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Sherry W. Johnson

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A MIXED METHOD DESCRIPTIVE STUDY OF HIGH SCHOOL GRADUATES'
DUAL ENROLLMENT
EXPERIENCES AND THE INFLUENCE ON COLLEGE READINESS

By
Sherry W. Johnson

A Dissertation
Submitted in Partial Fulfillment
of the Requirements for
the Degree of Doctor of Education
in Curriculum and Leadership
(EDUCATION LEADERSHIP)

Columbus State University
Columbus, GA

July 2018

Copyright Page

Sherry W. Johnson

July 13, 2018

Dedication

This dissertation is dedicated to my family - for without family, we are nothing.

First, I would like to dedicate this to my wonderful husband, Jack Lowell and two boys, Trevor and Jaylon. Your consistent encouragement made this possible, as there were times when I was off the path, and your encouragement got me back on track and I will always love you for that. I thank my parents, James and Julia, for the example and work ethic that you provided for me. Mama Janice, thank you for checking on me and encouraging me to continue this journey along with my brothers and sisters for their support. My sisters in Christ: Jean, Kay, Vivian, and Monica for your prayers and positive words and inspiration to stay focus on this journey. To my school family and administration team for always having a reassuring word. Also, I would like to thank Coach Coffey, who would greet me every morning with “Good morning, Dr. J”, even before I started this journey. To my church family for your prayers and understanding during the heavy writing stages and when I had to say no to assisting with projects. Thank you all for your encouragement and steadfast belief that this was an attainable achievement for me, as well as your prayers. We are all part of one big family that God has put together and is full of “Love”.

Acknowledgements

I would like to acknowledge and give thanks to God who makes everything possible and has given me strength when I thought I had nothing left. As in 2 Corinthians 12:9, “And he said unto me, My grace is sufficient for thee: for my strength is made perfect in weakness.” I would also like to acknowledge the members of my committee: Dr. Lemoine, Dr. Richardson, and Dr. Garretson for your insightful feedback and encouragement throughout this process. Your comments and guidance significantly improved my writing and this dissertation. Thank you, Dr. Yates for being willing to become a part of my committee after Dr. Lemoine departure. I especially want to express my gratitude and appreciation to Dr. Lemoine, my first committee chair who was determined to provide as much support and encouragement as possible even after departing from Columbus State University. Thank you, Dr. Lemoine, for believing in me and providing never-ending support. I will always be grateful. Toward the end of this journey many situations occurred, but I had to take one step at a time and reflect on Philippians 4:6, “Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God.” And I give God all the honor and praise for bring me through until this appointed time.

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ABSTRACT

The purpose of this descriptive study was to examine the perceptions of graduates regarding the benefits of participating in Dual Enrollment and how their participation influenced their college readiness. Dual enrollment programs have become prominent nationwide. Several studies show positive outcomes including increased high school completion, improved postsecondary persistence, and higher college degree completion. This study will evaluate dual enrollment participants at one high school located in central Georgia. Data is analyzed and presented based on relevance to the effectiveness of the dual enrollment program. The study was important because the success of Dual Enrollment could provide a possible remedy for the challenges of decreased college degrees, training for the workforce, and college preparedness. This study will be relevant because scholars are unclear about the effects and effectiveness 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 procedures to the Dual Enrollment program. An online survey instrument and a telephone interview were utilized to gain the perceptions of the high school Dual Enrollment students. Mixed method including quantitative and qualitative measures will be applied to this study.

Keywords: Career and Technical Education (CTE), college readiness, college degree completion, dual credit, dual enrollment, experiential learning, perceptions, phenomenological, postsecondary persistence, secondary and postsecondary education.

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CHAPTER I: INTRODUCTION

Introduction

In some states, the policies overseeing Dual Enrollment programs started over 30 years ago, with the targeted audience a small group of honor students needing the opportunity to take a more demanding curriculum (Collins, 2012; Collins, Blanco, & Root, 2013; Western Interstate Commission on Higher Education (WICHE), 2006). Dual Enrollment was a program of study, which allowed high school students to earn credits toward a high school diploma and a post-secondary degree or certificate at the same time (Burns & Lewis, 2000). In addition, the purpose was to give students an early start on college and lessen the time and the credits needed to earn a degree (Collins, 2012). In the 1970s, New York City was a leader in implementing Dual Enrollment programs (Heath, 2008). Due to mandates to ensure that more students completed their college degree, there was a push for states to provide the same opportunity to a larger number of participants. This was in accordance to the Southern Regional Education Board's (SREB) 2012 *Redesigning Dual Enrollment to Promote College Completion* (Collins, Blanco, & Root, 2013). The goal was to seek and to identify experiences or obtain evidence that Dual Enrollment was beneficial to the students in their preparation for college.

Dual Enrollment courses were taught for direct credit by both high school and college instructors and occurred on the high school campus, the college campus, online, or through Career and Technical Education articulated programs (Hooker, Fix, & McHugh, 2014; Lowe, 2010; Wozniak, 2011). The demand from parents for their child to participate in Dual Enrollment increased over the past ten years. The basis for Dual

enrollment was for high school students to enhance their chances for college success by better understanding what was necessary to succeed in college through experiencing real college coursework (Cowan & Goldhaber 2014; Struhl & Vargas, 2012). Allen (2010) defined college readiness as the level of preparation a student needed to succeed without having to take remedial courses their first year in college. An and Taylor (2015) reported as students finished their Dual enrollment course students had a better sense of needed skills and expectations for college success.

Tobolowsky and Allen (2016) mentioned five factors that caused the growth in Dual credit program: the increasing need for a college degree and an educated workforce; the United States trailing behind other countries in degree completion; the program offering substantial academic and social benefits; the decreasing of time to complete a degree; and saving money on tuition. Despite the popularity of Dual Enrollment, prior research was limited and often contrary (Tobolowsky & Allen, 2016). Some studies revealed academic benefits, such as rigorous curriculum and parents saving money in their child's pursuit of a college degree and other studies highlighted critical challenges such as lack of standards, the transferability of credits, students taking too many courses, and the college transition affecting career choices (Anderson, 2010; Lewis, 2009; Tobolowsky & Allen, 2016). Tobolowsky and Allen (2016) suggested more research should be done to explore the relationship between programmatic characteristics and specific student outcomes to inform further dual credit programs and policies. Dual Enrollment was a practical and effective method to preparing any student, even those who were struggling academically and had no initial interest in pursuing a postsecondary degree or certificate but were inspired by access to Dual Enrollment programs to

complete high school and enter college (Purnell, 2014). The economic benefit of dual credit was one of the other reasons for the growth (Tobolowsky & Allen, 2016). College costs and student loan debts were of increasing concern to students and families, particularly from students who had traditionally underrepresented backgrounds (Tobolowsky & Allen, 2016). The average 2013 college graduate emerged with \$28,500 in student loan debt (Downey, 2014; Tobolowsky & Allen, 2016).

In 2011, parents of a child who took advantage of HOPE understood that Georgia's lottery-funded scholarship program was not as profitable as it once was, especially if their child did not qualify for a Zell Miller Scholarship. With college costs increasing, parents had to be resourceful planners and not overlook one low-cost option, Dual Enrollment (Downey, 2014). Students participating in Dual Enrollment took two college courses each semester during their junior and senior years and graduated from high school with 24 college credits, which was comparable of a freshman year (Downey, 2014). The costs associated with earning those fully transferable college credits were paid for by the Georgia Student Finance Commission (Downey, 2014). Participating in Dual Enrollment prepared students for the college environment differently from a traditional high school environment, while saving their parents money for the twenty-four college credits (Downey, 2014).

There was an increase in Dual Enrollment programs, but the research available on the college readiness of students was limited (Karp, Calcagno, Hughes, Jeong, & Bailey, 2008). The researcher proposed to investigate perceptions regarding the benefits of participating in Dual Enrollment and college readiness by 2016 graduates of a high school in Central Georgia.

Statement of the Problem

Educators and policymakers believed students must be able to meet the demands of postsecondary education to ensure students earned a college degree. To accomplish this expectation, the understanding of the requirements to complete college-level work to be successful in college, students needed correct study skills and habits. Educators and state policymakers enhanced curriculum and clarified the alignment between secondary and postsecondary education through the practice of Dual Enrollment with the purpose of improving college readiness. Researchers indicated that the average high school student was unprepared for the rigors of study: lacked good study habits, listening skills, and the ability to identify academic support resources, such as individualized tutoring services and college life skills classes. Students' support and positive outcomes of Dual Enrollment facilitated legislators' educational decisions regarding Dual Enrollment programs. There was much attention paid to the importance of college readiness for high school students.

The goal of Georgia's *Move On When Ready* was to increase college access and completion and prepare students to enter the workforce with the skills they need to succeed. The Georgia name *Move On When Ready* was changed August 3, 2017 to "Dual Enrollment". The Georgia State Legislators envisioned that a stronger coordination between high schools and colleges was needed to prepare students for the increasing challenging postsecondary undertaking, as well as to decrease the need for academic remediation in college, thereby reducing the costs of college for students, families, and the state. The State Board of Education, the Board of Regents of the University System of Georgia, and the Board of Technical and Adult Education developed policies to ensure

that students who completed the core curriculum established pursuant to Georgia's Code Section 20-2-140 met the requirements for purposes of admission into a postsecondary institution.

School districts administrators wanted high school graduates academically prepared for postsecondary education or for the workforce with sufficient training in the use of soft skills such as effective communication, collaboration, and problem solving. As America's workforce needs continued to change, greater emphasis was placed on postsecondary educational achievement. Individuals with only a high school diploma or less had limited ability to secure middle-income level positions.

An increasing number of high school students took advantage of the Dual Enrollment program. Nevertheless, there was one motivation behind Dual Enrollment growth; the belief that these programs improved college readiness. Despite Dual Enrollment's popularity, not much was known about its effectiveness in meeting program goals, particularly those goals addressing college preparedness and completion. What was the relationship between the increase in the number of students participating in Dual Enrollment and the students' choice for their decided educational path? Therefore, the researcher proposed to investigate perceptions regarding the benefits of participating in Dual Enrollment and college readiness by 2016 graduates of a high school in central Georgia.

Research Questions

Many stakeholders of education asked questions about the Dual Enrollment program availability, exposure, and benefits for all students which led to the development of the research questions. The following research questions guided the study:

Research Questions:

1. To what extent did students perceive positive benefits of the Dual Enrollment program?
2. To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high school in 2016?

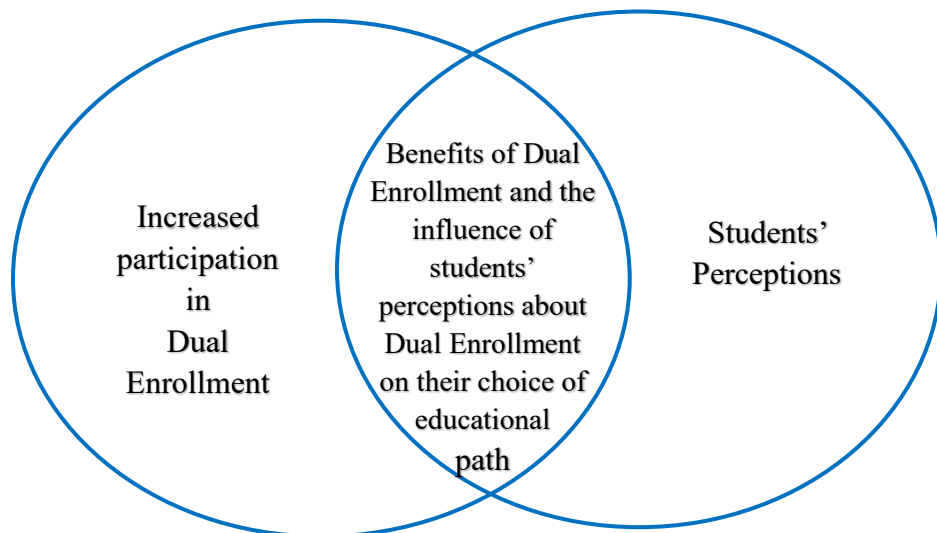
Therefore, the researcher purposed to examine the perceptions of graduates regarding the benefits of participating in Dual Enrollment and how their participation influenced their future educational path. The benefits of Dual Enrollment were defined as the advantages or gains of the 2016 graduates from participation in the program. Karp and Joeng's (2008) study stated that the benefits for colleges and high schools were the improvement of communication and collaboration between the two sectors resulting from partnerships with colleges and universities, which allowed high schools to learn what was expected from students at the college level. Another benefit of Dual Enrollment was the allowance of an expanded curriculum, which helped develop students' preparation to meet the demands of postsecondary education. The positive benefits of participating in Dual Enrollment included: the high school rigor academic curriculum increased; low-achieving students met the high academic standards; more academic and electives opportunities were provided in low-funded, small, rural schools; high school dropout rates decreased; student aspirations and acclimation to college life increased, and the cost of college was reduced. One of the expected outcome of students participating in the Dual Enrollment experiences was to influence their educational decision after graduating from high school. One concern was the impact of Dual Enrollment on the number of

high school students successfully transitioning to college, completing career-focused certificates or degrees, transferring to a university, and/or entering the workforce.

Conceptual Framework

The conceptual framework pictured below (see Figure 1) is a visual representation of the increased number of students participating in Dual Enrollment and the students' perception of their participation. The influence of students' participating in Dual Enrollment affected the students' future educational path outcome.

Figure 1 Conceptual Framework



In Figure 1, the Conceptual Framework provided a visual reference about the increased participation of students in Dual Enrollment and the students' perceptions about their participation in Dual Enrollment. Even though there was an increase in Dual Enrollment programs, there was limited research on Dual Enrollment outcomes and college readiness (Karp, Calcagno, Hughes, Jeong, & Bailey, 2008). Stakeholders assumed that participating in the program had additional benefits and included a wider range of students, with the aim of improving student access to, success in, and completion of college (Karp & Joeng, 2008).

Purpose of the Study

The intent of this descriptive study was to learn about the experiences of high school students who participated in Dual Enrollment during high school. The study was important because the success of Dual Enrollment could provide a possible remedy for the challenges of decreased college degrees, training for the workforce, and college preparedness. Researchers were unclear about the effects of Dual Enrollment on college readiness/preparedness (An & Taylor, 2015; Bishop-Clark, Hurn, Perry, Freeman, Jernigan, Wright, & Weldy, 2010; Cassidy, Keating, & Young, 2010; Franks, 2016; James, Lefkowitz, & Hoffman, 2016). The investigation of the goals, needs, and benefits became increasingly more important as Dual Enrollment programs increased in popularity among students and parents (Karp & Hughes, 2008).

The argument of policymakers, authors, educators, and foundations was many students, not just those with outstanding educational qualifications, benefited from participation in a Dual Enrollment program (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). Dual Enrollment was viewed by policymakers, authors, educators, and foundations as a long list of positive outcomes for all participating youth, including the increased academic rigor of the high school curriculum; helping low-achieving students meet high academic standards; providing more academic opportunities and electives in cash-strapped, small, or rural schools; reducing high school dropout rates, increasing student aspirations and helping students acclimate to college life while reducing the cost of college for students (An & Taylor, 2015; Anderson, 2010; Burns & Lewis, 2000; Cassidy, Hooley, Marriott, & Sampson, 2011; Keating, & Young, 2010; Karp, Calcagno,

Hughes, Jeong, & Bailey, 2007; Kilgore & Taylor, 2016; Lewis, 2009; Rodriguez, 2013; Struhl & Vargas, 2012; Swanson, 2008).

The importance of the study based on the concerns of school districts and universities was based on the concept that Dual Enrollment was in the best interest of both high schools and colleges, because of the projected improvement of high schools' post-graduation outcomes and colleges' retention and graduation outcomes (An & Taylor, 2015). Insights gained by high school and college administrators about the perceptions of students from this study could assist in creating solutions to the challenges encountered by the educational community (Saenz & Combs, 2015). The challenges included: a decline in students completing college degrees; issues regarding student success in having access and equity; a deficiency of high school graduates not prepared for college; and the dropout rate of economically disadvantaged students, Black, Hispanic, and first-generation college students (Barnes & Slate, 2010; Saenz & Combs, 2015; Struhl & Vargas, 2012; Swanson, 2008).

According to Allen (2010), the American Association of State Colleges and Universities indicated two primary benefits of Dual Enrollment for high schools. First, the improved communication and collaboration between the two sectors resulting from partnerships with colleges and universities, which allowed high schools to learn what was expected from students at the college level. Colleges and universities were urged to become more involved with the communities in which they were rooted. The colleges and universities were accepting greater responsibility in the local economic and social development. Colleges and universities that offered Dual Enrollment increased their

visibility within their service areas, and Dual Enrollment generated a positive image in the community and strengthened community ties (Allen, 2010).

The second benefit from Dual Enrollment programs was the allowance of an expanded curriculum, which helped develop students' preparation to meet the demands of postsecondary education (Allen, 2010; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). Of the students enrolling in college courses, 20% of freshmen entering 4-year institutions and 52% entering 2-year institutions required remedial coursework (English, 2013; Post, 2013). An and Taylor's (2015) research indicated the probability of taking a remedial course for students who participated in Dual Enrollment was lower than those who did not participate in Dual Enrollment.

Only 70% of high school graduates transition directly to college (Post, 2013). With at least some postsecondary training or education being prerequisite for approximately two thirds of future jobs, these outcomes raised challenging questions regarding the meaningfulness of a high school diploma (English, 2017; Post, 2013). However, in states, such as Georgia, where Dual Enrollment was funded by the government or the educational institutions, students completed several credits in Dual Enrollment programs tuition-free, thereby reducing the total cost of attaining a four-year degree and positively influencing the students' decisions about whether and where to go to college (Kennedy 2008)

The decrease of both the college-going and college persistence rates of students were enduring concerns in higher education (Pretlow & Wathington, 2014). The colleges' goal was for students to complete postsecondary education to keep the pace with the global marketplace (Saenz & Combs, 2015). Dual Enrollment programs opened

new pathways to recruitment and retention (Allen, 2010). By granting credit for work completed at the college level, an institution possibly retained a student to degree completion simply because the student had already completed some of the work at that institution. Dual Enrollment programs attracted top high school students who otherwise might not have considered a community college or local university (Allen, 2010). The information learned from this study about students' Dual Enrollment experiences could lead to recommended strategies that colleges and universities employ to recruit and retain students (Huntley & Schuh, 2002).

The American Association of Collegiate Registrars and Admissions Officers Survey project results indicated that Dual Enrollment served multiple purposes for many institutions. For more than 75% of the respondents, Dual Enrollment served as a recruiting tool, followed by meeting the mission of the institution, or as a community service mechanism (Kilgore & Taylor, 2016). Dual Enrollment was widely available and accepted at higher education institutions in the United States. One of the reported key findings from the American Association of Collegiate Registrars and Admissions Officers (AACRAO) survey was that during the 2015-2016 academic year, 78% of institutions in the sample offered Dual Enrollment options (Kilgore & Taylor, 2016). The presumption was that dual credit programs increased postsecondary enrollment and success by improving academic readiness, preparing students for the psychological and social demands of college, such as developing time management skills and new kinds of social relationships, and lowering the cost of postsecondary education (Piontek, Kannapel, Flory, & Stewart, 2016).

Dual Enrollment was a tool used to provide an educational opportunity to a variety of students, researchers, and practitioners needed to understand better the ways that Dual Enrollment functioned as an agent of college access and success (Kanny, 2015). Knowing more about Dual Enrollment's potential, researchers, practitioners, and policymakers could improve the Dual Enrollment program to achieve enhanced college academic outcomes and persistence among various students (Kanny, 2015). This justified the time, effort, finances, and human resources committed to this study with the results of the value of continued support for and the expansion of Dual Enrollment programs in the United States (Kennedy, 2008).

The researcher proposed to examine the students' perceptions of Dual Enrollment and how their participation influenced their future educational path. A Mixed Method study including quantitative and qualitative research designs was used to acquire students' perceptions about the positive benefits in the experience of participating in the Dual Enrollment program through an online survey and semi-structured telephone interviews (Kennedy, 2008). Kennedy's (2008) study results revealed students' beliefs in three dominant areas about the role of the Dual Enrollment program. The dominant areas were career preparation, college preparation, and college aspirations. In career preparation, the students felt that their Dual Enrollment experience would be of value to them in their future career pursuits (Kennedy, 2008). In college preparation, the results supported the notion that Dual Enrollment programs not only helped students' academic transcripts by receiving high school and college credit, but also gave them experience in a college classroom and the confidence to believe they could be successful in college (Kennedy, 2008). In college aspirations, the study results indicated that many of the

students had the opportunity to experience the college environment and the expectations for a college student. (Kennedy, 2008). After participating in the Dual Enrollment program, they were exposed to the qualities of being challenged, independent, confident, and treated as adults (Kennedy, 2008).

Significance of the Study

The significance of the study was the contributions to the development of the Dual Enrollment program as students' voices revealed what they had experienced in the program. The study provided information regarding the value of Dual Enrollment to high school students toward their preparation for postsecondary education options or the workforce. Dual Enrollment was beneficial to the interest of both the local school district and the colleges/universities, because of the projected improvement of high schools' post-graduation outcomes and colleges' retention and graduation outcomes. In recent years, institutions were urged to become more involved with the communities in which they were rooted. Increasingly, colleges and universities were accepting greater responsibility in local economic and social development. Colleges and universities that offered Dual Enrollment increased their visibility within their service areas, and Dual Enrollment created a positive image in the community and strengthened community ties.

The results of the study could be valuable to program constituents such as legislative policymakers, state officials, and program administrators who made critical decisions related to programs and policies for Dual Enrollment through information-rich data obtained from program recipients. For example, in Georgia, the Dual Enrollment award amount covered all required standard tuition, mandatory fees, and required book expenses. The study provided feedback from a sample of the recipients in whom they

were investing. The state could benefit from the program's successful contribution to a more educated population, which facilitated a more educated workforce and fulfilled a projected outlook that two-thirds of the future jobs will require at least some postsecondary training or education.

Procedures

Research Design

The researcher proposed to examine the students' perceptions of Dual Enrollment and the impact of Dual Enrollment on their educational decision after high school. The study used a mixed method using quantitative and qualitative methodology to investigate this research issue. Mixed methods research was an approach involving collecting both quantitative and qualitative data, combining the two forms of data, and using distinct designs that may involve logical assumptions and theoretical frameworks (Creswell, 2013). The study began with an online survey to generalize results to the population the graduates and then, in the second phase, focused on the qualitative, open-ended telephone interviews to collect detailed views from the participants to help explain the initial quantitative survey (Creswell, 2013).

Quantitative research was defined as collecting numerical data to explain a phenomenon and answering questions using quantitative methods (Creswell, 2013). Quantitative research method for this study was an online survey. The online survey data provided a quantitative or numeric depiction of trends, attitudes, or views of the population (Creswell, 2013). Qualitative research was defined as the method of collecting data from interviews, focus groups, observations, documents, and material culture (Onwuegbuzie, Leech, & Collins, 2010). Moreover, qualitative research endeavored to

explain an existing situation and established patterns or trends that emerged (Rodriguez, 2013). The qualitative research method for this study was semi-structured telephone interviews. Interviews provided researchers with direct access to the language and concepts participants used to structure their experiences and to think and talk about a topic (Goins, 2015; Hughes & DuMont, 1993). Ramsey-White's (2012) study indicated that qualitative research dealt with how people made sense of their lives. In a qualitative study the researcher did not seek out evidence to prove or disprove an assumption; instead, the assumptions were built as data was gathered and analyzed (Ramsey-White, 2012).

Population and Participants

The proposed population for the study was the 2016 graduates of a central Georgia high school who participated in Dual Enrollment and earned dual credits in the academic area or in the career area. Fifty-one graduates participated in Dual Enrollment in 2016 out of the class of two-hundred and forty-seven graduates.

Sample

Purposive sampling for the interviews was used (Burns & Lewis, 2000). The students were selected based on their participation in Dual Enrollment during high school. The interviews' participant goal was eight to fourteen participants from the 2016 graduation class (Miles & Huberman, 1994).

