveys were emailed to DE teachers and high school counselors in the South Alabama school district. The return rate was 84%, and participation was voluntary. This study did not include non-DE teachers. The non-DE teachers and
administrators could have provided additional insight. Past and present DE program
participants’ perceptions could have also been beneficial to the study. Another limitation
was the study was conducted in only one school district. The reliability of the research
subscale was < 70 and was also a limitation to the study.

Recommendations for Policy or Practice

Based on the findings of this study, there are several recommendations for
education policymakers and stakeholders. School districts across the nation are
encouraged to offer and promote more DE programs to students of all socioeconomic
levels. Findings from this study revealed DE teachers and high school counselors
perceive DE as an effective tool for students to be college-ready upon high school
graduation. DE should be an option for all high school students going to college and or
entering the workforce (Blanco et al., 2007; Camblin, 2003; Conley, 2007, Conley et al.,

There are other programs designed to give students an opportunity of earning
college credit; however, those programs have high academic standards. Academic
standards are applicable to only the academic elite. All high school students performing
at or above their grade level with the will to further their education deserve to have a pre-
college experience regardless of income or geographical status. As stated by Conley et
al. (2010), many districts simply are not highlighting the benefits associated with DE
early enough for all high school students. School districts are encouraged to inform
parents and students of the benefits of DE early on—even before high school.

This study fills a gap in literature on DE in South Alabama. Specifically, there is
no published source on DE based on the perceptions of DE teachers and high school
counselors. The perceptions of the DE teachers and counselors are highly valued based on their interaction with the students as they begin and complete the DE program. The DE teachers have weekly tests and assignments to measure improvement among the DE participants. The high school counselors have access to standardized test results to track students’ progress as they take more DE courses.

This study compared to many other studies that have found reasons to support DE across the nation. Gatlin’s (2009) study was conducted in Tennessee and revealed positive results from the perceptions of teachers, parents, and students. According to Karp and Hughes (2007), students’ attitudes and perceptions of college often changed after the first true encounter with a college course. This study revealed that the perceptions of DE teachers and high school counselors were parallel to the findings of Karp and Hughes (2007) based on responses to the survey statements. There were several statements on the survey pertaining to students’ level of confidence and motivation while taking DE courses.

In a study conducted by Karp (2008), 17 of 26 high school students shifted their perceptions of the role of college students during their first semester in a college course as indicated by their more accurate descriptions of the role at the end of the course when compared to their initial descriptions. Chamberlain and Plucker (2008) claimed DE programs in Ohio are a valuable asset to the recruitment process for colleges in Ohio. DE students in Ohio were better prepared for college and performed better in college than non-DE participants (Chamberlain & Plucker, 2008). The aforementioned studies were relevant guides to this study and strengthened the research.
Recommendations for Future Research

This study examined the perceptions of DE teachers and high school counselors on DE efficacy on college readiness in South Alabama. This study could be expanded by future researchers in other states. Recommendations for future research include the following:

1. Future studies include all high school teachers’ perceptions of DE efficacy on college readiness. This study was limited to the DE teachers and high school counselors. Perceptions of regular high school teachers could be beneficial to a study.

2. Future studies based on the current study expand the geographical area of the study. This study was based on one school district in South Alabama.

3. Future studies following a DE cohort after college graduation could really support the premise of the current study. Such a study would provide policymakers and stakeholders with answers to the nation’s problems between secondary and postsecondary education.

4. Future studies on students’ perceptions of DE efficacy on college readiness would be beneficial. The students’ perceptions would be valuable in improving and expanding DE programs across the nation.

Summary

This chapter provided a summary and a discussion of findings. No significant differences were found between the perceptions of DE teachers and the perceptions of high school counselors on DE efficacy in South Alabama. There were no differences based on gender and years of experiences among the DE teachers and high school counselors. This study was limited to DE teachers and high school counselors in one
school district in South Alabama. This study was parallel to other studies on DE across the U.S. Recommendations for future studies were made to continue and expand this research. In conclusion, the findings of this study will be valuable to all policymakers and educational stakeholders, specifically in South Alabama. The findings will help education leaders with funding choices in education. DE could be an inexpensive way for the U.S. to take back its position as a global leader and for the nation to reach the goal of President Obama’s 20/20 plan.
APPENDIX A

SURVEY INSTRUMENT

Gatlin Tennessee Teachers’ Perceptions Survey

Please answer the following questions carefully in regard to Dual Enrollment efficacy on college readiness. Please read all of the questions provided and answer each one.

Please place an (X) in the appropriate space for items 1-3.
1. Please indicate your years of experience in either teaching or counseling by placing the number in the blank next to the appropriate designation
   ________years as a Dual Enrollment Teacher
   ________years as a High School Counselor
2. Do you teach: _________ Dual Enrollment students
   Do you counsel: _________ Dual Enrollment students
3. Gender: _____M     _____F

The following sections are concerning different issues regarding student participation in Dual Enrollment and their level of college readiness. Please respond to each of the following sections by clicking the appropriate choice.