Instrumentation

This study used an online survey instrument for the collection of the quantitative data and semi-structured telephone interviews for the collection of qualitative data. The online survey instrument was developed using Survey Monkey to collect the students'

response regarding participating in Dual Enrollment. The data collected was analyzed to determine the relationship between the benefits of participating and postsecondary educational aspirations. The online survey had closing date to complete. Lewis (2009) study stated that including a deadline date for closing the survey had the potential to produce greater response rates. Each participant received identical online survey to record their response to the same questions. The online survey included seven questions. The survey also included a request to participate and consent, a request for contact information, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, a current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender. This information was reported in aggregated form. Once the online surveys were completed the researcher selected at least two participants from the following area: students attending a four-year college, students attending a Technical college, students in the Military, and students in the workforce for the telephone interviews.

Semi-structured interviews were the most common method as this method provided students to speak face-to-face about the phenomena (Goins, 2015; Saenz & Combs, 2015). The telephone interview consisted of ten open-ended questions to obtain information such as their involvement with Dual Enrollment, advantages of Dual Enrollment, impact of Dual Enrollment on their educational decision after high school, skills gain from participating in Dual Enrollment, and what they were currently doing (attending college, in the workforce, military, or unemployed).

The data were analyzed through several methods. The Statistical Package for the Social Sciences (SPSS) Statistical software was used for all statistical analysis. SPSS is a

tool capable of analyzing data used in the social sciences or business research (Gatlin, 2009). SPSS software was used to conduct an analysis on the students' demographic data. The SPSS univariate procedure was used to calculate summary statistics for the demographic variables. For the quantitative data, the researcher compiled the open-ended online survey responses to distinguish any patterns and common responses to further answer the research questions presented in this research using thematic analysis.

The telephone interviews were audio recorded for transcription purposes. The interviews were transcribed and coded to identify group experiences that related to the phenomena. The use of an audit trail to established trustworthiness and confirmability (Goins, 2015; Huntley & Schuh, 2002). Member checking was also used for the interviews, by having participants review the transcriptions to ensure accurate interpretation and placement of responses. Once the transcripts were completed and reviewed by the participants, they were coded to find common themes among the interviews using the common comparative method (Huntley & Schuh, 2002; Lewis, 2009).

Description, understanding, and interpretation were the goals for the mixed method research (Lichtman, 2006). This study provided an opportunity for policymakers and educators who make decisions about Dual Enrollment to gather information from graduates who were affected by the Dual Enrollment experience, which could increase policymakers and educators' awareness of issues and experiences connected with Dual Enrollment (Lewis, 2009). This study provided an opportunity to provide data to improve educational practices, set priorities for future goals, and perhaps even generate new ideas leading to positive outcomes for policymakers, students, and their families (Lewis, 2009).

Limitations

Limitations were influences on the methodology that the researcher could not control (Creswell, 2008). The limitations of this study included the sample of students who chose to participate in the Dual Enrollment program during their junior and/or senior year of high school. The timeframe of the study also served as a limitation. Participants' responses were captured during the months of May and June of the spring semester of 2018 of dual enrolled graduates from 2016. Therefore, the participants' responses were reflective of their opinion at that time of the online surveys and the telephone interviews, two years beyond high school.

Assumptions

There were several assumptions for this study. The first assumption was that Dual Enrollment would continue to exist in the future and that schools that offered Dual Enrollment had some level of advantage over school systems where the program was not readily available. The second assumption was that students who participated in a Dual Enrollment program at the high school level gained the necessary college readiness skills by the time they graduated from high school. The third assumption was that all 2016 Dual Enrolled graduates who participated in the online surveys and the telephone interviews provided answers that were honest and accurate.

Delimitations

This study was delimited to self-reported data and perceptions of Dual Enrolled high school graduates on the efficacy of the Dual Enrollment program on college success among the participants. 2016 graduates participated in the online surveys and the telephone interviews. Only one school from the school system and the central Georgia

area was selected, so the results may not be representative of the entire state or the United States. The number of students who participated was limited to the number of 2016 graduates who participated in Dual Enrollment classes while attending the central Georgia high school. The graduating class of 2016 could be in the second year of college during the 2018 school year if they attended a four-year college. The study examined data on students' intentions to attend postsecondary education; there may have been other factors, which influenced students' decision to attend.

Definitions

Major definitions of terms relevant to the study are listed below:

1. *Advanced Placement (AP) program* – was administered by the College Board, where high school students took one or more college level courses to earn high school credit but only college credit upon passing the associated exam with a score of three or higher. The courses' curriculum was based on typical college introductory course but were not the actual college curricula. Courses were taught on high school campuses or through virtual school (Collins, 2012).
2. *Career Academy*- Enhanced comprehensive programs provide additional academic supports and counseling to facilitate the secondary-postsecondary transition (Cassidy, Keating, & Young, 2010).
3. *College* - College is any formal education beyond high school leading to a degree. This can, and often does, include technical colleges or a four-year university (Lewis, 2009).
4. *College persistence* -was a consequence of the ways that students actively came to understand the college environment prior to entering college, through activities that

- allowed the students to understand what college was like and how they would be expected to behave (Karp, 2007).
5. *College readiness*- was the level of preparation a student needs to enroll and succeed without having to take remedial courses their first year in college (Allen, 2010).
 6. *College Remediation*- consists of the courses and support services in basic academic skills which address the needs of a diverse population of underprepared students (Lewis, 2009).
 7. *Concurrent and joint enrollment* were used interchangeably for dual credit programs and the programs that gave students the opportunity to earn college credit only (Collins, 2012).
 8. *Credits*- are one of the primary methods used to determine and document that students have met academic requirements, at the high school or college level. Credits are awarded upon completing and passing a course or required school program based on the Carnegie unit, or hours of instructional time (GGSP, 2013).
 9. *Direct Credit*- a form of Dual Enrollment where classes are taught on the high school campus (Wozniak, 2011).
 10. *Dual Enrollment (DE)*- was a program of study, which allows high school students to earn credits toward a high school diploma and a post-secondary degree or certificate at the same time (Burns & Lewis, 2000). For the purposes of this study, other terms, including concurrent enrollment, dual credit, postsecondary enrollment, and may be used to describe Dual Enrollment (Collins, 2012; Heath, 2008).
 11. *Dual credit*- referred to courses that award both high school and college credits (Collins, 2012).

12. *International Baccalaureate (IB) program*- was administered by the International Baccalaureate Organization (IBO), the IB program included a comprehensive, two-year curriculum that focused on six academic areas, as well as a community service component and an independent project. Students took a rigorous sequence of classes for which they may earn college credit upon passing the corresponding IB exams with a score of four or higher. High school teachers trained by the IBO teach all IB courses at an IB school (Collins, 2012).
13. *Military*- the armed forces of a country. Graduates could be in the Air Force, Army, Coast Guard, Marine Corps, Navy, and/or National Guard.
14. *Move On When Ready*- the program referred to describing students dually enrolled in Georgia (GaDOE, 2016).
15. *Workforce*- the total number of persons employed or employable.

Summary

Dual Enrollment implementation across the nationwide has increased rapidly. The program appeared promising for improving educational attainment concerns held by educators and policy makers. All states allow Dual Enrollment, with 46 having at least one statewide Dual Enrollment program established by state policies; the other four states leave programs to the discretion of local district and college policies. State governments, post-secondary administrators, and local school administrators were faced with the challenges of decreased college degrees, increased remediation courses, cost of college degree, training for the workforce, and college preparedness.

Dual Enrollment was a strategy districts and schools used to address the above challenges and to advance the high school curriculum and promote college for a wide

range of students. Educators and policymakers believed students must be able to meet the demands of postsecondary education to ensure students earned a college degree.

Educators and state policymakers enhanced curriculum and clarified the alignment between secondary and postsecondary through the practice of Dual Enrollment with the purpose of improving college readiness. The researchers showed that dual enrollees were less likely to enroll in remedial courses than non-dual enrollees but the literature available on the college readiness of students was limited. This area was pertinent to the study to determine the factors that determined students' readiness for college.

The intent of this mixed method descriptive study was to learn about the experiences of high school students who participated in Dual Enrollment during high school and how the participation in Dual Enrollment influenced their college or career decision after graduating from high school. The focus of the study was on students' gains in college readiness after they participated in Dual Enrollment. The importance of the study to school districts and universities was based on the concept that Dual Enrollment was in the best interest of both high schools and colleges, because of the projected improvement of high schools' post-graduation outcomes and colleges' retention and graduation outcomes. States could benefit from the program's successful contribution to a more educated population, which facilitated a more educated workforce and would fulfill the projected outlook that two-thirds of the future jobs would require at least some postsecondary training or education.

The researcher used the research design utilizing the mixed method research design. The research design allowed the researcher to investigate by allowing the participants to tell about their lived experiences of their participation in Dual Enrollment

during high school through an online survey and semi-structured telephone interviews.

The researcher examined the students' perceptions of participating in the Dual Enrollment program with the goal of discussing the program's effectiveness and potential improvements.

CHAPTER II: LITERATURE REVIEW

Dual Enrollment was a growing phenomenon that showed potential for increasing student educational attainment and success (Anderson, 2010). School systems were faced with the increased availability and parental desire for Dual Enrollment opportunities for their high school student as early as their sophomore year. Parents saw Dual Enrollment as a money-saving strategy that avoided tuition costs, because courses were paid for through local high schools (James, Lefkowitz, & Hoffman, 2016). School leaders were concerned about how the increase of students taking Dual Enrollment courses influenced the school climate, as well as, the impact on the unprepared students who were not successful in the college courses and endangered their high school graduation status. Dual Enrollment addressed early college experience along with students being comfortable with the college environment (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Rodriguez, Hughes, & Belfield, 2012).

This review of literature included an historical perspective of Dual Enrollment in Georgia and other states, discussed the benefits and drawbacks of Dual Enrollment, and addressed the concern of college readiness of students involved in Dual Enrollment. Articles, related dissertations, studies, and reports were studied to gather students' perspective about Dual Enrollment and their college readiness. Even though there was an increase in Dual Enrollment programs, there was limited research on Dual Enrollment outcomes (Karp, Calcagno, Hughes, Jeong, & Bailey, 2008).

Program administrators heard directly from participants of the program and received feedback that contributed to the decision-making process as they considered implementing or modifying similar programs. The results were expected to have an

institutional and a social impact by unveiling information that improved educational practices, set priorities for future goals, and generated innovative ideas that could lead to positive outcomes for policymakers, students, and their families.

There was a rise in the number of participants in Dual Enrollment programs and the popularity of the program grew among policymakers and education leaders (ACT, 2015). In 2013, Dual Enrollment was mentioned in three gubernatorial State of the State addresses. In 2014, the number rose to 12 and in 2016 as an additional five governors introduced Dual Enrollment proposals or highlighted existing program successes. Stakeholders assumed that Dual Enrollment could address shortcomings in the existing educational system; if it did not, then new reforms could be identified and implemented (Karp & Jeong, 2008). Shortcomings that Dual Enrollment could address were the transitional problems of high school graduates to college coursework and college expectations, the improvement of college persistence, the promotion of academic integration, and the increase of degree attainment (Karp & Jeong, 2008).

The American College Testing (ACT) agency, in 2016 launched a multiyear commitment to increase the number of eligible high school students in Dual Enrollment programs across the nation (ACT, 2015). ACT worked with federal and state policymakers and numerous prominent national organizations to make sure that all eligible students had the opportunity, at little cost, to earn college credit from trained instructors in high-quality Dual Enrollment programs (ACT, 2015).

States and Local Education Agencies (LEA) began devoting substantial resources to the expansion of the Dual Enrollment programs (Karp & Jeong, 2008). School systems were faced with the increased Dual Enrollment accessibilities and parental desire for

Dual Enrollment opportunities for their high school student, as early as the sophomore year. This caused concerns from school leaders regarding the increased participation on the impact of school climate as well as the impact on the unprepared students who were not successful in the college courses and endangered their high school graduation status. It was important for the states and LEAs to know whether the disbursement of these resources led to the intended outcomes (Karp & Jeong, 2008).

Despite Dual Enrollment's popularity, not much was known about its effectiveness in meeting program goals, particularly those goals addressing college preparedness and completion. According to Karp and Jeong (2008) there were two extensive reviews of the literature (Bailey & Karp, 2003; Lerner & Brand, 2006) where little evidence was found that Dual Enrollment contributed to students' college access or academic success (Karp & Jeong, 2008). A report from the Community College Research Center provided promising evidence that Dual Enrollment participation led to a range of positive outcomes for students of all backgrounds (Karp & Jeong, 2008).

Previous researchers linked college readiness in high school and subsequent success in postsecondary education. Colleges across several states adopted more rigorous college and career readiness standards in K–12 education to reinforce this link. The benefits of Dual Enrollment went beyond improving academic preparation for participating students (ACT 2015). Participation in Dual Enrollment programs exposed students to experiences which had the potential to strengthen their knowledge with other elements of both college and workplace success (ACT, 2015). The elements identified were critical thinking, collective problem solving, along with, persistence, self-regulation and the development of education and career navigation skills (ACT, 2015).

Given the appeal for increased educational attainment, rising college costs, and the popularity of Dual Enrollment programs, a study of the positive benefits of Dual Enrollment participation with high school students was merited. The researcher proposed to investigate perceptions about the positive and negative benefits of participating in the Dual Enrollment program, as well as, the relationship between Dual Enrollment participation and college readiness. The researchers' findings could provide insights to policymakers and education leaders who were organizing or considering Dual Enrollment activities for the improvement of students' college readiness.

There were several research studies conducted with findings that supported Dual Enrollment as an avenue to the preparation of students for the challenges of college (Anderson, 2010; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Kennedy, 2008; Porter, 2003; Rodriguez, Hughes, & Belfield, 2012; Struhl & Vargas, 2012). Additional researchers also indicated that the students' participation in Dual Enrollment enhanced their understanding of college life and eased their transition from high school to college (Garbee, 2015; Kennedy, 2008; Porter, 2003; Prophete, 2013). Dual Enrollment students were identified as being most likely to earn a high school diploma, to enroll in postsecondary education in the state university system, to enroll in college full-time, and to have higher grade point averages after a full year of college (Karp, Calcagno, Hughes, Keong, & Bailey, 2007).

Kennedy (2008) suggested that students were largely satisfied with their Dual Enrollment experiences and their participation in the program was an inspiration for them to attend college. An & Taylor (2015) reported as students finished their Dual Enrollment course they had a better sense of needed skills and expectations for college success.

Whether the presence of Dual Enrollment options increased students' postsecondary aspirations was not clear, but students who took advantage of the option seemed to demonstrate increased confidence that they could succeed in college after high school graduation (Kennedy, 2008). Allen (2010) referenced research that Dual Enrollment programs simplified the transition between high school and college. Students could earn a college degree faster, lower their college expenses, and adapt to the college environment (Allen, 2010; Flores, 2012). The high school drop rates were lower and the need for remedial course work was minimized. The student's motivation and goal to attend college increased and opportunities for underserved student populations were enhanced (Allen, 2010; Flores, 2012).

The Conley's Framework of College Readiness focused on the four key dimensions of college readiness: cognitive strategies, content knowledge, contextual skills, and using the resources on campus (Allen 2010; An & Taylor, 2015; Conley, McGaughy, Kirtner, van der Valk, & Martinez-Wenzl, 2010). Based on previous research it was suggested that college readiness evaluations be conducted based on the students' behavior and performance in college and not before entering college (An & Taylor, 2015). An and Taylor's (2015) research concluded with three findings. First, students who participated in Dual Enrollment were more likely to be college ready on three of Conley's four dimensions than students not earning college credit in high school (An & Taylor, 2015). Second, the impact of accelerated programs on college readiness did not differ statistically between students in Dual Enrollment and those taking Advanced Placement (AP) courses (An & Taylor, 2015). Finally, the effect sizes on college readiness by accelerated programs were small (An & Taylor, 2015).

Kennedy's (2008) study looked at students' motivations for pursuing a Dual Enrollment program and their postsecondary goals at the beginning and end of the program. Flores (2012) study discussed Chickering and Reisser's (1993) seven-vector theory for adolescence developmental. The vectors addressed both the developmental phases of the high school-aged student and the progression of students as they matured in their college years (Flores, 2012). According to Flores (2012), "The vectors included developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationship, establishing identity, developing purpose, and developing integrity" (p. 6). The intent of the seven-vector theory was to suggest that development within the earlier vectors provided foundational skills and character traits, which promoted healthy development throughout the later vectors. For example, high school students functioned in the first four realms of the vectors, whereas, college students progressed through the last three vectors (Flores, 2012).

Students participating in Dual Enrollment were in a unique situation in which the classroom experiences were preparing the student for college credit. The Dual Enrollment programs' success was based on the formation of knowledge the student learned prior to enrolling in a college credit course that also met their high school requirements. Their learning was a collaborative process where the student interacted with both a high school environment and a college environment for successful completion (Flores, 2012).

Theoretical Framework

This study was framed by the experiential theory, which stated that learning occurs within the cycle of experience, sharing, autonomy, and adjusting. Learning was

based on the experiences and interactions which occurred within a situation that helped develop the results (Passarelli & Kolb, 2012). Learning was informal and was developed by the interaction with others. The learner was the focus of learning, not the instructor. The experience and the process motivated the learner. The learner was driven by their interest, such as earning college credit while still in high school. The role of the instructor was to encourage the learners to pursue their interests along with others who shared the same interests (Patrick, 2017). Experiential learning theory put theory to practice through career and technical education programs such as Dual Enrollment (Haltinner, Mooney, & Stanislawski, 2012).

According to Kirschner, Sweller, & Clark (2006) the learning process of the experiential theory began with a person carrying out an action. For example, participation in Dual Enrollment courses, and determining the influence of that action in the setting, along with the belief that if the same action took place under the same circumstances it was possible to predict what would happen. The basis of Dual Enrollment was that high school students enhanced their chances for college success if they better understood what it took to succeed in college by experiencing real college coursework through Dual Enrollment (Cowan & Goldhaber 2014; Struhl & Vargas, 2012).

History of Dual Enrollment

In some states, the policies overseeing Dual Enrollment programs started over 30 years ago, but the targeted audience was a small group of honor students needing the opportunity to take a more demanding curriculum (Collins, 2012; Collins, Blanco, & Root, 2013; Western Interstate Commission on Higher Education (WICHE), 2006). The purpose was to give students a start on college and lessen the time and the credits needed

to earn a degree (Collins, 2012). In the 1970s, New York City was a leader in implementing Dual Enrollment programs, (Heath, 2008). Due to recent changes to ensure that more students completed their college degree, there was an effort for states to provide the same opportunity to a larger number of participants. This was in accordance to the Southern Regional Education Board's (SREB) suggestions in the 2012 publication, *Redesigning Dual Enrollment to Promote College Completion* (Collins, Blanco, & Root, 2013).

Dual Enrollment programs differed from other accelerated learning alternatives (Collins, 2012). The option of Dual Enrollment allowed states to take more control over the curriculum flexibility in how and what courses were offered. Other accelerated learning opportunities included the College Board's Advanced Placement (AP) program and the International Baccalaureate (IB) program (Collins, 2012).

What made Dual Enrollment different from AP and IB programs was their curriculum, which was set by their sponsoring organizations and required students to complete a nationally standardized exam to earn the college credits by earning a predetermined score (Collins, 2012). The opportunity for students to earn college and high school credits simultaneously was considered a method to be more cost effective and while still increasing college enrollment (An & Taylor, 2015). Not only did the number of participants in Dual Enrollment programs increase but also, the recognition of the program among policymakers and education leaders multiplied (ACT, 2015). In 2013, three gubernatorial State of the State addresses mentioned Dual Enrollment and within a two-year period, that number increased to seventeen. The governors introduced or

highlighted successful existing programs as part of the address to their states (ACT, 2015).

During the 2010–2011 school year, 82 percent of high schools reported students enrolled in dual credit courses (Thomas, Marken, Gray, & Lewis, 2013). Approximately 1,277,100 high school students took college credit courses within a Dual Enrollment program (Thomas, Marken, Gray, & Lewis, 2013). A nine percent increase of high school graduates participating in Dual Enrollment occurred between 2005 and 2009, from 216,000 to 249,000 and the same percentage earned Dual Enrollment credits (Collins, Blanco, & Root, 2013), an increase in Dual Enrollment in several states. Florida’s program increased by nearly 44 percent from 2006-2007 to 2010-2011. In Kentucky, 17 percent to nearly 28 percent of eleventh and twelfth graders participated by 2010-2011. In Texas, the Dual Enrollment program participants grew by 31 percent from 2007 to 2009 (Collins, Blanco, & Root, 2013).

Collins, Blanco, and Root (2013) also found that Dual Enrollment students who went to college were more likely to persist into the second year of college and had “statistically significant” higher GPAs in college than their college peers who had not participated in Dual Enrollment. These results were true for students in both high school career/technical and academic concentrations (Collins, Blanco, & Root 2013). They also were true regardless of whether students attempted many or only a few Dual Enrollment credits. Simply participating was enough to benefit from these courses (Collins, Blanco, & Root 2013).

Statewide Dual Enrollment Policies

Forty states had some state legislation or policies that authorized or supervised Dual Enrollment or the operation of Secondary-Post Secondary Learning Options (Lerner & Brand, 2006). All the states in the Southern Regional Education Board (SREB) either adopted legislation or created new legislation enacting a statewide Dual Enrollment policy which provided students the opportunity to earn postsecondary credits in high school (Collins, Blanco, & Root, 2013; Kim, 2008; Pretlow & Wathington, 2014). Arkansas used administrative rules to address concurrent college and high school credit, as well as, the rule that students were responsible for all costs of higher education courses (Collins, Blanco, & Root, 2013). Florida had Dual Enrollment policy for decades, but legislation repealed some sections of the previous law and made significant changes (Collins, Blanco, & Root, 2013).

The Florida legislators replaced the statement concerning institutional articulation agreements with articulation agreements. The legislators also authorized agreements with state universities, eligible independent colleges and universities, and private secondary schools. Students' eligibility requirements were amended to specify standards for the rigor of Dual Enrollment courses. The law also included a requirement referencing an articulation agreement for home school students participating in Dual Enrollment program (Collins, Blanco, Root, 2013).

Kentucky's Council on Postsecondary Education approved a Dual Credit Policy in 2012, with implementation in the fall 2013. Maryland's 2013 Senate Bill 740 revised existing legislation along with payment changes, reporting requirements, and a requirement to inform all students about the Dual Enrollment opportunity. Mississippi's

Senate Bill 2869, 2011 revised existing provisions and defined Dual Enrollment, as well as, course prerequisites. North Carolina's Legislature 2011 House Bill 200 directed the state Board and the North Carolina Community College System to start the Career and College Promise Dual Enrolled program for high school students highlighting pathway options. Tennessee's 2012 Senate Bill 2809 acknowledged the transfer of dual credits earned in high school to all public postsecondary institutions (Collins, Blanco, & Root, 2013).

According to Collins, Blanco, and Root (2013) Dual Enrollment policies in many states potentially needed to be redesigned to ensure that a wide mix of program participants were well served and completed college degrees more efficiently. The benefit for historically underrepresented students was of interest as states worked to close achievement gaps by increasing both access and completion (Collins, Blanco, & Root 2013).

Dual Enrollment in Georgia

In 1991, the Georgia General Assembly passed an amendment to the state constitution designating lottery proceeds for educational purposes only. The voters ratified the amendment the following year under the supervision of Governor Zell Miller (GSFC, 2017). In 1993, the Helping Outstanding Pupils Educationally (HOPE) Scholarship was started to aid the cost of tuition at eligible Georgia postsecondary institutions to provide an incentive and reward the high achieving students in Georgia (GSFC, 2017). The HOPE scholarship had a three-fold purpose (Barlament, 2017): foremost was to improve the quality of education in Georgia by providing an incentive for students to perform better in high school and maintain their performance in college; to

encourage top-performing high school students to attend college in-state; to address the differences between college enrollment of whites and African Americans, and between socioeconomic classes (Barlament, 2017; GSFC, 2017). The program helped more than 1.7 million eligible students attending the state's public and private universities as well as public technical schools. The program's implementation was Governor Miller's vision to a better-educated workforce investing in Georgia's economic future (GSFC, 2017).

HOPE consisted of six different aid programs: HOPE Scholarship, HOPE Grant, Zell Miller Scholarship, Zell Miller Grant, HOPE General Education Development (GED) Grant, and HOPE Career Grant. The HOPE Scholarship was a merit-based award available to Georgia residents who demonstrated academic achievement. The eligible recipients were high school graduates with a minimum 3.0 grade point average (GPA) who maintained a minimum 3.0 cumulative postsecondary GPA. The scholarship provided tuition assistance to students pursuing an undergraduate degree at a Georgia HOPE Scholarship eligible college or university. There was a seven-year limit for students who received their first HOPE Scholarship during the 2011-2012 academic year or later (GSFC, 2017). The HOPE Grant was available to Georgia residents who were pursuing a certificate or diploma. The eligible recipient maintained a minimum 2.0 cumulative postsecondary GPA. The grant provided tuition assistance to students enrolled at a Georgia HOPE Grant eligible college or university (GSFC, 2017).

The Zell Miller Scholarship was a merit-based award available to Georgia residents, like the HOPE Scholarship, but with more stringent academic requirements and a higher level of tuition assistance. The recipients were high school graduates with a minimum 3.7 GPA combined with a minimum SAT score of 1,200 on the combined math

and reading portions or a minimum composite ACT score of 26 in single national test administration. Eligible students maintained a minimum 3.3 cumulative postsecondary GPA. Students were provided full-tuition assistance while pursuing an undergraduate degree at an eligible Georgia college or university. A seven-year limit existed for students first receiving the Zell Miller Scholarship during the 2011-2012 academic year or later (GSFC, 2017). The Zell Miller Grant was a merit-based program available to Georgia residents pursuing a certificate or diploma. The eligible recipient maintained a minimum 3.5 cumulative postsecondary GPA. Grant recipients were awarded full-standard tuition assistance while enrolled at an eligible Georgia college or university (GSFC, 2017).

The HOPE GED Grant was available to Georgia residents who earned a GED diploma after June 30, 1993. The Technical College System of Georgia awarded the GED. The grant provided a one-time \$500 award designated for tuition, books, or other educational costs at an eligible Georgia college or university. Full-time enrollment was not required but the grant had to be used within 24 months after the date of earning a GED diploma (GSFC, 2017). The HOPE Career Grant was available to Georgia residents and was formerly known as the Strategic Industries Workforce Development Grant (SIWDG). The grant provided educational cost for recipients of the HOPE and Zell Miller Grant students who pursued a certificate or diploma in an approved designated program of study (GSFC, 2017).

Georgia had a twofold system of higher education that included a technical and community colleges system. Dual Enrollment was permitted and regulated by multiple programs, policies, and funding sources. In 2011, House Bill 149 was revised as the *Georgia Move on When Ready Act* (Karp, Hughes, & Cormier, 2012). The Georgia

Department of Education governed all the Dual Enrollment programs under State Board Rule 160-4-2-.34 (Karp, Hughes, & Cormier, 2012). Students taking Department of Education approved certified Dual Enrollment courses earned both high school and college credit but were taught by a college instructor. Students had the option to take classes on a college campus, a high school campus, or through distance education (Karp, Hughes, & Cormier, 2012).

Students eligible to take college general academic degree-level courses participated in the ACCEL program. The ACCEL Program was established beginning with the 2004-2005 Award Year and the Georgia Student Finance Commission managed the regulations of the program. The State of Georgia's Annual Operating Budget authorized state revenues to fund the program instead of lottery funds beginning in fall 2011. At the same time when Dual Enrollment funding for students was returned to local systems (GSFC, 2014), students could attend on a part-time or full-time basis (GSFC, 2014). High School students with a 3.5 grade point average who met all college requirements could participate in the program. The ACCEL program was designed for students who were advanced, ready for college level work, and able to provide their own transportation to the post-secondary institutions to take classes. The students had the option to attend classes at a Georgia two- or four-year institution or a technical college (Kennedy, 2008).

According to Karp, Hughes, and Cormier (2012), in Georgia for many years, Dual Enrollment was "hold-harmlessly" funded, which meant that the high schools and the colleges received funding for students who were dually enrolled. Effective during the 2008 – 2009 school year, at the urging of Governor Perdue, new State Board of

Education rules decreased high schools' funding for dually enrolled students. When this happened, the number of students participating in Dual Enrollment dropped significantly. The Technical College System of Georgia witnessed a 25 percent drop in enrollment from 7,548 students to 5,919 in 2008-2009 and continued to decrease in 2010-2011.

In 2011, Governor Deal signed HB 186 at the strong urging of Lt. Governor, Casey Cagle, key legislators, the State Board of Education, and K-12 districts across the state. This legislation reinstated the "hold-harmless" funding for Dual Enrollment. Due to the loss of funds when the rule changed in 2008, school districts were allocated \$2 million as a one-time budgeted item (Karp, Hughes, & Cormier, 2012). The funds were allotted on the belief that Dual Enrollment was an essential element of the state's completion strategy. In addition, the leaders realized that the costs, overall, were not that large as the difference between double funding and removing funds from the high schools was roughly \$2 million per year, a comparatively small portion of the state's overall budget (Karp, Hughes, & Cormier, 2012).

Finally, proponents reframed the conversation. They argued that the state was paying for credits, not seat time. Therefore, when students earned high school credit, high schools were paid; when students earned college credits, colleges were paid. If both happen to occur at the same time, credit was awarded (Karp, Hughes, & Cormier, 2012).

The Georgia Student Finance Commission paid students' tuition, fees, and up to a \$150 book allowance per semester. Per pupil, the colleges and the high schools received funding for dually enrolled students under the ACCEL program (Karp, Hughes, & Cormier, 2012). Students could also earn Helping Outstanding Pupils Educationally (HOPE) funds for Dual Enrollment courses if they met the college readiness requirements

and maintained a 3.0 grade point average (GFSC, 2014). HOPE was designated for students taking career and technical education courses.

Georgia's lottery funds financed the HOPE Dual Enrollment programs, but because of concerns about the sustainability of this funding stream, in 2011, the HOPE grants paid only 90% of students' tuition costs but did not cover fees or books. Colleges had the option to waive the remaining tuition, but if the colleges decided not to, the parents and students were responsible for the difference (Karp, Hughes, & Cormier, 2012).

In 2016, the state of Georgia joined in the endeavor to expand the opportunity for students to receive dual credit, by meeting the requirements to receive an associate degree, a technical college diploma, industry occupational certifications or licenses required to work in certain fields, or complete two technical college certificate of credit programs (SB132, Georgia General Assembly 2015). SB 132 reorganized the three programs: ACCEL, HOPE Grant Dual Enrollment, and *Move On When Ready* under one umbrella "*Move On When Ready*" (GaDOE, 2016). HB 132 was changed to make it easier for students, parents, and K-12/higher education personnel to understand, promote, and administer (GaDOE, 2016). The change put into place the Georgia Student Finance Commission (GSFC) as the single administrator of the program and reduced the students' out-of-pocket expenses. During the 2016 fiscal year, there was an increase of 7,000 students; 27,512 students were dually enrolled in Georgia (GaDOE, 2016). The MOWR student enrollment included 1292 freshmen, 2528 sophomores, 8403 juniors, and 15,979 seniors during the 2016 fiscal year (GaDOE, 2016).

According to the GaDOE, the bill included the SB 2-MOWR Early Graduation Option for students to earn their high school diploma. Under SB2, students earned credit for all their End of the Course Test (EOCT) courses, which included two English, two math, two sciences, and two social studies, and the required PE and Health requirement (GaDOE, 2016). During this time, the student earned an Associate degree, Technical diploma, or a two-year certificate programs within a career pathway. The three career pathway options included computer programmer, networking, or welding (GaDOE, 2016).

In October 2016, Georgia received its first statewide Gaining Early Awareness and Readiness for Undergraduate Program (GEAR UP) Grant (GaDOE, 2017). In 2017, the US Department of Education granted Georgia the Discretionary Grant Program Statewide for the GEAR UP Georgia for a seven-year timeframe. The goal of the GEAR UP Georgia was to increase the number of Georgia high-need students who obtained a secondary school diploma and were prepared for success in postsecondary education and careers. The program provided students with supportive services to help them receive their high school diploma, prepared them for post-secondary education, prepared them for careers, and supported them through their first year of college (GaDOE, 2017). The project proposed to serve over 12,000 students in the neediest sections of the state as early as 7th grade through their first year of college (GaDOE, 2017).

Federal Law: Every Student Succeeds Act (ESSA)

The Elementary and Secondary Education Act (ESEA), was reauthorized in December 2015. Entitled Every Student Succeeds Act (ESSA), ESSA included important shifts in accountability and assessment (Wardlow, 2016). The Elementary and

Secondary Education Act was created during Lyndon B. Johnson's administration in 1965. The original ESEA legislation was a civil rights law created as a response to poverty and inequity in education across the country. President Johnson witnessed this type of poverty first hand while teaching in Texas (Wardlow, 2016). ESEA offered federal grants to districts serving low-income students and grants for books, education centers and scholarships for low-income college students (Wardlow, 2016).

The Every Student Succeeds Act maintained the transparency and accountability provisions for all students and student subgroups established in the Elementary and Secondary Education Act of 1965 (US Department of Education, 2017). The law required states to help ensure that all students had access to highly qualified teachers and positive, safe learning environments with necessary supports to prepare them for success in college, a career and life (U. S. Department of Education, 2017).

ESSA encouraged states and local education agencies to consider dual and concurrent enrollment as a key strategy for successfully preparing students for college (Perry & Lowe, 2017). Federal funds were allocated to support college coursework, encouraged greater accountability and increased data transparency (Perry & Lowe, 2017). ESSA gave more control over education to states and school districts with the goal of empowering students to reach their full potential (Malter, 2016). For students to achieve success in the classroom, the supporters of ESSA suggested Dual Enrollment and concurrent enrollment programs had to be components of ESSA (Malter, 2016). The belief was that Dual Enrollment initiatives had the potential to improve high school graduation rates, reduce dropout rates, make high school more engaging for students, and help lower college costs for students (Malter, 2016).

ESSA encouraged greater use of dual and concurrent enrollment programs as a significant strategy to increase the rigor of high school curriculum and prepare students for college (Malter, 2016). The Act also incorporated student participation in college coursework on local school and state report cards as a component of local school district plans to transition students to postsecondary education, and as a potential indicator in state accountability systems (Malter, 2016). Finally, ESSA included, for the first time in federal statute, a definition of dual and concurrent enrollment programs and early college high schools to establish consistent terminology (Malter, 2016; Perry & Lowe, 2017). In the “Every Student Succeeds Act” the definitions were:

DUAL OR CONCURRENT ENROLLMENT PROGRAM. The term ‘dual or concurrent enrollment program’ means a program offered by a partnership between at least one institution of higher education and at least one local educational agency through which a secondary school student who has not graduated from high school with a regular high school diploma is able to enroll in one or more postsecondary courses and earn postsecondary credit that—“(A) is transferable to the institutions of higher education in the partnership; and “(B) applies toward completion of a degree or recognized educational credential as described in the Higher Education Act of 1965 (20 U.S.C. 1001 et seq.)

(17) EARLY COLLEGE HIGH SCHOOL.—The term ‘early college high school’ means a partnership between at least one local educational agency and at least one institution of higher education that allows participants to simultaneously complete requirements toward earning a regular high school diploma and earn not less than 12 credits that are transferable to the institutions of higher education in the

partnership as part of an organized course of study toward a postsecondary degree or credential at no cost to the participant or participant's family. (ESSA, 2015, p. 289)

Under ESSA, the increased importance placed on Dual Enrollment was a sign Congress understood Dual Enrollments' value in improving college access. Any school district seeking Title I funding had to submit a list of strategies to increase Dual Enrollment, from the individual school level to the Department of Education as part of its application. This process ideally gave more schools the motivation to implement and expand Dual Enrollment (Malter, 2016). Dual Enrollment became a mandatory component of local school and state report cards under the ESSA reporting requirements. Ideally, more school districts were encouraged to implement Dual Enrollment with a featured component in their report card.

States had the option to include Dual Enrollment as an indicator in accountability systems developed under this legislation (Malter, 2016). There were more funding opportunities for Dual Enrollment under the new law. For the first time, Dual Enrollment was covered by Title I grants for schools serving low income students, Title II professional development grants, Title III grants for ELL and immigrant students, and Title IV grants for student support and academic enrichment (Malter, 2016).

Types of Dual Enrollment

Dual Enrollment courses were taught by both high school and college instructors and occurred on the high school campus, the college campus, or online (Collins, 2012; Hooker, Fix, & McHugh, 2014; Lowe, 2010). Dual Enrollment took many forms including direct credit for classes taken on the high school campus, on college campuses,

online, and Career and Technical Education (CTE) articulated programs (Heath, 2008; Wozniak, 2011). Dual Enrollment was sometimes referred to as dual credit, concurrent, and joint enrollment (Collins, 2012). During the 2010-2011 school year, dual and concurrent enrollment programs enabled 1.4 million high school students to enroll in over 2 million credit-bearing college courses through colleges and universities nationwide (Lerner & Brand, 2006; Malter, 2016). The dual credit program awarded students both high school and college credits, whereas the concurrent and joint enrollment programs only awarded students college credit (Collins, 2012).

The basis of Dual Enrollment was high school students enhanced their chances for college success if they better understood what it took to succeed in college by experiencing real college coursework through Dual Enrollment classes (Collins, 2012; Collins, Blanco, & Root, 2013; Jones 2014; Struhl & Vargas, 2012). Kuntz, Gildersleeve, and Pasque (2011) stated that Dual Enrollment programs were meant to help with the transition of students from high school to college and improve college graduation.

Benefits of Dual Enrollment

The main benefit of the Dual Enrollment programs was to provide motivated high school students the opportunity to take more rigorous course work while still in high school. What were the students' perceptions of the benefits and disadvantages of participating in Dual Enrollment? Kanny (2015) study's purpose was to provide an exploratory qualitative study to examine the perceptions of students regarding the benefits and drawbacks of Dual Enrollment. M. Allison Kanny conducted the study. The site for the study was a small, independent charter school in an urban setting in Los

Angeles, California. The school was situated in a low-income community and 100% of the students qualified for the free and reduced lunch program. The high school consisted of approximate 520 students and 90% of the population was Latino. At the beginning of the 2010–2011 academic year, the high school sophomores and juniors in good academic standing began taking courses at a community college campus called City College located roughly seven miles from the high school campus. Two to three days per week, buses transported the dual enrolled students to classes at the community college campus. Each semester, the students enrolled in two four-unit college courses. Students were enrolled in mathematics and English language arts courses and some took politics and economics courses (Kanny, 2015).

Five self-selected high school seniors who took Dual Enrollment courses during their junior year participated in the study. Four of the participants were female but all the participants were Latina/o and attended the charter school since the fifth grade. The participants' prior academic achievement included two students who had earned unweighted grade point averages above 3.5 and the remaining three students had grade point averages above 3.0. Each college-bound participant was considered because of the completion of the A-G requirements as part of the California's secondary curriculum (Kanny, 2015). A-G referred to the high school courses required for entrance to the University of California and the California State University systems (Silicon Valley Education Foundation, 2017)

The A-G requirement included:

A. Two years of History/social science including one year of world history, cultures and historical geography and one year of U.S. history, or one-half year of U.S. history and one-half year of American government or civics.

- B. Four years of College Preparatory English that integrated reading of classic and modern literature, frequent and regular writing, and practiced listening and speaking.
- C. Three years of College Preparatory Mathematics including or integrating the topics covered in elementary and advanced algebra and two- and three-dimensional geometry.
- D. Two years of Laboratory science providing fundamental knowledge in at least two of the three disciplines of biology, chemistry and physics.
- E. Two years of Language other than English of the same language or equivalent to the second level of high school instruction.
- F. One year of Visual and performing arts chosen from dance, music, theater or the visual arts.
- G. One year of college-preparatory elective chosen from the “a-f” courses beyond those used to satisfy the requirements above, or courses that have been approved solely in the elective area. (SVEF, 2017)

The researcher used a qualitative, grounded theory approach to provide evidence by exploring how dually enrolled high school students within an urban setting perceived the benefits and drawbacks of Dual Enrollment participation. Each participant completed a demographic questionnaire that collected data regarding their background characteristics, academic achievement in high school, and experiences in Dual Enrollment courses at City College. Participants selected and used a pseudonym for the study. Each student then participated in a one-on-one semi-structured interview that lasted 45–60 minutes. The semi-structured nature of the interviews allowed for commonality across the interviews by asking open-ended questions, which provided flexibility to explore the unique aspects of each participant’s perceptions of and experiences in Dual Enrollment courses (Kanny, 2015).

The researcher revealed that students who participated in Dual Enrollment courses at City College perceived their experiences as simultaneously beneficial and detrimental

to their academic achievement and personal growth as future college students. Six themes emerged from the data: the beneficial and the ones found detrimental, three each positively and negatively associated with students' participation in Dual Enrollment. Three themes captured students' perceptions of benefits derived because of their Dual Enrollment experiences: exposure, learning the hidden curriculum, and independence and freedom (Kanny, 2015). Three themes captured students' perceptions of drawbacks because of their Dual Enrollment experiences: issues in credit and grades, negative interactions with others, and limited support systems (Kanny, 2015).

The study made an important contribution to the previous knowledge about the impact of Dual Enrollment because it focused on the student perspective. To increase the college-readiness and success of a wide range of high school students, Dual Enrollment was the strategy perceived and promoted and included those traditionally underrepresented in higher education. What was evident from the findings of the study was that students potentially experienced a wide range of benefits and drawbacks simultaneously while taking Dual Enrollment courses. The intersection between positive and negative experiences was very apparent. The students' reflections on the benefits and drawbacks of Dual Enrollment were not mutually exclusive (Kanny, 2015). Kanny (2015) identified three drawbacks because of the students' Dual Enrollment experience: issues in credit and grades, negative interactions with others, and limited support systems.

Chimere J. Jones of Benedictine University conducted the Jones (2014) study. The purpose of the qualitative, phenomenological research study was to explore how the Dual Enrollment Program and other internal and external factors influenced the beliefs, motivations, academic success, and persistence of a small group of Hispanic college

students. The East Bay Area University was the research site for this study. A phenomenological approach was used for this study to ascertain the viewpoints and firsthand experiences of the students who participated in the Dual Enrollment Program, to help understand what had influenced their persistence in college. The qualitative data was collected from interviews with 10 of 15 formerly dual enrolled Hispanic college students at East Bay Area University. The outcome of the study was that the participants' responded that early exposure to college level courses had a positive impact on their college persistence. College persistence was defined as the students' perceptions that they were academically and socially part of the campus life (Jones, 2014). The participants acknowledged their individual growth and development and the option to attend college (Jones, 2014).

An and Taylor (2015) conducted another study from the University of Iowa with Jason L. Taylor of the University of Utah. The primary purpose of Wabash National Study of Liberal Arts Education (WNSLAE) was to study the influence of liberal arts colleges and experiences, and as a result, investigators included students from liberal arts colleges (17 colleges). For this study existing data were used from WNSLAE, a longitudinal study of first-year, full-time undergraduate students who entered one of 23 four-year postsecondary institutions in 2008. The postsecondary institutions were in 14 states and spanned across all four Census regions: West, Midwest, Northeast, and South. The WNSLAE investigators surveyed students in the fall of 2008 and resurveyed them in the spring of 2009. WNSLAE investigators sampled students from six universities, of which 43% of students in the WNSLAE data originated. WNSLAE was well suited for the study because investigators administered the National Survey of Student Engagement

(NSSE) and the WNSLAE Student Experiences Survey (WSES), both of which included measures related to college readiness. The researcher supported the prior research that Dual Enrollment benefited students in the short and the long-term basis. An and Taylor's evidence supported that dual enrolled students contributed to a higher levels of students' academic inspiration, firmer study habits, understandable college expectations, greater levels of interaction with college faculty, and academic knowledge and skills (An & Taylor, 2015).

Dual Enrollment was thought to be the best option for high school and colleges with the hope of improving the rate of students after high school entering college and persisting until they had earned their degree (An & Taylor, 2015). The belief and long-term goal were that Dual Enrollment solved the issue of college readiness for students leaving high school and retention of students starting college. Investing in partnerships with Dual Enrollment was viewed as a great investment for future generations and all the institutions involved (An & Taylor, 2015).

The Southern Regional Education Board's (SREB) 2013 *Essential Elements of State Policy for College Completion* (Collins, Blanco, & Root, 2013) brief highlighted the recent states' actions on Dual Enrollment, offered six issues for policymakers to consider and summarized recommendations from SREB's 2012 publication *Redesigning Dual Enrollment to Promote College Completion* (Collins, 2012). Dual Enrollment played a role in college completion because it allowed students to take college courses while in high school and earn college credit. The higher Dual Enrollment numbers and a more diverse mixture of public high school students participating in Dual Enrollment programs to get a head start on college with the goal of progressing more quickly toward

a career were noted in the report. SREB's report also reported Dual Enrollment courses in high school potentially shortened time-to-degree and potentially reduced students' college costs (Collins, Blanco, & Root, 2013).

Increased Dual Enrollments and the greater diversity of students in Dual Enrollment programs created a need for policy-makers to update their state's policies to ensure that all students who participate were successful. For example, Florida's program increased by nearly 44 percent to 14,000 students from 2006-2007 to 2010-2011. In Kentucky, the participation rate of 11th- and 12th-grade students in Dual Enrollment and dual credit increased from 17 percent of the classes in 2002-2003 to nearly 28 percent in 2010-2011, when nearly 25,000 students participated. In 2011, Texas state's Dual Enrollment program grew by 31 percent to just over 94,000 participants from 2007 to 2009 (Collins, Blanco, & Root, 2013). Recommendations reflected the college and career-readiness policies and strategies, needed for policy-makers to redesign their Dual Enrollment programs to enhance college completion efforts (Collins, Blanco, & Root, 2013).

There were six recommendations made in the SREB policy brief. The first recommendation was that state policy address both the type and amount of credit awarded to students included earning both high school and college credits defined in Carnegie units counted toward graduation and degree completion. The second recommendation was state policy needed to address funding issues by identifying equitable ways to fund the high schools and colleges that educated the same students, maximized savings to the state, and provided incentives to institutions to participate by tying certain accountability measures or performance funding to student participation and

success in Dual Enrollment courses. The third recommendation addressed defining the parties responsible for paying the cost of tuition while promoting the access to Dual Enrollment courses to all students regardless of their ability to pay through a state aid programs to high school students or by providing tuition and fee waivers for needy students. The fourth recommendation addressed quality assurance for the level of rigor with the course curriculum and the evaluation of instructors who taught dual or non-Dual Enrollment classes. The fifth recommendation addressed eligibility requirements for students participating in Dual Enrollment to reflect the admission criteria for the participating colleges and the eligibility criteria was balanced to guarantee student meet college-ready standards. The sixth recommendation addressed on-campus course locations to ensure the full benefit of participating while also providing transportation as need for low-income families and students' full access to college's resources (Collins, 2012).

College Readiness

An and Taylor's (2015) research on Dual Enrollment considered the participation in Dual Enrollment changing a student's college readiness directly after participation or prior to college admission. The discussion about college readiness was not a new concept; it was presented in November 1946 to the five committees of the Conference of the Education of Youth in America (Bailey & Karp, 2003; Burns & Lewis, 2000; Moore, Slate, Edmonson, Combs, Bustamante, & Onwuegbuzie, 2010; Rosenbaum, 1998).

College readiness was defined as the level of preparation a student needed to enroll and succeed without having to take remedial courses their first year in college (Allen, 2010; An & Taylor, 2015; Bailey, Hughes, & Karp, 2002; Cassidy, Keating, & Young, 2010;

Conley, 2011; English, 2017; Leonard, 2013; Moore, Slate, Edmonson, Combs, Bustamante, and Onwuegbuzie, 2010).

In Moore, Slate, Edmonson, Combs, Bustamante, & Onwuegbuzie's (2010) study the authors examined the college-ready graduate rates of all students in 1,099 high schools in the State of Texas for the 2006-2007 school year. Data were analyzed for students' scores in reading, in math, and in both subject areas combined. Approximately one-third of all students were determined to be college-ready in both subject areas. Statistically significant and practically relevant differences, reflecting moderate to large effect sizes, were present in reading, math, and both subjects among Hispanic, African American, and White students.