<table>
<thead>
<tr>
<th>Please rate how well you perceive Dual Enrollment students’ levels of college readiness in each of the following areas. Click the appropriate number for your response.</th>
<th>Not well</th>
<th>Somewhat well</th>
<th>Very well</th>
<th>Extremely well</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Oral communication skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Science</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Mathematics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Writing skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Reading comprehension</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Critical thinking/Problem solving</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Motivation to work hard</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Research skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Overall readiness for college level work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please continue to next section
How often should the following be assigned to Dual Enrollment students to augment students’ levels of college readiness?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Less than once a month</th>
<th>One-two times a month</th>
<th>Once a week or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Writing research papers (five or more pages)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Making oral presentations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. Participate in class discussions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. Memorize facts, methods, or ideas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. Work as a team, research, and applying critical thinking</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. Apply theories to real or new situations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. Integrate technology into assignments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please continue to next section

Please indicate the extent to which you agree or disagree with the following statements in regard to college readiness for DE participants.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree or disagree</th>
<th>Some-what agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. The Dual Enrollment classes challenge student more than standard high school courses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I feel Dual Enrollment classes can increase a student’s confidence toward taking future college classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Dual Enrollment classes keep students motivated to stay in school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I would recommend that students take Dual Enrollment classes while in high school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please continue to the last section.
Thank you so much for taking the time to complete this questionnaire. If you have any suggestions for improvement or other information regarding Dual Enrollment efficacy on college readiness that you would like to share, please do so in the space provided.

Please return your completed questionnaire to:
Shulanda Franks via shulanda@bellsouth.net.
APPENDIX B

PERMISSION TO USE AND MODIFY INSTRUMENT

On Sep 29, 2014, at 12:30 PM, "Shulanda Franks" <shulanda@bellsouth.net> wrote:
Hello Dr. Gatlin,

I would like to thank you again, for permission to utilize your instrument from your study: THE PERCEPTIONS OF REGULAR HIGH SCHOOL AND DUAL ENROLLMENT TEACHERS AND DUAL ENROLLMENT STUDENTS TOWARD COLLEGE PREPAREDNESS AND DUAL ENROLLMENT COURSES IN TWO TENNESSEE PUBLIC SCHOOL SYSTEMS. However, when you granted permission to utilize the instrument you did not state permission to modify. Would you please grant permission to utilize and modify the instrument as well.

With appreciation,

Shulanda Franks

To
Me
Sep 29 at 10:17 PM
You may use, modify, or do whatever you need to do with the instrument of my study. Hope this works.

Thank you

Jennifer Gatlin, Ed.D.
CTE/Marketing Lead and DECA Advisor
Antioch High School
Hide message history
APPENDIX C

PERMISSION TO CONDUCT THE STUDY

September 19, 2014

Ms. Shulanda L. Franks
5359 Timberlane Drive
Mobile, AL 36693

Dear Ms. Franks,

Thank you for your interest in conducting research with the Mobile County Public School System. Your Research Proposal Request Application has been received. In our continued effort to ensure that every student graduates high school prepared, I am pleased to inform you that your research study proposal, “An Examination of Dual Enrollment Efficacy on College Persistence Based on the Perceptions of High School Dual Enrollment Teachers and High School Counselors in South Alabama,” has been accepted. A few questions however, persist. Please make plans to contact Ms. Merrier A. Jackson, Research Development Specialist, at (251) 221-4036 or mjackson@mcpss.com in the next few days to answer our remaining questions prior to proceeding with your study.

Additionally, please be advised that a signed copy of this approval letter has been sent via electronic mail to:

The University of Southern Mississippi
School of Educational Leadership
Dr. David E. Lee, Committee Chair
David.e.lee@usm.edu

Once again, thank you for your desire to partner with the Mobile County Public School System as we continue in our effort to contribute to the larger body of knowledge on effective instructional practices. If you have any questions and/or concerns, please do not hesitate to contact me at (251) 221-6249 or ssmith@mcpss.com.

Sincerely,

Susan Smith, Ph.D.
Executive Director

/maj
C: FranksS20155Y
APPENDIX D

APPROVAL OF THE UNIVERSITY OF SOUTHERN MISSISSIPPI INSTITUTIONAL REVIEW BOARD

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION
The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 15031802
PROJECT TITLE: Dual Enrollment Efficacy on College Readiness as Perceived by High School Dual Enrollment Teachers and Counselors in South Alabama
PROJECT TYPE: New Project
RESEARCHER(S): Shulanda Franks
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Educational Leadership and School Counseling
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 03/31/2015 to 03/30/2016

Lawrence A. Hosman, Ph.D.
Institutional Review Board
REFERENCES


Makela, J. (2005). *Current practices and policies on dual credit admissions in Illinois’ 4-year colleges and universities*. Champaign, IL: University of Illinois at Urbana-Champaign, Office of Community College Research and Leadership.