There were several research studies conducted with the findings that supported Dual Enrollment as an avenue to the preparation of students for the challenges of college, (Anderson, 2010; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Kennedy, 2008; Rodriguez, Hughes, & Belfield, 2012; Struhl & Vargas, 2012). Anderson (2010) evaluated one Dual Enrollment program offered by a mid-sized community college in Wyoming. The study sample was the total population of 948 students who participated in the Accelerated College Education (ACE) Dual Enrollment program and graduated high school in 2007 and 2008. There were 181 respondents. The purpose of the research was to provide educators and policy makers with information useful for program improvement and National Alliance of Concurrent Enrollment Partnerships (NACEP) accreditation. Data from a survey administered by the Board of Cooperative Educational Services (BOCES) in July 2009 utilized for this Dual Enrollment study. Researcher indicated that Dual Enrollment improved academic preparation for college, prepared

students for the role of college student, and the cost of Dual Enrollment impacted students' enrollment choices.

Karp, Calcagno, Hughes, Jeong, and Bailey (2007) study findings provided a very encouraging, though not definitive, picture of Dual Enrollment as a strategy for encouraging student access to and persistence in postsecondary education. Dual Enrollment students in Florida earned a high school diploma, enrolled in postsecondary education in the state university system, enrolled in college full-time, and had higher grade point averages after the first and fourth semesters and cumulatively. The researchers found a strong statistical association with persistence in college, as well as, a large impact on the total postsecondary credits earned. Dual Enrollment participants had earned an average of 15 more credits than their non-Dual Enrollment peers had but those who took more than five Dual Enrollment courses had a 25-credit advantage.

In Kennedy's (2008) study, the students' subjective responses in their journals demonstrated that the experience of Dual Enrollment affected their attitudes toward college and career decisions faced upon high school graduation. While students in Dual Enrollment generally were aware that they were taking courses, which gave them college credit, the students made pointed comments about differences in testing, grading, attendance requirements and rigor of subject matter they had observed between high school and college course work. This was consistent with findings in the existing literature. Researchers reported students applied what they learned to their self-analyses regarding their own behaviors and habits in approaching their schoolwork. They clearly saw the relevance of their Dual Enrollment experience to future college and career choices and believed that they were better prepared and less anxious about their ability to

succeed in college and/or their chosen careers. Dual Enrollment had largely given them what they expected, as well as sharpened their awareness of how college might differ from high school. Students reported the advantages in preparation and experience that they believed would help in their futures. There was also a benefit in Dual Enrollment programs for supporting female students' college and career aspirations as well as developing those aspirations in male students.

Garbee (2015) examined the impact of dual credit on college success and completion in Texas by using different groups of students through, means of academic and demographic controls. The most important finding from the study was that dual credit positively affected college outcomes, including both freshman college GPA and degree completion. The conclusion supported prior research on the effects of rigorous coursework in high school and, specifically, the positive impact of dual credit. The results indicated that underrepresented students in higher education had lower enrollment in dual credit courses except for Hispanic students. They also had lower GPAs and a lower probability of graduating from college, when controlling for all other factors. Garbee (2015) reported the need to consider the outcomes regarding underrepresented students alongside the positive outcomes for dual credit students. Garbee's (2015) study suggested that students' participation in Dual Enrollment increased their levels of human and academic capital and ensured students preparation for success in college.

Rodriguez, Hughes, and Belfield's (2012) research yielded evidence on the apparent effects of the Concurrent Courses Initiative (CCI) on college success. The goal of the CCI was to expand access to supportive, career-focused Dual Enrollment for students often underserved by such programs and underrepresented in higher education,

with the expectation that participating students would prosper in college subsequently. Longitudinal administrative data on individual students who participated in 2008–2009 and 2009–2010 was used to test for outcomes. There was no straightforward evidence that CCI participation had any influence on enrollment in college in general, although the first cohort of dual enrollees were statistically significantly more likely to enroll in four-year institutions compared with their district peers. In addition, there was convincing evidence that CCI dual enrollees had a greater persistence and accumulated more credits in their first and second years in college; their accumulation exceeded their peers in their school districts. Rodriguez, Hughes, and Belfield (2012) suggested the need for students to take advantage of the college support services available.

Struhl and Vargas (2012) study investigated the effectiveness of Dual Enrollment as a strategy for improving postsecondary success. The researchers used a dataset with 132,772 students who graduated from high school in 2004 after completing all four years in the same school district. The study focused on the academic outcomes of 32,908 Texas students from the high school graduating class of 2004. Half of the study group completed at least one college course before graduating from high school and those who completed college courses through Dual Enrollment attended college, persisted in college, and completed an Associate degree or higher within six years. The methodology used was a quasi-experimental design, propensity score modeling (PSM). The Propensity Score Matching technique matched the treatment cases to control cases. This study matched each student who took dual-credit with one who did not but had the same predicted probability to have taken dual-credit courses. In all analyses, completing a college course through Dual Enrollment had a consistent and positive association with

college enrollment, persistence, and completion. This was especially notable given that the research compared dual enrollees with non-dual enrollees who were otherwise from similar academic and demographic backgrounds. The researchers reported that students who completed college courses scored higher on state tests, were less likely to be low income, and more likely to be white than of other racial backgrounds.

Several researchers indicated that the students' participation in Dual Enrollment enhanced their understanding of college life and eased their transition from high school to college (Garbee, 2015; Kennedy, 2008; Porter, 2003; Prophete, 2013). Dual Enrollment students were identified as being most likely to earn a high school diploma, to enroll in postsecondary education in the state university system, to enroll in college full-time, and to have higher grade point averages after a full year of college (Karp, Calcagno, Hughes, Keong, & Bailey, 2007). Arnold (2015) defined college readiness as "career-planning skills and as college Grade Point Average (GPA)" (p. 26); Arnold's study indicated that dual enrolled students were more advanced in planning for their career and received grades higher than a C than students who did not participate in a Dual Enrollment program.

Conley's Framework of College Readiness focused on the four key dimensions of college readiness: cognitive strategies, content knowledge, contextual skills, and using the resources on campus (Allen 2010; An & Taylor, 2015; Conley, McGaughy, Kirtner, van der Valk, & Martinez-Wenzl, 2010). An & Taylor (2015) reported that as students finished their Dual Enrollment course they had a better sense of needed skills and expectations for college success. Conley's (2011) framework covered the four types of readiness:

Work Ready meant that students met the basic expectations regarding workplace behavior and conduct;

Job Ready, meant that students possessed the specific knowledge necessary to begin an entry-level position;

Career Ready, meant students possessed sufficient foundational knowledge, skill, and general learning strategies necessary to begin studies in a career pathway;

College Ready, meant students were prepared in the four keys of college readiness necessary to succeed in entry-level general education courses. (p. 8)

Conley (2011) identified the Four Keys to College and Career Readiness. Key one included the Cognitive Strategies, such as, problem understanding, research, interpretation, communication, precision and accuracy. Key two identified was Content Knowledge concerning items such as, key terms & terminology, information, linking ideas, organizing concepts. Key three was the Key Learning Skills & Techniques, which included time management, study skills, goal setting, self-awareness, perseverance, shared learning, student ownership of learning, technical proficiency, and retention of information. Key four was the Transition Knowledge & Skills, which included Postsecondary program selection, admissions requirements, financial aid, career pathways, postsecondary culture, role & identity issues, agency (Conley, 2011).

An and Taylor (2015) suggested that college readiness evaluations be conducted based on the students' behavior and performance in college and not before entering college. The promoters of Dual Enrollment programs and state policies stated that college readiness was increased but few researchers tested this claim (An & Taylor, 2015). If college readiness was improved by a student's participation in Dual Enrollment

there needed to be an important level of readiness and evidence of those who participated than those who did not participate in a Dual Enrollment program (An & Taylor, 2015).

An and Taylor's (2015) research results included three findings: (1) students who participated in Dual Enrollment were more likely to be college ready on three of Conley's four dimensions than student not earning college credit in high school; (2) the impact of accelerated programs on college readiness did not differ statistically between student in Dual Enrollment and those taking Advanced Placement (AP) courses; (3) the effect sizes of accelerated programs on college readiness were small in size due to the removal of students who did not receive college credit but participated in the AP courses. However, given the evidence from this study, An and Taylor reported that state policy makers should consider adopting policies that expanded Dual Enrollment eligibility standards so more students can access Dual Enrollment and are college ready in both the cognitive and noncognitive domains (An & Taylor, 2015).

Determining College Readiness

The American College Test (ACT) and the Scholastic Aptitude Test (SAT) were the two well-known assessments used for determining college readiness (Venezia & Jaeger, 2013; An & Taylor, 2015; Moore, Slate, Edmonson, Combs, Bustamante & Onwuegbuzie, 2010). In 2012, the number of graduates meeting the College Readiness benchmark varied on both assessment. Only 25 percent of the graduates met the College Readiness ACT benchmark and only 43 percent met the SAT benchmark (Venezia & Jaeger, 2013).

Venezia and Jaeger's (2013) research spoke about the two assessments being under fire because of the significant percentage of underserved student groups attending

college. Venezia and Jaeger (2013) brought several concerns to the forefront about the two assessments. One concern was the belief that well-off students have better chances to prepare for the assessments. Another concern was that the assessment did not cover what the students had learned in class. The last concern was that there was no good indicator of how students would succeed in college along with the fact, that most of the students planning to attend a community or technical school did not take the ACT nor the SAT because it was not required for admission (Venezia & Jaeger, 2013).

ACT scores were linked with the measures of college readiness (ACT, 2015). An ACT scores did not affect three of the four college readiness measures (ACT, 2015). An and Taylor's (2015) researchers reported a negative relationship between ACT scores and key learning skills and techniques. The ACT scores were not a good indicator of a strong positive influence on college readiness granted that performance on college exams connected positively with college grades (ACT, 2015). An & Taylor (2015) concluded that the completion of further research was needed to determine whether college readiness increased other important outcomes such as lifelong learning and aspirations toward graduate education.

An and Taylor (2015) suggested that the ACT and SAT score not be the only predictor for college readiness but be only marginally associated with measuring college readiness. Venezia and Jaeger's (2013) stated that the reasons why many students completing high school were not ready for college were more complicated and dependent upon individual conditions. In Venezia and Jaeger's (2013) research, study academic and nonacademic factors were identified. The nonacademic list included the students' ability to adjust to college, motivation, along with non-cognitive domains such as positive self-

concept, realistic self-assessment, long-term goals, a strong family support, peer influences, leadership, and community engagement (Venezia & Jaeger, 2013). Research also showed that students are more likely to attend college if their parents graduated from college (Venezia & Jaeger, 2013).

Contrary Studies

Post (2013) and Speroni (2011) research findings led to an area of concern or conflict about the belief that Dual Enrollment participation for high school students prepared them for college. There were studies that indicated that there was no evidence that participation in Dual Enrollment had a significant effect positively or negatively on college readiness or students' desire to enroll in college immediately after high school (Post, 2013; Speroni, 2011).

The Post (2013) study used a correlational design with archival data to examine the unique role of Dual Enrollment, using selected predictor variables, to explain three distinct indicators of the educational achievement of postsecondary students at technical colleges in Georgia. The study analyzed archival data from the Technical College System of Georgia (TCSG) Banner Student (2011a) database system. The study's participants represented a sample of students, ages 18-20 who had entered a postsecondary technical college in Georgia after high school graduation, without credits from another educational institution outside of the TCSG. Post's results indicated that Dual Enrollment was a statistically significant predictor of the likelihood of a higher GPA at the end of the first year, but negatively affected the likelihood that a student would persist to the second year.

According to Post (2013), students who participated in Dual Enrollment were aware of the processes and procedures of the college but indicated students could have been just as successful in the same process without taking Dual Enrollment classes. Post's (2013) study did not determine definitively a positive or a negative impact for Dual Enrollment on postsecondary outcomes.

The results of Post's (2013) study did not support the view that Dual Enrollment was a predictor for academic achievement on student retention and graduation. Post suggested due to the division of the two separate higher educational systems in Georgia students attempted to find the path of least resistance and one financially feasible for their economic circumstances. According to Post (2013), one unknown factor that remained unexplored was the motivation for participating in Dual Enrollment at the technical college verses a four-year institution. Other factors listed included: students' determination, family support, encouragement for students' counselors or teachers, and if the availability of the funds for technical colleges verses university which all played a role in the students' decision about their educational goal (Post, 2013).

Another recommendation from Post's (2013) research was the need to provide an avenue for tracking students who would not normally participate in college level courses, such as, students who had lower grade point averages and standardized test scores to see how successful they were in college as compared to students who did not participate in Dual Enrollment program. Post also suggested the need for research comparing advanced placement students with student who participated in Dual Enrollment courses and their success in college (Post, 2013).

Speroni’s (2011) study used the quasi-experimental method with the purpose of evaluating the causal effects of Dual Enrollment on student outcomes. The study used data from the Florida Department of Education, which included all public-school students in the 2000–2001 and 2001–2002 high school senior cohorts and tracked their postsecondary outcomes in the state’s public system through the summer of 2007. The results showed no evidence that simply taking a Dual Enrollment course improved marginal students’ rates of high school graduation, college enrollment, or college degree attainment. However, for the students who participated in a challenging Algebra Dual Enrollment course, there was a large and significant effect on college enrollment and graduation rates. Speroni also suggested course failure discouraged failing students from pursuing college education altogether or set them on a nonacademic path.

Speroni’s (2011) recommended districts and colleges to track students who participated in the Dual Enrollment program. Tracking data could potentially be used to gather feedback for changes to maximize the program effectiveness and impact along with budgeting sources of funding for students.

Chart of Studies

The chart of studies below included three studies that were relevant to the research.

STUDY	PURPOSE	PARTICIPATION	DESIGN/ ANALYSIS	OUTCOMES
Anderson, J. J. (2010)	This study explored student perceptions of a site specific Dual Enrollment program to inform high	Target institution, a mid-sized, western community college, and a purposefully selected sample of 948 students who	Five null hypotheses were tested utilizing chi-square analysis.	Findings were: (1) Dual Enrollment prepared students academically for the challenges of college (2) Dual Enrollment enhanced students’

	<p>school and community college policy makers on program effectiveness.</p> <p>The purpose of this case study was to examine student perceptions of participation in Dual Enrollment community college courses as measured with the Central Wyoming Accelerated College Education (ACE/BOCES) Student Follow-up Survey.</p>	<p>had participated in its Dual Enrollment program in 2007 and 2008.</p>	<p>Data from a survey</p> <p>Blinded, archival data were provided</p> <p>Chi-square analysis was used to test the null hypotheses</p> <p>A logistic regression model</p>	<p>understanding of the college student role</p> <p>(3) Dual Enrollment did not help students make college/career path decisions, and</p> <p>(4) Students were very satisfied with their Dual Enrollment experience and recommended the program to others.</p> <p>Number of Dual Enrollment credits acquired had the most significant relationship with improved academic preparation while location of Dual Enrollment classes (college or high school campus) had the most impact on students' social acclimation.</p>
<p>Lewis (2009)</p>	<p>To add to the existing literature base regarding Dual Enrollment by collecting data on the perceptions of students who have transitioned to the university setting after having experienced Dual Enrollment</p>	<p>Twenty-one students were interviewed via e-mail</p> <p>18 females and 3 male students.</p> <p>Sample make-up: 14 Caucasian/white, 3 African American/blacks, 1 Asian, 1 Hispanic, and 2 who were multi-racial</p>	<p>Qualitative</p> <p>E-journaling to elicit descriptive responses from students</p>	<p>Reasons for participating in DE: were to seize the opportunity to save money on books and tuition, to earn college credit or obtain a higher GPA</p> <p>Most students already planned to attend college and their DE participation did not affect their decision to go to college</p> <p>Student DE participation helped in</p>

		Students reported taking courses through Dual Enrollment as early as age 15, although most students began at age 17 when they were seniors		<p>successfully navigated the system and increased confidence by completing college courses</p> <p>Provide unique college experience by attending classes on college campus versus on their high school campus</p> <p>Suggested legislators and other key administrators to continue the commitment to facilitate growth in acceleration mechanisms such as Dual Enrollment, to obtain a more educated workforce that will be able to keep up with the demands of our economy and society</p>
Post (2013)	The purpose was to examine the unique role of Dual Enrollment, given the concomitant influence of other selected predictor variables, in explaining three distinct indicators of the educational achievement of postsecondary students at	Participants represented a multiple staged selection sample of students, ages 18-20, who had entered a postsecondary technical college in Georgia after high school graduation, without credits from another educational institution outside of the TCSG	<p>Quasi-experimental correlational design</p> <p>Used archival data of Technical College System of Georgia (TCSG) Banner Student (2011a) database system</p>	<p>A majority of students were White, women, enrolled part-time, and enrolled in a diploma level program.</p> <p>The average GPA for the sample was 1.81; slightly higher for students with Dual Enrollment experiences (M=1.92), and slightly lower for those with no Dual Enrollment credit (M=1.70).</p>

	<p>technical colleges in Georgia</p>		<p>Regression analyses</p>	<p>Less than 14.00% of all students in the sample graduated by the end of the data collection period. Rates were marginally higher for Dual Enrollment students (15.75%) and lower for Non-Dual Enrollment students (12.00%).</p> <p>Indicated that Dual Enrollment was a statistically significant predictor of the likelihood of a higher GPA at the end of the first year, but negatively impacted the likelihood that a student would persist to the second year.</p> <p>When controlling for other variables, White students were more likely than Black students to possess higher GPAs at the end of the first year.</p> <p>Black students were less likely than White to be persistent in enrolling in coursework Year 2.</p> <p>Men were less likely than women to be retained, as well.</p>
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Struhl & Vargas (2012)	To investigate the effectiveness of Dual Enrollment as a strategy for improving postsecondary success	The dataset started with 132,772 high school 2004 graduates after completing all four years in the same school district	Quasi-experimental Propensity score matching model Longitudinal data Logistic regression College attendance and completion for Texas students at least six years past high school graduation	Completing a college course through Dual Enrollment had a consistent and positive association with college enrollment, persistence, and completion Students who completed college courses scored higher on state tests, were less likely to be low income, and more likely to be white than of other racial backgrounds
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The three studies are listed. Post (2013) supported the idea that the majority of students who participated in Dual Enrollment were White females and the White students were more likely than Black students to possess higher GPAs and less likely to continue their coursework the next year. Lewis (2009) study dealt with the perceptions of Dual Enrollment on students' university experience and encouraged legislators and other key administrators to continue the commitment to Dual Enrollment. Struhl and Vargas (2012) investigated the effectiveness of Dual Enrollment as a strategy to improve postsecondary success and the indication was that Dual Enrollment had a consistent and a positive effect on postsecondary enrollment, persistence, and completion.

Summary

Dual Enrollment took many forms including direct credit for classes taken on the high school campus, on college campuses, online, and Career and Technical Education

(CTE) articulated programs. Expansion and demand from parents for their children to participate in Dual Enrollment increased over the past ten years. The original purpose for Dual Enrollment was to provide an opportunity for high school students to experience college success while increasing their understanding of what it took to succeed in college by experiencing real college coursework.

In the 21st century, the need to prepare students for success in college and career could not be understated. A high school diploma no longer guaranteed a middle-class job; without a postsecondary degree or certificate, it was difficult for most students to survive and thrive in our changing world. By 2020, approximately 35 percent of job openings potentially required at least a bachelor's degree and another 30 percent at least an associate degree or some college. Dual Enrollment programs engaged high school students in college course work and there was evidence of success among Dual Enrollment programs in improving dropout rates and helping to move more students onto a college-bound track. More than 1.4 million high school students took courses offered by a college or university for credit through Dual Enrollment.

Multiple research study outcomes suggested participation in Dual Enrollment led to improved academic outcomes, especially for students from low-income backgrounds and first-generation college students. In addition, participation in Dual Enrollment led to better grades in high school, increased enrollment in college following high school, led to higher rates of persistence in college, greater credit accumulation, and increased rates of credential attainment. Dual Enrollment programs continued, strengthened, and expanded to meet the goal of ensuring that all students were college- and career-ready. With strong increases in Dual Enrollment and support from the school systems, state education

departments, and a push by federal legislation, there was still little research as the program continues to evolve, thus the researcher proposed to investigate perceptions regarding the benefits of participating in Dual Enrollment and college readiness by the 2016 graduates of one high school in Central Georgia.

CHAPTER III: METHODOLOGY

Introduction

The researcher proposed to examine the students' perceptions of Dual Enrollment and the impact of Dual Enrollment on their educational decision after high school. The study used a mixed method which included quantitative and qualitative methodology to investigate the research issue (Golden, 2017). The study investigated the students' perception of participating in the Dual Enrollment program and the influence on college readiness. In conjunction, to also discover if the basis for students participating in Dual Enrollment was for the opportunity to enhance their chances for college success, along with understanding what it took to succeed in college through their experience of real college coursework (Collins, 2012; Collins, Blanco, & Root, 2013; Cowan & Goldhaber, 2014; Jones 2014; Struhl & Vargas, 2012).

Mixed methods research was an approach involving collecting and combining both quantitative and qualitative data while using distinct designs that involved logical assumptions and theoretical frameworks (Creswell, 2013). Quantitative research was defined as collecting numerical data to explain a phenomenon and answering questions using quantitative methods such as experiments and surveys (Creswell, 2013).

Quantitative research method for this study was an online survey. The online survey data provided a quantitative or numeric depiction of trends, attitudes, or views of the population (Creswell, 2013). The study began with an online survey in order to generalize results from the 2016 graduates and then, in the second phase, focused on the qualitative, open-ended telephone interviews to collect detailed views from the 2016 graduates to help explain the initial quantitative online survey (Creswell, 2013). The

qualitative data that emerged because of the semi-structured telephone interview provided an account about the participants' Dual Enrollment experience (Elliott & Timulak, 2005). The telephone interviews provided researchers with direct access to the language and concepts participants used to structure their experiences about Dual Enrollment through their feelings and conversation about the designated topic (Hughes & DuMont, 1993). Furthermore, the quantitative and the qualitative research together attempted to explain a situation as it exists and determine patterns or trends that have emerged (Rodriguez, 2013).

This study was framed by the experiential theory, which stated that learning occurred within the cycle of experience, sharing, autonomy, and adjusting. Learning was based on the experiences and interactions that occurred within a situation that helped develop the results (Passarelli & Kolb, 2012). Learning was informal and was developed by the interaction with others. The learner was the focus of learning not the instructor. The experience and the process motivated the learner. The learner was driven by their interest, such as earning college credit while still in high school. The role of the instructor was to encourage the learners to pursue their interests along with others who shared the same interests (Patrick, 2017). Experiential learning theory puts theory to practice through career and technical education programs such as Dual Enrollment (Haltinner, Mooney, & Stanislawski, 2012).

According to Kirschner, Sweller, and Clark (2006) the learning process of the experiential theory began with a person carrying out an action, for example, participation in Dual Enrollment courses, and determining the influence of that action in their setting. Along with the belief that if the same action took place under the same circumstances it

was possible to predict what would happen. The basis of Dual Enrollment was that high school students enhanced their chances for college success if they better understood what it took to succeed in college by experiencing real college coursework through Dual Enrollment (Cowan & Goldhaber, 2014; Struhl & Vargas, 2012).

Research Questions

There are questions about the Dual Enrollment program availability, exposure, and benefits for all students. The following research questions guided the study:

Research Questions:

1. To what extent did students perceive positive benefits of the Dual Enrollment program?
2. To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high School in 2016?

Therefore, the researcher proposed to examine the perceptions of students regarding the benefits of participating in Dual Enrollment and how their participation influenced their future educational path.

Research Design

The researcher proposed to examine the students' perceptions of Dual Enrollment and the impact of Dual Enrollment on their educational decision after high school. The study used a mixed method using quantitative and qualitative methodology to investigate the research issue. (See Table 1 below).

Table 1- Research Confirmation

Research Question(s)	Instrumentation/ Analysis – what instrument will you use?	What strategy will be used to answer research question?
1. To what extent did students perceive positive benefits of the dual enrollment program?	<u>Quantitative</u> Online Survey <u>Qualitative</u> Telephone Interview	Numeric data from Quantitative surveys provided information regarding the frequency of various perceptions about Dual Enrollment. Narrative data from the Qualitative transcribed interviews provided thematic coding identifying the similarities and differences in the experience of 2016 graduates who participated in Dual Enrollment.
2. To what extent did students' dual enrollment experiences impact their educational decision after graduating from high school in 2016	<u>Quantitative</u> Online Survey <u>Qualitative</u> Telephone Interview	Numeric data from Quantitative surveys provided information regarding the frequency of various perceptions about Dual Enrollment. Narrative data from the Qualitative transcribed interviews provided thematic coding identifying the similarities and differences in the experience of 2016 graduates who participated in Dual Enrollment.

Mixed methods research was an approach involving collecting and combining both quantitative and qualitative forms of data while using distinct designs involving logical assumptions and theoretical frameworks (Creswell, 2013). The study began with an online survey in order to generalize results from the graduates and then, in the second phase, the focus was on the qualitative, open-ended telephone interviews used to collect detailed views from the graduates to help explain the initial quantitative online survey (Creswell, 2013).

Quantitative research was defined as collecting numerical data to explain a phenomenon and answering questions using quantitative methods, such as experiments

and surveys (Creswell, 2013). Quantitative research method for this study was an online survey. The online survey data provided a quantitative or numeric depiction of trends, attitudes, or views of the population (Creswell, 2013). Qualitative research was defined as the method of collecting data from interviews, focus groups, observations, documents, and material culture (Onwuegbuzie, Leech, & Collins, 2010). Moreover, qualitative research endeavors to explain an existing situation and established patterns or trends that emerged (Rodriguez, 2013). The qualitative research method for this study was semi-structured telephone interviews. Interviews provided researchers with direct access to the language and concepts participants used to structure their experiences and to think and talk about a topic (Goins, 2015; Hughes & DuMont, 1993). Ramsey-White (2012) study indicated that qualitative research dealt with how people made sense of their lives. In a qualitative study the researcher does not seek out evidence to prove or disprove an assumption; instead, the assumptions are built as data was gathered and analyzed (Ramsey-White, 2012).

Population

The proposed population for the study was the 2016 graduates of a central Georgia high school who participated in Dual Enrollment and earned dual credits in the academic area or in the career area. Fifty-one graduates participated in Dual Enrollment in 2016 out of the class of two-hundred and forty-seven graduates. The population of fifty-one graduates included two Asia/Pacific Islanders females, four Multi-racial females, twenty White females, sixteen White males and nine African Americans females, but no African American males. The dual enrolled graduates earned credits in the academic area and in the career area.

Participants

Purposeful sampling was used for this study to select students whose experiences were considered information-rich based on their participation in Dual Enrollment (Lewis, 2009). Purposeful sampling involved identifying and choosing individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Creswell, 2013). Participants were selected purposively with a specified criterion based on their participation in Dual Enrollment during the 2015-2016 school year, along with their willingness to participate in the study. There were two-hundred and forty-seven graduates in 2016 and fifty-one participated in Dual Enrollment.

Site

The site for the research was a central Georgia high school that opened in 2010, located in a rural community approximately two hours south of Atlanta, and the newest of five high schools in the school system. The school has served approximately 1650 students in grades 9-12 with eighty full-time certified teachers, four counselors, and one media specialist. For the two previous years, the number of students who participated in Dual Enrollment had increased. In 2014 there were twenty-six Dual Enrolled students, in 2015 thirty-eight Dual Enrolled graduates, and in 2016 there were fifty-one who participated in Dual Enrollment an increase of thirteen more students. The students participated in Dual Enrollment by taking classes at several local four-year institutions located in the central Georgia area or at the local career academy in partnership with the local technical college.

The local career academy was an extension of the programs of the county's five high schools and was an off-campus center for the local technical college. The goal of the

career academy was to integrate academics and advanced career/technical education programs by providing an aligned and seamless curriculum. The curriculum addressed the priorities and expectations of the businesses and industries in the area through the avenue of rigorous high school courses along with college level courses. The career academy was under the control and management of the local Board of Education but was governed by the Board of Directors of the Charter School. The Directors included business representatives, educational representatives, parents, and a representative from the local Air Force Base.

One noted factor about the high school was its proximity to the Air Force Base. Because of the closeness to the Air Force Base, the student population had a high influx of military connected students, bringing diverse backgrounds and experiences. The school was in a community where students were expected to continue their education whether at a two-year or four-year university or join the military. Since the participants are graduates of the school where the researcher worked as an administrator the students' familiarity and trusting relationship had already been established (Goins, 2015). The researcher was aware of the importance of building trusting relationship with the participants for them to share honestly their Dual Enrollment experiences and perspectives (Goins, 2015).

Instrumentation

This study used an online survey instrument for the collection of the quantitative data and semi-structured telephone interviews for the collection of qualitative data (see Table 2).

Table 2 Online Survey Item Analysis

Online Survey Instrument Item Analysis		
Interview Item analysis Themes/Sub Themes	Actual Survey question	Which Research Question does it answer? (#)
1. N/A	Informed Consent Form and Contact Information	N/A
2. Benefits	Please rate how well you perceived that your Dual Enrollment experience prepared you in each of the following areas with 4 being extremely well and 1 being not well. a. Oral Communications Skills b. Writing Skills c. Reading Comprehension Skills d. Study Habits e. Critical Thinking/Problem Solving	#1
3. Benefits & Perceptions	Read each statement and indicate the extent to which you agree or disagree with 5 being Strongly Agree and 1 being Strongly Disagree. a. Dual Enrollment classes challenged me more than my standard high school courses. b. I obtained additional confidence toward taking college courses. c. Dual Enrollment classes kept me motivated to strive for better grades in high school. d. Dual Enrollment classes kept me motivated to stay in high school. e. I feel that participating in Dual Enrollment classes, increased my chances of my college success. f. I would recommend that all high school students take Dual Enrollment classes while in high school.	#1 and #2
4. Current Status	What are you currently doing?	#2
5. Demographics	What is your gender?	N/A
6. Demographics	Which race/ethnicity best describes you?	N/A

The online survey instrument was developed using survey monkey to collect the students' response regarding participating in Dual Enrollment. The survey included a total of six questions (see Appendix B). The questions included a consent to participate required to answer question, one contact information, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, one

current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender. The online survey had a closing date to complete of one week. Lewis (2009) study stated that including a deadline date for closing the survey had the potential to produce greater response rates.

Each participant needed to consent to participate in the survey and telephone interview. The Informed Consent was obtained through a web-based email invitation where the first page was the embedded Informed Consent form for the Online Survey and the Telephone Interview. At the bottom of the first page, there was a statement that the graduates agreed or disagreed to having read the Informed Consent, voluntarily agreed to participate in the Online Survey and Telephone Interview, and they were 18 years of age or older. The Informed Consent was acknowledged by the graduates clicking on the "Agree" button and once the Agree option was selected an email was sent to the researcher and the graduate advanced to survey question #1 which included a text box where the graduates provided the following information: name, date, email address, and the best contact telephone number. If a respondent did not agree to participate, the respondent was not able to access the remaining questions. The data from the surveys was compiled and summarized. Once the online surveys were completed, the researcher's goal was to have least two participants from the following area: attending a four-year college, attending a Technical college, in the Military, and in the workforce to participate the telephone interviews. For the students who did not have an email address on file a letter requesting their response by providing their email address if they wanted to participate.

Semi-structured interviews were the most common method as this method provided students to speak face-to-face about the phenomena (Goins, 2015; Saenz & Combs, 2015). The telephone interview consisted of ten open-ended questions to obtain information such as their involvement with Dual Enrollment, advantages of Dual Enrollment, impact of Dual Enrollment on their educational decision after high school, skills gain from participating in Dual Enrollment, and what they were currently doing (attending college, in the workforce, military, or unemployed) (See Table 3).

Table 3 Telephone Interview Item Analysis

Telephone Interview Instrument Item Analysis		
Interview Item analysis Themes/Sub Themes	Actual Interview question	Which Research Question does it answer? (#)
1. Influences	What/who influenced you to participate in the Dual Enrollment Program while in high school?	#2
2. Experiences and Benefits	How did you benefit from your participation in the Dual Enrollment Program?	#1
3. Advantages of participating in Dual Enrollment	What do you see as some of the advantages to being enrolled in a dual enrollment class?	#1
4. Experiences and Benefits	What was the greatest benefit of taking a college level course in high school?	#1
5. Influences past high school graduate	How did participating in the program influence your aspirations to attend or not to attend college?	#2
6. Perceptions about Dual Enrollment	What were your thoughts and beliefs about college before participating in the Dual Enrollment Program and how did your thoughts and beliefs change after participating in the program and entering college?	#2
7. Skills and Benefits	What skills did you gained by taking a dual enrollment course such as test taking, writing skills, teamwork, motivation, etc.?	#1 and #2
8. Experiences	Did your anxiety of going to college decrease after you took a college level course in high school?	#2
9. Influences	What are you doing now and how was your current situation impacted or not by participating in Dual Enrollment.	#2
10. Experiences	Do you have any other comments about your Dual Enrollment experience?	#2

The telephone interviews were audio recorded for transcription purposes. The interviews were transcribed by a third party online professional transcription service and coded to identify group experiences that related to the phenomena. The use of an audit trail to established trustworthiness and confirmability (Goins, 2015; Huntley & Schuh,

2002). Member checking was also used for the interviews, by having participants review the transcriptions to ensure accurate interpretation and placement of responses. Once the online surveys were received and the transcripts were completed and reviewed by the participants, they were coded to find common themes among the surveys and interviews using the common comparative method (Huntley & Schuh, 2002; Lewis, 2009). This method allowed the researcher to identify themes, patterns, and trends as the data were collected and later refining the themes, patterns, and trends occurred as more data were collected and studied.

Description, understanding, and interpretation were the goals for the mixed method research (Lichtman, 2006). This study provided an opportunity for policymakers and educators who make decisions about Dual Enrollment who have been affected by the experience and increase their awareness of issues and experiences connected with Dual Enrollment (Lewis, 2009). This study provided an opportunity to have an impact on Dual Enrollment by uncovering information that may improve educational practices, set priorities for future goals, and perhaps even generate new ideas that will lead to positive outcomes for policymakers, students, and their families (Lewis, 2009).

Validation

Taylor (2012) stated to ensure the validity of a study, there are four guiding criteria used to develop trustworthiness of a qualitative and quantitative inquiry. They are credibility, dependability, confirmability and transferability. Taylor (2012) identified six strategies: triangulation of data, member checks, long-term observation, peer examination, participatory research, and bias declaration used to enhance the

internal validity of this mixed method research. The researcher incorporated triangulation and member checks and bias declaration from the four criteria.

Triangulation strengthened the validity of the evaluated data (Zohrabi, 2013). The researcher used several sources, online surveys and telephone interviews, to collect data, since the use of only one collection technique would make the research questionable, biased, and weak (Zohrabi, 2013). The collection of data from more than one source along with a variety of techniques was used (Zohrabi, 2013). Therefore, if the results from the online survey and the telephone interviews are the same the data was valid (Zohrabi, 2013).

Member-checking was one of the techniques that qualitative researchers use to establish credibility (Taylor, 2012). This technique allows for the sharing of data, interpretations, and conclusions with the participants (Taylor, 2012). Member checks were utilized to verify the transcripts accuracy and provided the participants with the opportunity to add, clarify, or amend their comments to ensure accurate interpretation and placement of responses. Copies of the interview transcript were made available for review to the participants within a week after transcription for verification (Salerno, 2011; Taylor, 2012). This allows participants to clarify what their intentions were, correct errors, and provide additional information if necessary. Credibility was established through the interview data, which was cross-referenced with the online survey data to determine if the students' answers supported the research questions that students' Dual Enrollment experiences influenced their educational decision after graduating from high school in 2016.

Dependability and confirmability of the research entailed a clear, systematic process undertaken by the researcher (Taylor, 2012). Confirmability of the findings was supported by a detailed practical description of the process and an audit trail. The audit trail allowed the observer to trace the course of the research step-by-step via the decisions made in addition, to procedures described (Goins, 2015; Huntley & Schuh, 2002; Taylor, 2012). To establish dependability and reliability, the focus group session was audio recorded and transcribed. Following transcription, the transcripts were reviewed for accuracy. Throughout the process of transcribing, detailed memos were taken, noting additional questions, conclusions, and generalizations (Salerno, 2011).

Data Collection

The data collected referenced the information gathered from the graduates of the 2015-2016 academic school year who participated in Dual Enrollment. The collection of data included the students' perceptions about the positive benefits of Dual Enrollment and the students' participation in Dual Enrollment influencing their preparation for college. Perception data was collected through the online surveys and the telephone interviews and analyzed to offer depth to the study and a better understanding of the student experiences.

The online survey instrument was developed using survey monkey to collect the students' response regarding participating in Dual Enrollment. The online survey had a closing date to complete and the survey was open for one week. Lewis (2009) study stated that including a deadline date for closing the survey had the potential to produce greater response rates. Each participant received an identical online survey to record their response to the same questions. The online survey included six questions. A request to

participate and consent to the online survey and telephone interview was presented as page one of the survey. The agreement to having read the Informed Consent, agreement to voluntary participate in the study and that they were 18 years or older, was required to be answered before being allowed to proceed to the survey. Once agreement was made there was a contact information question for the following: name, date, email address and best contact telephone number was requested.

The semi-structured telephone interviews were selected to investigate how Dual Enrollment programs assisted students in transitioning with their after-graduation decision especially college. This required an in-depth interview with participants to gather their interpretations of Dual Enrollment programs and how they have assisted them with this transition (Simon, 2017). Taylor's (2012) study indicated that the purpose of in-depth interviewing was to understand lived experiences and what the experience meant to the participants.

Prior to beginning the research an application, to conduct the study was submitted to the Institutional Review Board (IRB) at Columbus State University (Creswell, 2013). Consent was obtained from the school district's superintendent and the school's principal where the study was proposed. The participants for the study were the 2016 graduates who participated in the Dual Enrollment program in high school.

Data collection procedures for the study began with gathering existing data about 2016 graduates who participated in Dual Enrollment. The request was made to the school principal for the assistance of identifying the graduates who met the research study criterion. The participant criterion for this research study was graduates from 2016 that participated in Dual Enrollment.

Once the student data information was obtained, the second step in the process entailed contacting the students for participation in the study. It was important to protect the privacy of all participants (Salerno, 2011). Proper consent was obtained from each participant, outlining the exact purpose of the study. Confidentiality of all data, information, and subjects was maintained throughout the study.

The researcher contacted the fifty-one 2016 Dual Enrollment graduates as potential participants by sending a recruitment letter to their last known mailing address or a recruitment email invitation to their last known e-mail address. The recruitment letter included a request to prospective participants to participate in the online survey and the telephone interview as part of the study by responding directly to the researcher by sending their email address and once the email was sent an email invitation was sent. A follow-up recruitment letter and email invitation for the online survey and telephone interview was sent if no response was received within three days after the initial message was sent and again three more days after the second reminder. After agreeing to participate, the participants were assigned pseudonyms that were utilized by all individuals and institutions throughout the study to maintain and protect the privacy of all participants.

For the online survey each participant received an identical survey to record their response to the same questions. The online survey included question number one: a request to participate and consent, question number two: contact information, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, one current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender. The time it

took for the online survey was approximate fifteen minutes. A copy of the online survey was included in the Appendix section (see Appendix B).

The semi-structured telephone interviews allowed the same ten questions (see Appendix A) to be asked with the flexibility to explore various viewpoints of each participants' perceptions and experiences in the Dual Enrollment program. This flexibility allowed the participants the freedom to answer questions in greater depth without compromising the integrity of the method of inquiry (Taylor, 2012). The telephone interviews were conducted after school hours. The time for the interviews were at the graduates' convenience. The telephone interviews took approximately 30 - 60 minutes and consisted of ten questions related to their perceptions of their Dual Enrollment experience and the influence on College Readiness. The telephone interview protocol included ten general questions related to Dual Enrollment and the students' Dual Enrollment experience, was used to facilitate the interview (Ramsey-White, 2012).

During the telephone interviews, the researcher asked the participants to respond to open-ended questions. The researcher provided the pattern for the discussion using the following: the welcome, overview and topic, ground rules, then the first question.

Response Rate

According to Miles and Huberman (1994) the rule of thumb was eight to fourteen interview participants. The expected response rate of the fifty-one 2016 Dual Enrollment graduates out of the class of two-hundred and forty-seven was at least fourteen students who agreed to participate in the study with a mixed representation not homogeneous of race and gender.

Data Analysis

The data were analyzed through several methods. The Statistical Package for the Social Sciences (SPSS) Statistical software was used for all statistical analysis. This is a tool capable of analyzing data used in the social sciences or business research (Gatlin, 2009). SPSS software was used to conduct an analysis on the students' demographic data. The SPSS univariate procedure was used to calculate summary statistics for the demographic variables. The data collected were analyzed using descriptive statistics to describe, explain, and summarize the data. Descriptive statistics included frequency, central tendency, and percentages. For the quantitative data, the researcher compiled the online survey responses to distinguish any patterns and common responses to further answer the research questions presented in this research using thematic analysis.

The telephone interviews were audio recorded for transcription purposes. The most common analysis of interview results included an initial review of a transcript of the interview discussion and a summary of the conclusions from the discussion (Onwuegbuzie, Leech, & Collins, 2010). Data collection and the identities of the participants remained confidential; pseudonyms were used throughout the study. After gathering the interview transcriptions, the data was sorted by themes (Bogdan & Biklen, 1998). The interview was coded to identify group experiences and common themes that related to the phenomena.

Reporting the Data

The data were reported using tables, charts, and narratives. Data were analyzed and reported at three levels: the raw data, descriptive statements, and interpretation (Kreuger, 1988). The process of managing and organizing the raw data included

transforming the online survey coded themes and recorded telephone interviews into transcripts and data into charts. As the data were reviewed the information that was relevant to became part of the study (Kreuger, 1998). Raw data included the statements of the respondents, which were coded, and themes determined. Descriptive statements summarized the participants' comments and provided examples using the raw data, as well as included quotes. Data interpretation involved taking chunks of coded data that had similar meaning and put them into clusters with similar theme categories, and then themes emerged from the clusters (Kreuger, 1998).

Data access was limited to the researcher. All data collected, both hard copies and electronic were stored in the researcher's home office locked in a file cabinet; the researcher had the only key. The data were stored for one year following the study and the data were deleted in a secure manner; the paper files were shredded and the computer files including digital recordings were deleted.

Summary

Descriptive research was used to describe the characteristics of a topic or subject. The descriptive study provided an insight into the perception of Dual Enrollment students and the impact on their educational decisions after graduating from high school. The data collected increased the knowledge about the topic of Dual Enrollment, which led to recommendations for improvement of the program. Research about Dual Enrollment was written with the intent to help decision-makers understand why research was important and how policymakers could support research activities. Students' participation in Dual Enrollment had increased over the years. The online surveys and telephone interviews were conducted to gain additional information from the Dual Enrollment participants

who agreed to participate in the online survey and the recorded telephone interview using a guided set of open-ended questions.

The procedures for collecting data through the online surveys and the telephone interviews were conducted by selecting multiple individuals who had experienced the same phenomenon. The online survey included question number one: a request to participate and consent, question number two: contact information, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender. The telephone interview included ten open-ended questions that were recorded and then transcribed by an online professional third-party transcriber. The researcher used the mixed method approach research design to investigate the perspectives of the high school graduates who participated in Dual Enrollment and their educational decision after graduation. (Creswell, 2013; Kattato, 2016). Information in this chapter focused on the research design, participants, instrumentation, data collection, and data analysis.

CHAPTER IV: REPORT OF DATA AND DATA ANALYSIS

Introduction

Dual Enrollment was a program of study started over 30 years ago, which allowed high school students to earn credits toward a high school diploma and a post-secondary degree or certificate at the same time (Collins, 2012; Collins, Blanco, & Root, 2013; Burns & Lewis, 2000). In addition, the purpose was to give students an edge on college and lessen the time and the credits needed to earn a degree (Collins, 2012). In the 1970s, New York City was a leader in implementing Dual Enrollment programs (Heath, 2008). Due to mandates to ensure that more students completed their college degree, there was a push for states to provide the same opportunity to a larger number of participants. This was in accordance to the Southern Regional Education Board's (SREB) 2012 Redesigning Dual Enrollment to Promote College Completion (Collins, Blanco, & Root, 2013). The goal was to seek and to identify experiences or obtain evidence that Dual Enrollment was beneficial to the students in their preparation for college. The purpose of this descriptive study (Karp & Jeong, 2008) was to learn about the experiences of high school graduates who participated in Dual Enrollment during high school. The study was important because the success of Dual Enrollment could provide a possible remedy for the challenges of decreased college degrees, training for the workforce, and college preparedness.

Research Questions

The study was guided by the following research questions:

1. To what extent did students perceive positive benefits of the Dual Enrollment program? and

2. To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high School in 2016?

Research Design

This chapter began with an overview of the analysis of the quantitative and qualitative data collected from the 2016 high school graduates that participated in this research, totaling 15 graduates of the 51 Dual Enrollment participants. The overview of the analysis included the procedures within the analysis and a description of the demographic characteristics and the major themes revealed through qualitative analysis of the online survey and the telephone interview. This chapter concluded with a summary of the data findings as they relate to the two research questions: (1) To what extent did students perceive positive benefits of the Dual Enrollment program? and (2) To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high School in 2016?

Demographic Profile of Respondents

There were 51 students who participated in Dual Enrollment during the 2015-2016 school year. The only demographic data collected from the online survey were race/ethnicity and gender. The majority of the students were white (71%) with white females being (39%) and white males being (31%) followed by African-American (18%) females, Multi-racial females (8%) and Asian or Pacific females (4%). The gender of the 2016 graduates who participated in Dual Enrollment included thirty-five females (69%) and sixteen males (31%). See Table 4.

Table 4- Demographic Variables:

Race/Ethnicity and gender of Graduates Enrolled in the Dual Enrollment Program at the high school during the 2015-2016 school year (N=51)

Demographic Variables of Graduates participating in Dual Enrollment				
Race/ Ethnicity	Number		Percentage	
African-American	9		18%	
White, not Hispanic	36		71%	
Multi-racial	4		8%	
Asian or Pacific	2		4%	
Gender	Male	Female	Male	Female
African-American	0	9	0%	18%
White, not Hispanic	16	20	31%	39%
Multi-racial	0	4	0%	8%
Asian or Pacific	0	2	0%	4%
	16	35	31%	69%

Source: Infinite Campus Student Database

The demographics for the students who took Dual Enrollment courses at the Technical College/Career Academy was 38% which included ten males and nine females. There were six males and twenty-four females (59%) who attended classes at a four-year university, with only two females (2%) attending both a technical and a four-year university. (See Table 5)

Table 5- Type of Dual Enrollment class taken whether at the Technical College/Career Academy or College/University or both during the 2015-2016 school year (N=51)

Class	Number	Gender		Percentage
Technical/Career Academy	19	Male	10	38%
		Female	9	
College/University	30	Male	6	59%
		Female	24	
Participated in Both	2	Male	0	2%
		Female	2	

The race/ethnicity demographics for the students who consented to participate in the Online Survey and the Telephone Interview followed by completing the Online Survey included a total of fifteen participants. The completers included one male and fourteen females. There were four African-American females (27%), nine White females (67%) and one White male (7%) along with one Multi-racial female (7%). (See Table 6)

Table 6- Race/Ethnicity of the 2016 Graduate who were DE Enrolled, who consented to the Online Survey and the Telephone Interview, along with completing the Online Survey (N=15)

Participants' Demographic Variables		
Race/ Ethnicity	Number	Percentage
African-American	4	27%
White, not Hispanic	10	67%
Multi-racial	1	7%
Asian or Pacific	0	0%
Gender	Number	Percentage
Male	1	7%
Female	14	93%

Source: Online Survey

The race/ethnicity and gender demographics for the students who participated in the Telephone Interview included a total of ten which included one male (10%) and 9 females (90%). There were only ten of the fifteen students who consented to completed the online survey and participate in a telephone interview who were able to complete the telephone interview. Three of the female participants consented to be interviewed by the researcher but did not set an interview date or a specific time to be interviewed after several emails were sent in the attempt to do so. But they agreed to send their answered interview questions electronically but were only used for review purposes. Two other female participants were not able to participate in the telephone interview due to being

out of the country and not having access to a phone and a busy work schedule. The make-up was six White students (60%) including one White male (10%) and five White females (50%) and four African-American females (40%). (See Table 7)

Table 7- Demographic Variables of participants in the Telephone Interview (N=10)

Participants Demographic Variables		
Race/ Ethnicity	Number	Percentage
African-American	4	40%
White, not Hispanic	6	60%
Multi-racial	0	0%
Asian or Pacific	0	0%
Gender		
Male	1	10%
Female	9	90%

Source: Online Survey

The current status for the 2016 graduates who consented to participate in the research study included one student attending a Technical or 2-year college, ten students attending a four-year college university, two students in the military, one employed, and one employed part-time while also attending a four-year university. (See Table 8)

Table 8- A Profile of the Participants Current Status who consented to participate in the research study (n=15).

	Attending Technical College or 2-year College	Attending a 4-year College	In the Military	Employed	Employed part-time and attending 4yr-College
Current Status	1 (7%)	10 (67%)	2 (13%)	1 (7%)	1 (7%)

Source: Online Survey

Findings

The purpose of this descriptive study was to learn about the experiences of high school students who participated in Dual Enrollment during high school and the effect on college readiness. The study was important because the success of Dual Enrollment could

provide a possible remedy for the challenges of decreased college degrees, training for the workforce, and college preparedness. Researchers were unclear about the effects of Dual Enrollment on college readiness/preparedness (An & Taylor, 2015; Bishop-Clark, Hurn, Perry, Freeman, Jernigan, Wright, & Weldy, 2010; Cassidy, Keating, & Young, 2010; Franks, 2016; James, Lefkowitz, & Hoffman, 2016). The investigation of the goals, needs, and benefits became increasingly more important as Dual Enrollment programs increased in popularity among students and parents (Karp & Hughes, 2008).

The study used a mixed method using quantitative and qualitative methodology to investigate the research issue. Mixed methods research was an approach involving collecting and combining both quantitative and qualitative forms of data while using distinct designs involving logical assumptions and theoretical frameworks (Creswell, 2013). The study began with an online survey in order to generalize results to the graduates and in the second phase, the focus was the qualitative, open-ended telephone interview to collect detailed views from the graduates to help explain the initial quantitative online survey (Creswell, 2013).

The survey took approximately 15 minutes or less and consisted of questions relating to the graduates' perceptions of your Dual Enrollment experience and the influence on College Readiness. The qualitative research method was used to explain an existing situation and established patterns or trends that emerged (Rodriguez, 2013). The qualitative research method for this study was telephone interview. The interviews last approximately 10 – 15 minutes and consisted of ten questions related to the graduates' perceptions of your Dual Enrollment experience and the influence on College Readiness.

Findings from Online Survey

Fifty-five email invitations were sent using the last known email on file for the 2016 graduates who had participated in Dual Enrollment and two letters were mailed to the graduates who did not have an email address on file, but no response was received, nor were letters returned. Some graduates had more than one email address on file, so an email was sent to both. Of the fifty-five emails sent, seven emails bounced as undeliverable. Reminders were emailed to those graduates who had not yet responded after the third day of the original email. A final reminder was emailed forty-eight hours before the survey closed. The survey remained open for one week. A total of eighteen participants responded and three of them were parents but only one provided their child's current email address. The fifteen graduates who were interested in the study were called or emailed to set a date and time for the telephone interview and were also sent a copy of the ten interview questions. There were only ten of the fifteen students who originally consented to complete the online survey and participate in a telephone interview who were able to complete the telephone interview. Three of the female participants consented to be interviewed by the researcher but did not set an interview date or a specific time to be interviewed after several emails were sent in the attempt to do so. But they agreed to send their answered interview questions electronically but were only used for review purposes. Two other female participants were not able to participate in the telephone interview due to being out of the country and not having access to a phone and a busy work schedule.

Each respondent needed to consent to participate in the survey. The Informed Consent was obtained through a web-based email invitation where the first page included

an embedded Informed Consent form for the Online Survey and the Telephone Interview. At the bottom of the first page, there was a statement that the graduates agreed or disagreed to having read the Informed Consent, voluntarily agreed to participate in the Online Survey and Telephone Interview, and that they were 18 years of age or older. The Informed Consent was acknowledged by the graduates clicking on the “Agree” button and once the Agree option was selected an email was sent to the researcher and the students advanced to survey question #1 which included a text box where the students provided the following information: name, date, email address, and the best contact telephone number. If a respondent did not agree to participate, the respondent was not able to access the remaining questions.

Fifteen respondents agreed to complete the survey. The following sections present information gathered from the survey respondents. Survey questions 2 and 3 (see Appendix B) were designed to answer research question 1, the extent of the students’ perception of the positive benefits of the Dual Enrollment program.

Research Question 1.

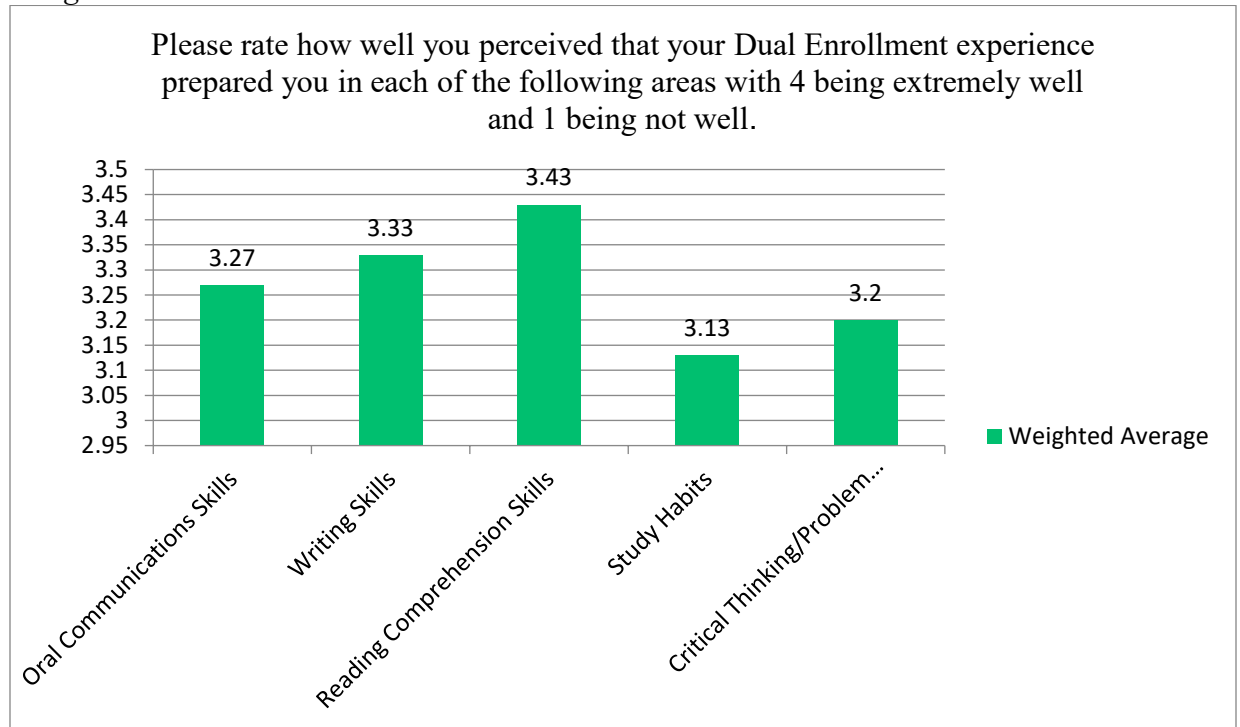
The information in this section presented responses from survey questions 2 and 3 aligned with the research question: To what extent did students perceive positive benefits of the Dual Enrollment program? This section presented the students’ perception of the positive benefits of Dual Enrollment programs among respondents in five areas.

Survey question 2 identified the areas of oral communications skills, writing skills, reading comprehension skills, study habits, and critical thinking/problem solving. All fifteen respondents answered survey question 2. For the Oral Communications Skills benefit, 7 respondents (47%) indicated that their Dual Enrollment experience as

extremely well, 6 respondents (40%) indicated very well, 1 respondent (7%) indicated somewhat well, and 1 respondent (7%) indicated not well. For the Writing Skills benefit, 8 respondents (53%) perceived as extremely well, 4 respondents (27%) perceived as somewhat well, and 3 respondents (20%) perceived as not well. For the Reading Comprehension Skills benefit, 7 respondents (50%) perceived as extremely well, 6 respondents (43%) perceived as very well, and 1 (7%) perceived as not well. For this statement only 14 respondents answered this question. For Study Habits benefit, 7 respondents (47%) perceived as extremely well, 4 respondents (27%) perceived as very well, 3 respondents (20%) perceived as somewhat well, and 1 respondent perceived as not well. For Critical Thinking/Problem Solving benefit, 4 respondents (27%) perceived as somewhat well, 4 respondents (27%) perceived as very well, and 7 respondents (47%) perceived as extremely well.

The weighted averages of the graduates' perception of how their Dual Enrollment experience prepared them in each of the identified skill, with 4-Being Extremely Well and 1-Being Not Well, were 3.27 for Oral Communication Skills, 3.33 for Writing Skills, 3.43 for Reading Comprehension Skills, 3.13 for Study Habits, and 3.2 for Critical Thinking/Problem Solving Skills (see Figure 2).

Figure 2- Weighted Averages of the Graduates' Perception of how Dual Enrollment experience prepared you in each of the following areas with 4 being extremely well and 1 being not well.



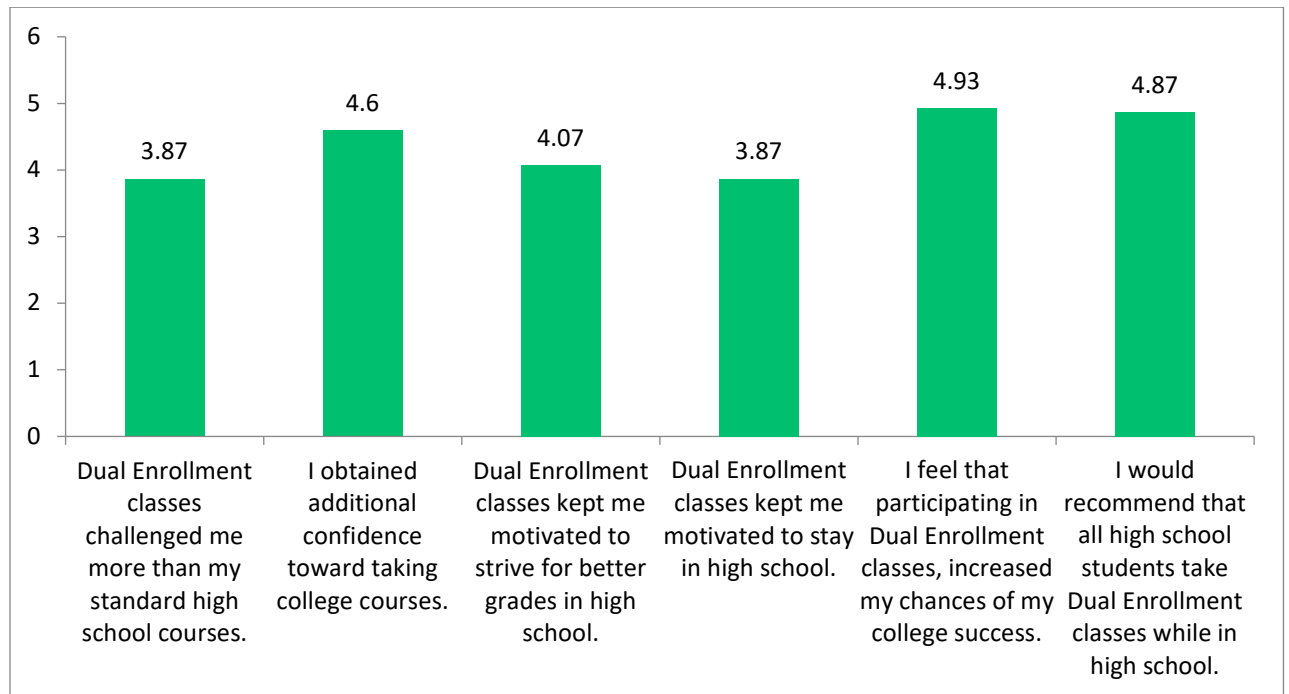
Source: Online Survey

Survey question 3, asked the respondents to read each statement and indicate the extent to which they agreed or disagreed with five statements regarding their Dual Enrollment experience and all the fifteen participants completed this question. For statement one, 4 respondents (27%) strongly agreed that Dual Enrollment classes challenged them more than their standard high school courses, 7 respondents (47%) somewhat agreed, 3 respondents (20%) neither agreed or disagreed and only 1 respondent (7%) strongly disagreed. For statement two, 10 respondents (67%) strongly agreed that they obtained confidence toward taking college courses, 4 respondents (27%) somewhat agreed, and 1 respondent (7%) neither agreed nor disagreed. For statement three, 5 respondents (33%) strongly agreed that Dual Enrollment classes kept them motivated to strive for better grades in high school, 6 respondents (40%) somewhat agreed, and 4

respondents (27%) neither agreed or disagreed. For statement four, 7 respondents (47%) strongly agreed that Dual Enrollment classes kept them motivated to stay in high school, 2 respondents (13%) somewhat agreed, 4 respondents (27%) neither agreed or disagreed, 1 respondent (7%) somewhat disagreed, and 1 respondent (7%) strongly disagreed. For statement five, 14 respondents (93%) strongly agreed that they felt that participating in Dual Enrollment classes increased their chances of their college success and 1 respondent somewhat agreed. For statement six, 13 respondents (87%) strongly agreed that they would recommend that all high school students take Dual Enrollment classes while in high school and 2 respondents (13%) somewhat agreed.

The weighted averages of the graduates' perception of their Dual Enrollment experience while attending high school, with 5-Being Strongly Agree and 1 Being Strongly Disagree, were 3.87 for Dual Enrollment classes challenged them more than their standard high school courses, 4.6 from the Dual Enrollment experience they obtained confidence toward taking college courses, 4.06 for Dual Enrollment classes kept them motivated to strive for better grades in high school, 3.87 for Dual Enrollment classes kept them motivated to stay in high school, 4.93 for participating in Dual Enrollment classes increased their chances of their college success, and 4.87 for them recommending that all high school students take Dual Enrollment classes while in high school (see Figure 3).

Figure 3- Weighted averages of the Graduates' Perception of their Dual Enrollment experience while attending high school with 5 being strongly agree and 1 being strongly disagree.



Source: Online Survey

Research Question 2.

The information in this section presented responses aligned with research question #2: To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high School in 2016? Based on the information the survey was able to capture, this section presented responses from survey question 4. Survey question 4 asked "what are you currently doing?" All fifteen respondents answered this question. One respondent (7%) indicated attending a Technical or 2-year college, 10 respondents (67%) indicated attending a 4-year college or university, 2 respondents (13%) indicated being in the Military, 1 respondent (7%) indicated being employed, and 1 respondent (7%) indicated working part-time and attending a 4-year college or university full-time. (See Table 9)

Table 9 Graduates: What are you currently doing?

	Frequency	Percent
Other (please specify or indicate college part-time or full-time or Working part-time or full-time)	1	6.7
Attending a Technical or 2-year College	1	6.7
Attending a 4-year College/University	10	66.7
In the Military	2	13.3
Employed	1	6.7
Total	15	100.0

Source: Online Survey

Findings from Telephone Interviews

In accordance with Kanny (2015) the second data collection process involved semi-structured interviews. The semi-structured descriptive interview is an informal process wherein the participant shares his or her subjective experiences of having lived the phenomenon (Kanny, 2015). Once the survey contact information was returned, the graduates were contacted by the researcher to set-up a date and time to conduct the telephone interview. The graduates were emailed prior to the interview date, the ten interview questions asking about perceptions regarding Dual Enrollment experiences and the influence on college readiness. (See Appendix A). Data to be collected from the participants was expected to be from their experiences of participating in the Dual Enrollment program.

Once a date and time was chosen, the graduate was called and their consent to participate was reviewed along with the notification that the interview was being recorded on a digital device and would be later transcribed, and that the data may be used for further research. The graduate was also reminded that their information would be

confidential and that they could withdraw from the interview at any time. Graduates were offered a copy of the interview transcript to review for accurate interpretation and placement of responses.

Once the interviews were transcribed verbatim by a professional transcription service, they were coded to find common themes among the surveys and interviews using the common comparative method. During the interview process the researcher looked at each participant's responses separated from the other. The responses were then grouped by similarities to see if there was a common element and, if there was none, then those responses looked at individually. The researcher was looking for similarities and differences in the perspectives of the program graduates. The perspectives assisted the researcher in being able to make sure that when the responses were analyzed separately and compared, this process helped in understanding how Dual Enrollment programs were beneficial to the participants. All the categories that derived from the participant responses helped to provide ways in which Dual Enrollment programs was perceived by the participants.

The transcripts and survey results were kept confidential and secured for analyzing. The telephone interviews took place in the researcher's home after school. Due to the time constraints of the graduates the interviews lasted no more than fifteen minutes. Fifteen respondents agreed to participate in the telephone interviews.

But there were only ten of the fifteen students who originally consented to complete the online survey and participate in a telephone interview who were able to complete the telephone interview. Three of the female participants consented to be interviewed by the researcher but did not set an interview date or a specific time to be

interviewed after several emails were sent in the attempt to do so. But they agreed to send their answered interview questions electronically but were only used for review purposes. Two other female participants were not able to participate in the telephone interview due to being out of the country and not having access to a phone and a busy work schedule. The following sections present information gathered from the telephone interview respondents. Interview questions 2, 3, 4, 7, and 10 (see Appendix A) were designed to answer research question 1, the extent of the students' perception of the positive benefits of the Dual Enrollment program.

Research Question 1.

The information in this section presented responses from interview questions 2, 3, 4, and 7 aligned with the research question #1: To what extent did students perceive positive benefits of the Dual Enrollment program? The interview guide for the study contained 10 open-ended questions that addressed the research questions. Questions were broken down into three variables- experiences, influences, and perception which were broken down into sub-categories. According to Goins, 2015; Saenz and Combs, 2015, interviews should allow for data that represent the participants' perspectives. In response to the open-ended questions, interview participants offered a variety of answers. The responses were grouped based on the similarities of the responses.

Interview Question 2: "How did you benefit from your participation in the Dual Enrollment Program?" The responses of the benefits of participating in the Dual Enrollment program were: 4 respondents (40%) indicated earning college credit, 4 respondents (40%) indicated opportunity to get the core classes out of the way, and 2 respondents (20%) indicated understanding the college structure. At least one respondent

(10%) indicated the following: no stress of financial aid issues, got a feel of college, earned an Associate Degree, opportunity to get out of high school daily classes early, opportunity to spend more time with her mom, opportunity to understand the ins and outs of the college structure, the experience itself, expanded socially was able to reinvent themselves, and it eliminated the false sense of what college was all about.

Interview Question 3: “What do you see as some of the advantages to being enrolled in Dual Enrollment classes?” The responses of the advantages of participating in the Dual Enrollment program were: 5 respondents (50%) indicated being prepared for the basic college courses, earning college credit, free college, 2 respondents (20%) indicated becoming responsible for your own schedule and getting ahead. At least one respondent (10%) indicated the following: overall experience, balance high school assignments with college assignments at the same time, opportunity to interact with college professors and learn the expectations and alleviated the stress of going off to college.

Interview Question 4: “What was the greatest benefit of taking a college level course in high school?” The responses regarding the greatest benefit were: 6 respondents (60%) indicated earning college credit and 5 respondents (50%) indicated Free classes and opportunity to feel what taking college courses was like, and 2 respondents (20%) indicated the opportunity to complete core course before leaving high school. At least 1 respondent (10%) indicated the following: independence, opportunity to learn college processes such as buying books, advisement, etc. and not having to go through the routine of taking AP classes all year and not making at least a 3 on the AP exam to get college credit.

Interview Question 7: “What skills were gained by taking a Dual Enrollment course such as test taking, writing skills, teamwork, motivation, etc.?” The responses regarding the greatest benefit were: 4 respondents (40%) indicated writing skills for college level papers and time management by planning and staying ahead of deadlines since the majority of the work was done outside of class, 3 respondents (30%) ability to communicate by listening and accepting peer critiques, 2 respondents (20%) indicated study skills increased in order to complete their college work whereas in high school they did not need to study. At least 1 respondent (10%) indicated the following: improvement in motivation, better ways to take notes, increased reading skills, became an adaptable learner, and exposure to different learning styles.

Research Question 2.

Interview Question 1: “What/who influenced you to participate in the Dual Enrollment program while in high school?” The responses regarding who influenced their participation in Dual Enrollment were: 4 respondents (40%) indicated counselors and friends and 2 respondents (20%) indicated parents and teachers. The responses regarding what influenced their participation in Dual Enrollment were: 6 respondents (60%) indicated not having to deal with the issues of AP courses such as, taking the class all year and not passing the exam due to not being good at standardized test, which they did not to receive the college credit. At least 1 respondent (10%) indicated the following: wanted a taste of college life and enjoyed leaving the high school campus early.

Interview Question 5: “How did participating in the program influence your aspirations to attend or not attend college?” The responses regarding the Dual Enrollment participation influence on aspiration to attend or not attend college were: 4 respondents

(40%) indicated future dreams by graduating college earlier by taking college level courses while still in high school; the reality of the expectations of attending college along with participating erased the scariness of attending and the realness of the college professors; the opportunity to re-evaluate current skills and what needed to be changed to succeed in college; there was a boost in confidence to attend since they had earned college credits to go ahead and used them, and 3 respondents (30%) indicated that their participation was not changed nor strengthen since they had already planned to attend college. At least 1 respondent (10%) indicated the following: cost effectiveness for their family, experiencing the being on a college campus not just taking college level classes on the high school campus, and overall had a positive experience.

Interview Question 6: “What were your thoughts and beliefs about college before participating in the Dual Enrollment program and how did your thoughts or beliefs change after participating in the program and entering college?” The responses regarding their thoughts and beliefs before participating in Dual Enrollment were: 7 respondents (70%) indicated before participating in Dual Enrollment they did not know what to expect and their perception was that it would be hard and difficult and at least 1 respondent (10%) indicated that before participating they knew that they were going to college and Dual Enrollment participation did not change their mind but provided a little more motivation; already had good grades in high school and never worried about studying.

Their thoughts and perception responses about Dual Enrollment after participating in classes were: got a lot of training, information, and the tools to move forward; was glad I participated due to a high GPA cushion, realization that Dual Enrollment was a

push toward the next level of education, the preparation for studying for quizzes and tests, had an idea of the expectations of attending college, had plan to attend college but received a little more motivation to continue and received a confidence boost, had poor study habits but had to develop better study habits and stayed on top of deadlines and realized there was a difference the expectations of high school and college.

Interview Question 7: “What skills were gained by taking a Dual Enrollment course such as test taking, writing skills, teamwork, motivation, etc.?” The responses regarding the greatest benefit were: 4 respondents (40%) indicated writing skills for college level papers and time management by planning and staying ahead of deadlines since much of the work was done outside of class, 3 respondents (30%) ability to communicate by listening and accepting peer critiques, 2 respondents (20%) indicated study skills increased in order to complete their college work whereas in high school they did not need to study. At least 1 respondent (10%) indicated the following: improvement in motivation, better ways to take notes, increased reading skills, became an adaptable learner, and exposure to different learning styles.

Interview Question 8: “Did your anxiety of going to college decrease after you took a college level course in high school?” The responses regarding the decrease in anxiety of taking college level courses in high school were: 8 respondents (80%) indicated their anxiety about college classes decreased after participating in Dual Enrollment through statements such as, got rid of the mythical of college, college did not look that scary anymore, they were less stressed about going off to college and felt better prepared. At least 2 respondents (20%) indicated that Dual Enrollment did not prepare because already knew it would be challenging.

Interview Question 9: “What are you doing now and how your current status was impacted by participating in Dual Enrollment?” The responses regarding their current status were: 7 respondents (70%) indicated attending a four-year university, and 2 respondents (20%) indicated being in the military U.S. Navy, and 1 respondents (10%) indicated attending a two-year Technical College.

Regarding the second part of question 9, “...how your current status was impacted by participating in Dual Enrollment?” their responses were:

Student #11 stated: “DE allowed me to follow my dreams and continue my education in Criminal Justice”

Student #1 stated: “DE allowed me to encourage others to participate in Dual Enrollment and allowed the increase speed of earning a degree.”

Student #2 stated: “I got my Associate Degree and in current job entered at a higher pay grade.”

Student #12 stated: “Participating in Dual Enrollment saved me a lot of headaches when others were complaining about English 1101 and 1102 and opportunities were opened to take more advanced level classes such as, Physics with a Calculus base due to the type of Physics Dual Enrollment classes already completed.”

Student #8 stated: “DE provided the communication skills with being part of a team and getting along with others in the military.”

Student #14 stated: “The Dual Enrollment experience set her mind at ease and believed that she could get through this, but realized that college was for her to graduate and to continue and earn her master’s degree.”

Student #15 stated: “The Dual Enrollment experience helped me complete my core classes, so I can now focus on my Interior Design courses.”

Student #13 stated: “I entered college with also my Associate Degree also ahead of schedule to graduate with a wanted degree.”

Student #7 stated: “I am currently a junior on the pre-med track.”

Student #4 stated: “I am ahead of schedule on credits and starting nursing school so will be obtaining degree sooner due to participating in Dual Enrollment, and classified as a second semester junior, which is a semester ahead other students who entered college at the same time but having complete a lot of the core courses have had the opportunity to build her resume with leadership campus positions, research, and activities to make her a better candidate for medical school.”

Interview Question 10: “Do you have any other comments about your Dual Enrollment experience?” The Dual Enrollment comments responses were: 6 respondents (60%) indicated the wish to have participated earlier than their junior and/or senior year and taken more classes and 2 respondents (20%) indicated that Dual Enrollment is a great opportunity and more students should take advantage of the opportunity. At least 1 respondent (10%) indicated the following: Dual Enrollment needed to be advertised more because it helps with the students’ anxiety of going off to college and being successful, if you are ready to move on do so to broader your spectrum, advised students to take Dual Enrollment over taking AP courses, Dual Enrollment helped show what tools were needed to be successful in college, teachers make college look so terrifying but it is not, had a stress free senior year taking Dual Enrollment half-time, and Dual Enrollment did not prepare for the aspect of having to only take three tests and a final,

because in the Dual Enrollment taken provided many opportunities for students to get the grades up, but recognized that might not have been all the Dual Enrollment classes procedure.

Data Analysis

The data were analyzed through several methods. The Statistical Package for the Social Sciences (SPSS) Statistical software was used for all statistical analysis. This is a tool capable of analyzing data used in the social sciences or business research (Gatlin, 2009). SPSS software will be used to conduct an analysis on the online survey which included the students' demographic data. The SPSS univariate procedure will be used to calculate summary statistics for the demographic variables. The online survey data collected were analyzed using descriptive statistics to describe, explain, and summarize the data. Descriptive statistics included frequency and percentages of the Extent of Dual Enrollment on Acquired Skills and Perception of Dual Enrollment Preparation.

The data indicated that in survey question 2a the highest frequency was that 47% of the students somewhat agreed that Dual Enrollment classes challenged them more than their standard high school courses. Survey question 2b indicated the highest frequency of 67% from the students who strongly agreed that they had obtained additional confidence toward taking college courses. Survey question 2c indicated the highest frequency of 40% from the students who somewhat agreed that Dual Enrollment classes kept them motivated to strive for better grades in high school. Survey question 2d indicated the highest frequency of 48% from the students who strongly agreed that Dual Enrollment classes kept them motivated to stay in high school. Survey question 2e indicated the highest frequency 93% from the students who strongly agreed that participating in Dual

Enrollment classes increased their chances of my college success. Survey question 2f indicated the highest frequency of 87% from the students who strongly would recommend that all high school students take Dual Enrollment classes while in high school (see Table 10).

Table 10 Frequency of Perception of Dual Enrollment Preparation Interview Question 2

2a. Dual Enrollment classes challenged me more than my standard high school courses.		
	Frequency	Percent
1---Strongly Disagree	1	6.7
3---Neither Agree or Disagree	3	20.0
4---Somewhat Agree	7	46.7
5---Strongly Agree	4	26.7
Total	15	100.0
2b. I obtained additional confidence toward taking college courses.		
	Frequency	Percent
3---Neither Agree or Disagree	1	6.7
4---Somewhat Agree	4	26.7
5---Strongly Agree	10	66.7
Total	15	100.0
2c. Dual Enrollment classes kept me motivated to strive for better grades in high school.		
	Frequency	Percent
3---Neither Agree or Disagree	4	26.7
4---Somewhat Agree	6	40.0
5---Strongly Agree	5	33.3
Total	15	100.0
2d. Dual Enrollment classes kept me motivated to stay in high school.		
	Frequency	Percent
1---Strongly Disagree	1	6.7
2---Somewhat Disagree	1	6.7
3---Neither Agree or Disagree	4	26.7
4---Somewhat Agree	2	13.3
5---Strongly Agree	7	46.7
Total	15	100.0
2e. I feel that participating in Dual Enrollment classes, increased my chances of my college success.		
	Frequency	Percent
4---Somewhat Agree	1	6.7
5---Strongly Agree	14	93.3
Total	15	100.0
2f. I would recommend that all high school students take Dual Enrollment classes while in high school.		

	Frequency	Percent
4---Somewhat Agree	2	13.3
5---Strongly Agree	13	86.7
Total	15	100.0

Source: Online Survey Data

The survey question 3 data indicated the highest frequency of Extremely Well regarding the extend of Dual Enrollment on acquired skills such as Oral Communications Skills was 47%, Writing Skills was 53%, Reading Comprehension Skills was 47%, Study Habits was 48%, and Critical Thinking/Problem Solving skills was 47% (see Table 11).

Table 11 Frequency Statistics for the Extent of Dual Enrollment on Acquired Skills for Interview Question #3

Oral Communications Skills		
	Frequency	Percent
1---Not Well	1	6.7
2---Somewhat Well	1	6.7
3---Very Well	6	40.0
4---Extremely Well	7	46.7
Total	15	100.0
Writing Skills		
	Frequency	Percent
2---Somewhat Well	3	20.0
3---Very Well	4	26.7
4---Extremely Well	8	53.3
Total	15	100.0
Reading Comprehension Skills		
	Frequency	Percent
2---Somewhat Well	1	6.7
3---Very Well	6	40.0
4---Extremely Well	7	46.7
Total	14	93.3
Missing System	1	6.7
Total	15	100.0
Study Habits		
	Frequency	Percent
1---Not Well	1	6.7
2---Somewhat Well	3	20.0
3---Very Well	4	26.7
4---Extremely Well	7	46.7
Total	15	100.0

Critical Thinking/Problem Solving		
	Frequency	Percent
2---Somewhat Well	4	26.7
3---Very Well	4	26.7
4---Extremely Well	7	46.7
Total	15	100.0

Source: Online Survey data

For the quantitative data, the researcher compiled the online survey responses to distinguish any patterns and common responses to further answer the research questions presented in this research using thematic analysis.

The telephone interviews were audio recorded for transcription purposes. The most common analysis of interview results included an initial review of a transcript of the interview discussion and a summary of the conclusions from the discussion (Onwuegbuzie, Leech, & Collins, 2010). Data collection and the identities of the participants remained confidential; pseudonyms were used throughout the study. After gathering the interview transcriptions, the data was sorted by themes (Bogdan & Biklen, 1998). The interview was coded to identify group experiences and common themes that related to the phenomena.

The researcher employed a qualitative methodology for purposes of coding and analysis. The researcher carefully read through each transcript seeking out common themes and assigning individual color codes to each recurrent theme. Microsoft Word and Excel were used to link the transcripts together and the survey responses for questions 2 and 3. The researcher assigned color coding and numbers to the corresponding themes. Analysis and coding of the online surveys and the interview transcripts revealed three distinctive themes were: Sources of Influences, Benefits of the Dual Enrollment experience, and Students' perceptions before and after participating.

Results

The research process included online web-based survey and telephone semi-structured and analysis of documents. During the analysis process of the data, a coding process was used and then clustered significant statements into categories noting similarities and differences among the responses of the participants. Three essential themes emerged from the analysis process that describe the essence of the phenomenon; the perception of the graduates' participation in Dual Enrollment and college readiness. The three themes were: influences, benefits of the Dual Enrollment experience, and students' perceptions before and after participating.

Theme 1: Sources of Influences.

There were two different sources of influences on the students to participate in the Dual Enrollment program educational and personal. Educational influences involved teachers and counselors. Teachers mentioned the Dual Enrollment program as an option to the students who were ready to move to the next level since the student had already completed their high school Math requirements and had available periods in their schedule. One of the responsibilities of a high school counselor was to go into the English classes and speak to the students about the Dual Enrollment option as well as other course offerings for the upcoming registration period. Three of the ten students remembered either a counselor coming to their class to speak, having a one-on-one scheduling counseling session, and the Dual Enrollment advertisement flyers located in the counselor's office. On the personal level the students were influenced by their parents, parents of friends, and friends who had already participated in the program. Student #14 commented, "Some of my friends had already done it and they were talking

about how much they liked it and how much they enjoyed being able to leave the high school scene and getting a little taste of college and I was like, okay well, I'll try it out for one of my classes, so I took a Psychology class and I really liked it my senior year, I enjoyed it.”

Theme 2: Benefits of the Dual Enrollment Experience.

The students identified several benefits of participating in Dual Enrollment that helped them educationally and personally. Eight out of the ten students (80%) interviewed mentioned the educational benefits of getting an early start on their college career and experiencing the college life. They mentioned earning college credits and high school credits at the same time, earning a diploma in technical area, getting their core classes out of the way and being able to focus on major courses once in college. For example, one student #12 commented, “It helped me take care of other courses when I got to college. It opened some classes for me, because now, I can take Physics with a Calculus base because I Dual Enrolled in Calculus, so I don't have to take the Calculus class at my current college. So, I can just go ahead and take that class for my Major.” Student #4 who had taken AP classes and was hoping to earn college credit stated, “I was in AP classes before participating in Dual Enrollment, but a lot of the ones that were available at the beginning of the school year were history classes. I'm not good at standardized tests. So, I didn't end up getting a lot of college credit from my AP classes. So, I decided to go the Dual Enrollment route so it's more like guaranteed credit.”

Nine out of ten (90%) of the interviewed students mentioned how participating in Dual Enrollment gave them the opportunity to experience the feel of college. They were able to get an understanding of the college setup, whereas everybody is not able to

experience that even in AP classes since those classes were still held at the high school. Participating in Dual Enrollment also exposed the students to the online format and influenced the way they took future college courses. For example, student #14 stated, "I think the biggest part of the benefit was that it was a hybrid class, so the work was completed online and then we would go to the college class and apply the work and a lot of the college classes that I take now are online so I kind of understand the setup of how the online structured classroom works." Students mentioned the opportunity to gain knowledge about the expectations of being in a college class while participating in Dual Enrollment as a benefit. Eight out of the ten students (80%) interviewed provided comments such as, "you got used to what college professors expected out of you and the time requirements of college compared to high school", "the experience itself, you can learn so many valuable skills and knowledge being in a college classroom, that you wouldn't really gain in the high school classroom," and "being more responsible for your own work and not being in the classroom every day with a constant reminder of like, oh you need to do this, this due date, and when you are only in the classroom three days a week, it's kind of up to you to remember when things are due and to plan your own schedule for yourself."

The cost savings was another benefit mentioned by five out of the ten students (50%) interviewed. Student #7 commented, "Participating in Dual Enrollment was the opportunity to experience the college life without the stress of financial aid issues." Student #2 commented, "A big benefit was financially, because I did not have to dip into HOPE for my first entire year of classes because I was a Dual Enrolled full-time student my senior year of high school. I knocked out a whole year of college without having to

use any sort of scholarship funds, or anything along those lines.” Student #2 also stated, “The greatest benefit, I would honestly say it was financially. For people who need and have the desire to go to college, but either don't have it financially, or they didn't qualify for as many scholarships as their peers, that's something that you can earn, just getting that credit while you can.”

Some of the other benefits mentioned during the interviews were socially, gaining independence, and the evaluation of current habits such as writing skills, communication, study habits and time management. One social benefit was mentioned. Student #2 commented, “I had enough of the high school experience, not the school itself, and I was ready to move on to the next level of her education. I made a lot of friends coming into high school, of course you always have all the peers that form their own opinions of you, and set along those lines, but I was able to reinvent myself and just really expand socially, when I got to a whole new place through my participation in Dual Enrollment.”

Student #4 mentioned the gaining of independence by making their own class schedule, driving to the college campuses and going through the normal college processes, such as, advisement, getting books from the bookstore, and having class only two times or three times a week instead of every day. Five out of the ten (50%) students stated that their participation in Dual Enrollment helped with the management of their work and time since much of the work had to be done outside of class with set deadlines. Student #7 and #13 commented about evaluating their current study habits and identified what changes needed to be made based on their Dual Enrollment experience. For example, student #13 stated, “I think that it started to prepare you for the kind of courses you were going to get in college. Like, if you must study or not... I didn't have to study in

high school, but once I started Dual Enrollment, I had to study. But, I got a little bit of glimpse of the study habits I needed to pick up.” Student #8, #12, #4, and #7, mentioned the improvement of communications skills and/or writing skills from participating in Dual Enrollment.

Theme 3: Students’ perceptions of Dual Enrollment before and after participating.

Eighty percent (80%) of the students’ anxiety level about college decreased after their participation in Dual Enrollment. Some of their perceptions before participating in Dual Enrollment included: the thought that college was going to be a lot harder than the classes in high school, college being scary, did not know how participating in Dual Enrollment would affect their college standings and the college application process, did not know the benefits of taking Dual Enrollment classes, believed that all their professors were going to be so mean, and some were just unsure. For example, student #14 commented, “At first, I was unsure what to expect like what the professor expected of us and how relaxed the schedule was...” The Dual Enrollment experience was considered by one student as a positive one.

But after participating in Dual Enrollment, there was a motivation and confidence boost that helped the students to believe that from the survey and interviews they could be successful in college. The perceptions included: felt more prepared and ready to tackle the college world and aware of what to expect from the being in college. Student #2 mentioned his preparation at the high school helped and commented, “...but I will say the AP program at my high school really prepared me for the study techniques, quizzes, and tests, as far as the difficulty level in perceiving and retaining information.”

Regarding writing skills, student #12 commented, “I took AP Language Arts before I took a Dual Enrollment class. Maybe, AP Language Arts is what gave me those skills before the college class because AP Language Arts seemed more rigorous to me.”

Student #14 commented, “Missing a day from a college class was not as serious as missing a day of high school because you're not doing work in the classroom, you were learning in the classroom and the workload is outside of the classroom.”

The student #11 and #12 stated that they did not have any anxiety about participating in Dual Enrollment, one had already planned to attend college and one had not planned to attend college but participating in Dual Enrollment was the motivation to start the education journey after high school. Student #12 indicated that the Dual Enrollment experience did not prepare her for college. Student #12 stated, “I was going to attend college either way. That's always been a goal of mine. So, whether I Dual Enrolled would not really have affected what I thought about college.” The aspect of the Dual Enrollment that was mentioned dealt with the different expectation from the Dual Enrollment courses and the actual college courses attended after graduating from high school. Student #12 stated, “Well, I would say it doesn't really prepare you for college in the sense that in Dual Enrollment, I feel like I had a lot of grades, a lot of opportunities to get my grades up. When you get to college, you'll take some classes it's like three tests and a final and that's it. So, I didn't really get that experience through Dual Enrollment. Maybe that was the college that I went to for Dual Enrollment? I don't know.”

The students’ perception about how Dual Enrollment participation affected their current status varied. The survey data of the fifteen participants, one respondent indicated attending a Technical or 2-year college, 10 respondents (student #1, #3, #4, #5, #6, #7,

#12, #13, #14, and #15) indicated attending a 4-year college or university, 2 respondents (student #8 and #11) indicated being in the Military, 1 respondent (student #2) indicated being employed, and 1 respondent (student #9) indicated working part-time and full-time attending a 4-year college or university. Among the ten interview participants, seven were enrolled at a 4-year college or university, three of them were majoring in Pre-Medical (student #4, #7, and #12), one had the goal to complete her bachelor's degree and continue to earn a master's degree in Communication Science and Disorders (student #14) and one in Interior Design (student #15). Student #2 was employed out of field but entered the job on a higher pay grade based on having an Associate degree, and two were in the Military. Student #11 was in the military the goal was to transfer the Criminal Justice credits earned during high school, toward a Nursing program and student #8 was not using the Cosmetology degree earned in high school but indicated the use of the team building and communications skills gained from participating in Dual Enrollment.

Data Collection

The data collected referenced the information gathered from the graduates of the 2015-2016 academic school year who participated in Dual Enrollment. The collection of data included the students' perceptions about the positive benefits of Dual Enrollment and the students' participation in Dual Enrollment influencing their preparation for college. Perception data was collected through the online surveys and the telephone interviews and analyzed to offer depth to the study and a better understanding of the student experiences.

The online survey instrument was developed using survey monkey to collect the students' response regarding participating in Dual Enrollment. The online survey had a

closing date to complete and the survey was open for one week. Lewis (2009) study stated that including a deadline date for closing the survey had the potential to produce greater response rates. Each participant received an identical online survey to record their response to the same questions. The online survey included six questions. A request to participate and consent to the online survey and telephone interview was presented as page one of the survey with the Informed Consent embedded. The agreement to having read the Informed Consent, agreement to voluntarily participate in the study and that they were 18 years or older, was required to be answered before being allowed to proceed to the survey. Once agreement was made there was a contact information question for the following: name, date, email address and best contact telephone number was requested.

The semi-structured telephone interviews were selected to investigate how Dual Enrollment programs assisted students in transitioning with their after-graduation decision especially college. This required an in-depth interview with participants to gather their interpretations of the Dual Enrollment program and how their experience assisted them with this transition (Simon, 2017). Taylor's (2012) study indicated that the purpose of in-depth interviewing was to understand lived experiences and what the experience meant to the participants.

Prior to beginning the research an application, to conduct the study was submitted to the Institutional Review Board (IRB) (see Appendix I) at Columbus State University (Creswell, 2013). Consent was obtained from the school district's superintendent/designee (see Appendix C) and the school's principal (see Appendix D) where the study was proposed. The participants for the study were the 2016 graduates who participated in the Dual Enrollment program in high school.

Data collection procedures for the study began with gathering existing data about 2016 graduates who participated in Dual Enrollment. The request was made to the school principal for the assistance of identifying the graduates who met the research study criterion. The participant criterion for this research study was graduates from 2016 that participated in Dual Enrollment.

Once the student data information was obtained, the second step in the process entailed contacting the students for participation in the study. It was important to protect the privacy of all participants (Salerno, 2011). Proper consent was obtained from each participant, outlining the exact purpose of the study. Confidentiality of all data, information, and subjects was maintained throughout the study.

The researcher contacted the fifty-one 2016 Dual Enrollment graduates as potential participants by sending a recruitment letter to their last known mailing address or a recruitment email invitation to their last known email address. The recruitment letter, for the participants with only a mailing address on file, included a request to the prospective participants to participate in the online survey and the telephone interview as part of the study by responding directly to the researcher by sending their email address. Once the email was sent an email invitation was sent to that participant. A follow-up recruitment letter and/or email invitation for the online survey and telephone interview were sent if no response was received within three days after the initial message was sent and again three more days after the second reminder. After agreeing to participate, the participants were assigned pseudonyms that were utilized by all individuals and institutions throughout the study to maintain and protect the privacy of all participants.

For the online survey each participant received an identical survey to record their response to the same questions. The online survey included question number one: a request to participate and consent, question number two: contact information, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, one current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender. The time it took for the online survey was approximate fifteen minutes. A copy of the online survey was included in the Appendix section (See Appendix B).

The semi-structured telephone interviews allowed the same ten questions (see Appendix A) to be asked with the flexibility to explore various viewpoints of each participants' perceptions and experiences in the Dual Enrollment program. This flexibility allowed the participants the freedom to answer questions in greater depth without compromising the integrity of the method of inquiry (Taylor, 2012). The telephone interviews were conducted after school hours. The time for the interviews were at the graduates' convenience. The telephone interviews took approximately 30 - 60 minutes and consisted of ten questions related to their perceptions of their Dual Enrollment experience and the influence on College Readiness. The telephone interview protocol included ten general questions related to Dual Enrollment and the students' Dual Enrollment experience, was used to facilitate the interview (Ramsey-White, 2012).

During the telephone interviews, the researcher asked the participants to respond to open-ended questions. The researcher provided the pattern for the discussion using the following: the welcome, overview and topic, ground rules, then the first question.

Response Rate

According to Miles and Huberman (1994) the rule of thumb was eight to fourteen interview participants. The expected response rate of the fifty-one 2016 Dual Enrollment graduates out of the class of two-hundred and forty-seven was at least fourteen students who agreed to participate in the study with a mixed representation not homogeneous of race and gender.

Data Analysis

The data was analyzed through several methods. The Statistical Package for the Social Sciences (SPSS) Statistical software will be used for all statistical analysis. This is a tool capable of analyzing data used in the social sciences or business research (Gatlin, 2009). SPSS software will be used to conduct an analysis on the students' demographic data. The SPSS univariate procedure will be used to calculate summary statistics for the demographic variables. The data collected was analyzed using descriptive statistics to describe, explain, and summarize the data. Descriptive statistics included frequency, central tendency, and percentage. For the quantitative data, the researcher compiled the online survey responses to distinguish any patterns and common responses to further answer the research questions presented in this research using thematic analysis.

The telephone interviews were audio recorded for transcription purposes. The most common analysis of interview results included an initial review of a transcript of the interview discussion and a summary of the conclusions from the discussion (Onwuegbuzie, Leech, & Collins, 2010). Data collection and the identities of the participants remained confidential; pseudonyms were used throughout the study. After gathering the interview transcriptions, the data was sorted by themes (Bogdan & Biklen,

1998). The quantitative data collection and analysis was followed up with qualitative data collection and analysis interpretation. The primary method of qualitative analysis used for this study was with descriptive statistics with emerging themes. The interview was coded to identify group experiences and common themes that related to the phenomena.

Reporting the Data

The data was reported using tables, charts, and narratives. Data can be analyzed and reported at three levels: the raw data, descriptive statements, and interpretation (Kreuger, 1988). The process of managing and organizing the raw data included transforming the online survey coded themes and recorded telephone interviews into transcripts and data into charts. As the data was reviewed the information that was relevant to become part of the study (Kreuger, 1998). Raw data included the statements of the respondents, which were coded, and themes determined. Descriptive statements summarized the participants' comments and provided examples using the raw data, as well as included quotes. Data interpretation involved taking chunks of coded data that had similar meaning and put them into clusters with similar theme categories, and then themes emerged from the clusters (Kreuger, 1998).

Data access was limited to the researcher. All data collected, both hard copies and electronic were stored in the researcher's home office locked in a file cabinet; the researcher has the only key. The data will be stored for one year following the study and the data will be deleted in a secure manner; the paper files will be shredded and the computer files including digital recordings will be deleted.

Summary

Descriptive research was used to describe the characteristics of a topic or subject. The descriptive study provided an insight into the perception of Dual Enrollment students

and the impact on their educational decisions after graduating from high school. The data collected increased the knowledge about the topic of Dual Enrollment, which could lead to recommendations for improvement of the program. Research about Dual Enrollment was written with the intent to help decision-makers understand why research was important and how policymakers could support research activities. Students' participation in Dual Enrollment had increased over the years. The online surveys and telephone interviews were conducted to gain additional information from the Dual Enrollment participants who agreed to participate in the online survey and the recorded telephone interview using a guided set of open-ended questions.

The procedures for collecting data through the online surveys and the telephone interviews were conducted by selecting multiple individuals who had experienced the same phenomenon. The online survey included question number one: a request to participate and consent, question number two: contact information, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender. The telephone interview included ten open-ended questions that were recorded and then transcribed by an online professional third-party transcriber. The researcher proposed to use the mixed method approach research design to investigate the perspectives of the high school graduates who participated in Dual Enrollment and their educational decision after graduation.

In sum, according to the results of the students' response in the interviews and on the survey, the Dual Enrollment program had a positive impact on not only their college preparation but life. In addition, five of the ten interviewed participants recommended

that the Dual Enrollment program should be expanded to more students. For example, one student commented, "I would encourage high school students to do it because Dual Enrollment was very helpful. I have also talked with my college friends that did not participate in Dual Enrollment courses and they all said that they wish they would have participated in Dual Enrollment. It is beneficial in that even if it seems confusing at first to do the paperwork and to do all the coordination, but once you do all that is super convenient and helpful." Another student commented, "Dual enrollment showed me that I had the tools needed to be successful in college, and with those tools, I could attend any college or university that I wanted to, which is why I'm majoring in the medical field, which is probably one of the hardest things ever. But I was like, "I can do this." Information in this chapter focused on the research design, participants, instrumentation, data collection, and data analysis.

In this chapter the researcher presented the data collected from the surveys and telephone interviews experiences of high school graduates who participated in Dual Enrollment during high school and effect on college readiness. The demographics of these graduates were described. The open-ended questions allowed respondents to include additional information and comments regarding their perception of the Dual Enrollment program. Many respondents reported having an overall positive Dual Enrollment experience and felt prepared for the expectations of college. There was a perceived impact that their participation in the Dual Enrollment program on their college readiness. The next chapter will discuss the implications of the findings, limitations of the study, and recommendations.

CHAPTER V: SUMMARY CONCLUSIONS, AND RECOMMENDATIONS

Summary

The focus of this study was the experiences of high school students who participated in Dual Enrollment while in high school and how the participation in Dual Enrollment influenced their college or career decision after graduating from high school. The study used a mixed method approach to answer the following research questions: 1. To what extent did students perceive positive benefits of the Dual Enrollment program? and 2. To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high school in 2016?

To obtain data to answer the two research questions the researcher surveyed and interviewed the 2016 high school graduates who participated in Dual Enrollment at a central Georgia high school. The online survey was the instrument for the collection of the quantitative data and semi-structured telephone interviews was the instrument for the collection of the qualitative data. The online survey instrument was developed using survey monkey to collect the students' response regarding their participation in Dual Enrollment. The survey included a total of six questions (see Appendix B). The questions included a required to answer consent to participate question, one contact information question, two Likert scale questions concerning the students' perception about their Dual Enrollment participation, one current status question, and two demographic information questions. The demographic information included students' race/ethnicity and gender.

The telephone interview consisted of ten open-ended questions to obtain information such as their involvement with Dual Enrollment, advantages of Dual Enrollment, impact of Dual Enrollment on their educational decision after high school,

skills gain from participating in Dual Enrollment, and what they were currently doing (attending college, in the workforce, military, or unemployed). Once the online surveys were received and the transcripts were completed and reviewed by the participants, they were coded to find common themes among the surveys and interviews using the common comparative method (Huntley & Schuh, 2002; Lewis, 2009). Three distinctive themes emerged: Sources of Influences, Benefits of the Dual Enrollment experience, and Students' perceptions before and after participating. The collection of data from graduates provided a look into the perceived benefits and the impact of the participation in the Dual Enrollment program on their college readiness.

Analysis of Research Findings

The researcher used surveys and interviews to address the two research questions. In doing so, a correlation was determined in terms of the data from the fifteen completed surveys and ten telephone interviews. Research question one asked, "To what extent did students perceive positive benefits of the Dual Enrollment program?" The results of the study were supportive in the overall perception of the students was that their Dual Enrollment experience was positive and beneficial in several areas. Based on a combination of the research survey questions responses along with the interview questions responses, the benefits mentioned by the participants included educational and personal benefits. The educational benefits from their Dual Enrollment experience included the evaluation of current habits such as writing skills, oral communication, making study habits and time management adjustments, getting an early start on their college career, experiencing the college life, and taking advantage of the cost savings. The personal benefits included an increased confidence toward taking college level

courses, decreased anxiety about attending college, and they strongly felt that participating in Dual Enrollment classes increased the chances of their college success.

Research question two asked, “To what extent did students’ Dual Enrollment experiences influence their educational decision after graduating from high School in 2016?” Based on a combination of the research survey questions responses and the interview questions responses, the majority of the participants indicated that their Dual Enrollment experience influenced their educational decision after high school graduation. The findings of the study were supportive in that after participating in Dual Enrollment courses the students had gained an understanding of what it was like to be a college student, because before participating in Dual Enrollment they had the perception that college was going to be hard and scary. Also after participating in Dual Enrollment their anxiety level about attending college after high school decreased. The students learned what behaviors were necessary to succeed in college, such as the importance of time management skills and having good study habits. Several of the students’ Dual Enrollment experience motivated and increased their confidence to take on the challenge of college and they felt prepared for the academic demands of college with the reassurance that they could complete college work successfully.

Discussion of Research Findings

Dual Enrollment was viewed by policymakers, authors, educators, and foundations for all participating youth as a long list of positive outcomes. The outcomes included the increased academic rigor of the high school curriculum; helping low-achieving students meet high academic standards; providing more academic opportunities and electives in cash-strapped, small, or rural schools; reducing high school dropout

rates, increasing student aspirations and helping students acclimate to college life while reducing the cost of college for students (An & Taylor, 2015; Anderson, 2010; Burns & Lewis, 2000; Cassidy, Hooley, Marriott, & Sampson, 2011; Keating, & Young, 2010; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Kilgore & Taylor, 2016; Lewis, 2009; Rodriguez, 2013; Struhl & Vargas, 2012; Swanson, 2008).

Based on the research collected, the researcher indicated the benefits of students participating in the Dual Enrollment and that most of the students' participation in Dual Enrollment had some influenced on their academic path after high school and college readiness. Study participants' responses aligned with the evidence presented in the literature review. This research study findings included some of the same positive outcomes, such as the increase of students' aspirations and the acclimation for students to college life while reducing the cost of college for the parents and the students. The students' responses were consistent in that they felt their Dual Enrollment experience had prepared them to meet the demands of postsecondary education and they also mentioned how previous AP courses had aided in the preparation of the difficulty level in perceiving and retaining information, as well as, study techniques, quizzes, and tests. The students in the study indicated the motivation to continue college after their participation in Dual Enrollment because the anxiety level of what to expect was lowered through their Dual Enrollment experience.

Overall the researcher found three themes: sources of influences, benefits of the experience, and the students' perceptions before and after participating in Dual Enrollment. The themes aligned with the benefits identified in the studies of Kennedy (2008): Anderson, (2010); Lewis (2009); and Struhl and Vargas (2012) regarding the Dual Enrollment experience toward career preparation, college preparation and college aspirations.

In career preparation, the students felt that their Dual Enrollment experience would be of value to them in their future career pursuits (Kennedy, 2008). In college preparation, the results supported the notion that Dual Enrollment programs not only helped students' academic transcripts by receiving high school and college credit, but also gave them experience in a college classroom and the confidence to believe they could be successful in college (Kennedy, 2008). In college aspirations, the study results indicated that many of the students had the opportunity to experience the college environment and the expectations for a college student. (Kennedy, 2008). After participating in the Dual Enrollment program, the student felt that they had been exposed to the qualities of being challenged, independent, confident, and treated as adults (Kennedy, 2008).

Theme one dealt with the sources of influences on students to participate in Dual Enrollment. In this study the students were influenced by their parents, their friends' parents, teachers, counselors, but the biggest influence was their friends who had already participated in the DE program, which supported the findings identified in Post's (2013) study. In Post's (2013) research study factors that played a role in the students' decision about their educational goal were listed. The factors included students' determination, family support, encouragement for students' counselors or teachers, and the availability of the funds for technical colleges versus university.

One other finding in this study was the students' perception about social acclimation. Anderson's (2010) study mentioned the number of dual enrollment credits acquired had the most significant relationship with improved academic preparation while location of dual enrollment classes (college or high school campus) had the most impact on students' social acclimation. In this study one of the students mentioned one benefit of

Dual Enrollment was the ability to leave high school and to reinvent herself and really expand socially, in a whole new place. In Lewis' (2009) study the students perceived their participation in Dual Enrollment provided them a unique college experience by attending classes on college campus versus on their high school campus.

Theme two in this study supported that the cost savings benefit of participating in Dual Enrollment was very beneficial for students and parents. This study was supportive of Anderson's (2010) study research that stated that Dual Enrollment prepared students academically for the challenges of college, enhanced students' understanding of the college student role, and that students were very satisfied with their Dual Enrollment experience and recommended the program to others. In Lewis' (2009) study reasons and benefits for students participating in Dual Enrollment were identified. The list included the opportunity to save money on books and tuition, to earn college credit or obtain a higher GPA, and the students being able to successfully navigate the college system procedures. The study also mentioned students' increased confidence about attending college after their participation in the Dual Enrollment program.

Like the literature review the reasons and benefits of the students who participated in Dual Enrollment involved the same reasons mentioned in the previous studies of Anderson (2010) and Lewis (2009). The students identified an increased in the understanding of college life and expectations, the opportunity to earn high school and college credits at the same time, the opportunity to save money, to obtain a higher GPA, and the increase of confidence in navigating the processes and procedures of attending college.

One of the findings in this study reflected on the aspect of Advanced Placement classes versus Dual Enrollment classes. The students stated that they would encourage high school students to enroll in Dual Enrollment classes over Advanced Placement due to the guaranteed opportunity to earn college credit. The rationale was that if a student did not test well on the Advanced Placement exam and did not score a certain score college credit would not be awarded. This finding aligned with the recommendation of Post's (2013) study for more research in the area of Advanced Placement versus Dual Enrollment.

Theme three dealt with the students' perceptions before and after participating in Dual Enrollment. Post (2013) and Lewis (2009) studies mentioned the concerns for students participating in college courses lacking good study habits and time management skills. These skills were addressed in this study when students acknowledged changes that they needed to ensure their college success. Students acknowledged that they had to study for their college classes where studying was not necessary for their high school classes. Also, the time management factor of keeping up with due dates and assignments since they were not attending college classes everyday like high school classes and having the expectation from professors that the work be completed and turned in on time.

In the studies of Anderson (2010); Lewis (2009); Struhl and Vargas, (2012) students who had already planned to attend college indicated that their Dual Enrollment participation did not affect their decision to go to college. This finding was supportive of the previous research work of Anderson (2010); Lewis (2009); Struhl & Vargas, (2012) that the Dual Enrollment participation did not influence their decision to attend college.

The students indicated that the experience just motivated them to stay on the original path.

In the studies of Struhl and Vargas (2012) and Anderson (2010), the extent of students' Dual Enrollment experiences influencing their educational decision after graduating from high school were addressed. One finding was that completing a college course through Dual Enrollment had a consistent and positive association with college enrollment, persistence, and completion. Like the literature review the students in this study had a consistent and positive association with college enrollment, persistence, and completion. Their responses indicated their motivation to attend college and to finish and continue to earn their bachelor's and master's degree, along with several students majoring in the medical fields, such as pre-med and nursing.

One of the findings in this study was that the majority of White students participated in Dual Enrollment than any other racial backgrounds. This correlated with a finding in the studies of Anderson (2010) and Young, Slate, Moore, & Barnes (2014). Anderson's (2012) study research indicated that students who completed college courses scored higher on state tests, were less likely to be low income, and more likely to be white than of other racial backgrounds. This study did not involve data about higher test scores or the students' income level, but like the literature review the students who participated in the Dual Enrollment program were majority White, of the fifty-one students 71% of them were White. Young, Slate, Moore, & Barnes' (2014) study noted the finding that the number of African American students who enrolled in Dual Enrollment courses was rather low each of the years reviewed in the study.

Conclusions

The Dual Enrollment program was supported by several stakeholders as a remedy for the challenges of decreased college degrees, training for the workforce, and college preparedness. All states allow Dual Enrollment, with 46 having at least one statewide Dual Enrollment program established by state policies; the other four states leave programs to the discretion of local district and college policies. Five factors were mentioned that caused the growth in Dual Enrollment program: the increasing need for a college degree and an educated workforce; the United States trailing behind other countries in degree completion; the program offering substantial academic and social benefits; the decreasing of time to complete a degree; and saving money on tuition.

The researcher concluded that there are benefits to students participating in Dual Enrollment and the impact of Dual Enrollment does affect their educational decision after high school. The following research questions were addressed in the study:

1. To what extent did students perceive positive benefits of the Dual Enrollment program?
2. To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high school in 2016?

The following conclusions have been made regarding the students' perceptions of the benefits of participating in Dual Enrollment and how the Dual Enrollment experience influenced their educational decision after graduating from high school.

Conclusion 1: This study verified what the existing literature said about the benefits of participating in the Dual Enrollment program for students. The responses regarding the benefits of participating in the Dual Enrollment program included the following: earning high school and college credits at the same time, the opportunity to get the core classes out of the

way and get an early start on their major classes, gaining an understanding of the college structure and environment, such as advisement, buying books at the bookstore, and procedures, along with the opportunity to get a feel of college by balancing high school assignments with college assignments and how to interact with college professors and know their expectations.

The data gathered from the survey responses regarding the students' perception of the positive benefits of the dual enrollment programs were identified in five skill areas: writing, reading comprehension, oral communications, study habits, and critical thinking/problem solving. The students indicated having to evaluate their current skills such as time management with not having class every day, but deadlines were still expected to be met, study habits changed from not studying to having to study, and the use of oral communication skills gained through participating in Dual Enrollment courses (Post, 2013).

Other benefits regarding their Dual Enrollment experience were that 93% of the students strongly agreed that their participation increased their chances of their college success and 87% strongly agreed that they would recommend that all students take Dual Enrollment while in high school. The students also indicated the benefit of a cost savings by having the opportunity to earn college credits for free and not using HOPE funds. Dual Enrollment classes were thought to be a guaranteed way to earn college credits versus taking the rigorous Advanced Placement classes where earning college credit was based on an earned test score. Sixty percent (60%) of the students found Dual Enrollment beneficial to them and indicated that they wished that they had participated in the Dual Enrollment program earlier than their junior and/or senior year and would have taken more classes. There were also students who participated in Dual Enrollment, but their participation did not affect their decision to continue to college. Because they had already planned to go to college even

if they had not participated in Dual Enrollment their plan was not influenced nor strengthened by the Dual Enrollment experience (Lewis, 2009).

Conclusion 2: This study verified what the existing literature said about what motivated students to participate in Dual Enrollment. The student's responses regarding who influenced their participation in Dual Enrollment included teachers (20%), parents (20%), parents of friends, and counselors along with friends who had already participated in Dual Enrollment (40%). The biggest influencers were their friends who had participated in Dual Enrollment, which emphasized the importance of having previous participants to speak about their Dual Enrollment as a promotional aspect and can be concluded as one of the reasons for the growth in Dual Enrollment participation. Sixty percent (60%) of the participants also indicated that not having to deal with the issues of AP courses such as, taking the class all year and not passing the exam due to not being good at standardized test, which they did not receive the college credit was also an motivating influence.

Conclusion 3: This study verified that students' perception about attending college changed after participating in the Dual Enrollment program. Seventy percent (70%) of the students indicated that before participating in Dual Enrollment they did not know what to expect and their perception was that it would be hard and difficult. Eighty percent (80%) of the students' anxiety level about college decreased after participating in Dual Enrollment and their thoughts were indicated by statements such as, "Dual Enrollment participation got rid of the mythical of college, college did not look that scary anymore, and that they were less stressed about going off to college because they felt better prepared".

Another student stated, "The Dual Enrollment experience set her mind at ease and helped her believe that she could get through this and realized that college was for her so after earning her bachelor's degree she planned to continue and earn her master's degree."

Sixty-seven percent (67%) of the students' confidence level increased toward being successful at college because of the positive experience in the Dual Enrollment program. Forty percent (40%) of the students indicated that participating in Dual Enrollment influenced their future dreams by being able to graduate from college earlier since they had completed core courses while still in high school and had the opportunity to take their more advanced courses earlier than the non-Dual Enrolled students. Five of the ten students' interview responses indicated that they were second semester juniors and three were in the Pre-Med program.

Conclusion 4. There was a larger number of females versus males and whites than minorities in this study that participated in Dual Enrollment. There were 51 students who participated in Dual Enrollment during the 2015-2016 school year. The gender of the 2016 graduates who participated in Dual Enrollment included thirty-five females (69%) and sixteen males (31%). The race/ethnicity of the students were 71% White (39% females and 31% males) followed by 18% African-American females, 8% Multi-racial females and 4% Asian or Pacific females.

Conclusion 5: The Dual Enrollment could be a helpful program as an option to help with decreasing the drop-out rate. Seven (47%) of the fifteen survey respondents strongly agreed that Dual Enrollment classes kept them motivated to stay in high school. The benefit for students participating in career-focused Dual Enrollment could be a solution to lowering the drop-out rate because they are learning a skill that makes them career-ready.

The researcher's findings were consistent with similar studies found in the literature regarding the benefits of students participating in Dual Enrollment. Further, the researcher and many of the students agreed that the students' participation in Dual Enrollment effected their academic path after high school. But to say Dual Enrollment

was the only determining factor that led the students to continue onto college would be difficult to say because more research is needed.

Research Framework

This study was framed by the experiential theory, which stated that learning occurs within the cycle of experience, sharing, autonomy, and adjusting. Learning was based on the experiences and interactions which occurred within a situation that helped develop the results (Passarelli & Kolb, 2012). The experience and the process motivated the learner. The learner was driven by their interest, such as earning college credit while still in high school. The Dual Enrollment program puts the experiential learning theory into practice (Haltinner, Mooney, & Stanislawski, 2012).

According to Kirschner, Sweller, and Clark (2006) the learning process of the experiential theory began with a person carrying out an action. The students' benefited from their participation in the Dual Enrollment courses and influenced their action after graduating from high school. The basis of Dual Enrollment was that high school students enhanced their chances for college success because they better understood what it took to succeed in college from their experiences of real college coursework through Dual Enrollment (Cowan & Goldhaber 2014; Struhl & Vargas, 2012). The findings of this study were evident to the correlation with previous studies. For example, through Dual Enrollment experience the students were able to share their knowledge about the program with others and the autonomy in expressing to others the benefits of the program and the necessary adjustments it took to be successful in college.

In comparison to the conceptual framework in chapter I, the new research framework would include another circle. The main two circles would remain: increased

participation in Dual Enrollment and students' perceptions, but the following arrows coming from the increased circle would be added: cost savings, former Dual Enrollment students' promotion, and earning college credits. The new circle would overlap the previous three circles and it would include there are benefits to participating in the two different types of Dual Enrollment: career-focused and academic-focused. In the intertwine circle, the influence of Dual Enrollment participation on the student's choice of educational path would still be a question with arrows from the circle with the options of four-year college/university, technical college, military, work-force.

Limitations

One limitation came from the fact that most of the graduates contact information on file was for the parents. There were three parents that responding with a yes that their student wanted to participate and only one of the parents provided their child contact information, the other two did not. For the graduates who had only mailing addresses on file after the letters were sent, there was not any response indicating receipt of the letter nor that the letters were undeliverable. Another limitation was out of fifteen respondents who were accessed and consented to complete the survey and to participate in the telephone interview, only ten were able to speak with me on the phone, due to their daily routine of working and being out of the country studying abroad.

Another limitation was having to shorten the interview to 10-15 minutes (from the initially planned 30-60 minutes) to obtain the required sample size of 10 participants due to the time constraints and other obligations of the students. One limitation observed after receiving the data for the 2016 graduates, was that there were no African American males

who had participated in the Dual Enrollment program. That group was one whose voice was not represented in the study.

Implications for Practice

The implications for this research are regarding the challenges of the decrease of college degrees, the increase of remediation courses, the cost of a college degree, training for the workforce, and college preparedness. The basis for Dual enrollment was for high school students to enhance their chances for college success by better understanding what was necessary to succeed in college through experiencing real college coursework. Allen (2010) referenced research that Dual Enrollment programs helped the transition from high school to college, allowed students to complete a degree faster, reduced costs for a college education, reduced the need for remedial course work, raised the student's motivation and goal to attend college, and familiarized students to the college environment. The Dual Enrollment program was seen as the avenue for state governments, post-secondary administrators, and local school administrators to address the challenges and in this study all the challenges were addressed or mentioned.

The implication for legislative policymakers and state officials concern the funds that have been award to colleges and local school system to cover all required standard tuition, mandatory fees, and required book expenses for the Dual Enrolled participants. With the increased in Dual Enrollment participation, the amount of funds being put into the Dual Enrollment program had increased. This study's findings was a way to provide the legislative policymakers and state officials with the feedback of the recipients who had benefited from the funds that had been allocated toward the Dual Enrollment program. The information will hopefully continue to highlight the value of Dual

Enrollment and encourage the continued support for and the expansion of Dual Enrollment program (Kennedy, 2008).

The funds provided toward Dual Enrollment should continue to help with the cost of earning a college degree and the timeframe to earn a degree. This benefit was identified by the students in the study because of the cost savings to their family toward college tuition while earning post-secondary credits and their high school diploma. The students indicated that advertising Dual Enrollment would ensure that all students would be aware of the opportunity to participate in Dual Enrollment along with the benefits. The promotion of Dual Enrollment included having students to share their stories to the local newspaper, television stations, social media outlets, as well as, school and district websites. Dual Enrollment informational workshops for parents, students, teachers, counselors along with post-secondary staff made available to convey information and answer questions. This would ensure that no barriers existed for students to participate in Dual Enrollment. The Dual Enrollment program would be advertised as an educational opportunity for college access and success (Kanny, 2015).

The implication for educational stakeholders such as, post-secondary administrators and local school administrators was regarding the Dual Enrollment program availability, exposure, and benefits for all students Franks (2016). The perceived benefits of the students regarding their experience of participating in the Dual Enrollment program were identified in this study. The program gave high school students the opportunity to take postsecondary courses at the Career Academy through the local Technical College and the surrounding four-year colleges and universities. The Dual Enrollment program provided students with opportunities from earning core academic

course credit, saving tuition money, decreasing number of years to earn a degree, motivation and confidence to pursue a four-year degree.

Allen (2010) defined college readiness as the level of preparation a student needed to succeed without having to take remedial courses their first year in college. The results of this study were an indication that the students did not have to take remedial courses, furthermore, the students were able to take their degree courses because they had completed most of their core classes through Dual Enrollment while still in high school. An and Taylor (2015) reported as students finished their Dual enrollment course the students had a better sense of needed skills and expectations for college success. The research study findings were supportive toward this expectation and was indicated by the students 'responses and reflections on their participation in the Dual Enrollment program and the motivation for them to continue to college. This was evident in the students' decision to take on the challenge of enrolling in difficult majors such as pre-med and nursing.

As post-secondary administrators and local school administrators, this study's findings would support the motivation to continue building partnerships to ensure students were given as many opportunities to gain the skills and knowledge to be prepared for the next level. This could be done through articulation agreements for the academic-focus and the career-focused Dual Enrollment program between the two entities. This would ensure students participating in career-focused courses were work-ready by earning degree certificates and the academic-focused courses would transfer to the four-year colleges and universities.

Local administrators have the greatest impact by ensuring that the Dual Enrollment program was continued in their school and district. School administrators, counselors, and teachers must continue to promote and communicate to parents and students the benefits of the Dual Enrollment program. The incorporation of a web-based exit survey would be an excellent avenue to gain immediate feedback from students as they participate each year in the Dual Enrollment program and again before the students graduate from high school. The web-based exit survey would provide a list of benefits, recommendations as to why Dual Enrollment programs should be supported, and a list of needed improvements.

The implication for the state of Georgia deals with the benefit that the Dual Enrollment program's successful contributions would facilitate a more educated workforce and fulfill a projected outlook that two-thirds of the future jobs will require at least some postsecondary training or education. Dual Enrollment is a way to college access and success even if it is just to increase the awareness of the need for education and training after high school because a high school diploma is no longer a guarantee for getting a middle-class job. Some of the students in this study had completed career-focused post-secondary certificates, had earned an Associate degree, or were progressing toward their bachelor's degree in different areas such as pre-med, interior design, and nursing.

Recommendations

This study was designed to learn about the experiences of high school students who participated in Dual Enrollment during high school and to examine the students'

perceptions of Dual Enrollment and how their participation influenced their future educational path.

Below are the researcher's recommendations:

1. Schools need to look at their Dual Enrollment data and ensure that all population groups are taking advantage of the opportunity and if disparities are found they should be addressed as needed.
2. School-based promotional programs and activities are needed to enhance minority parents' awareness of the Dual Enrollment experience and the benefits.
3. High school teachers as advisors and counselors need to continue providing guidance to all students about Dual Enrollment in both areas, career-focused and academic-focused. During this guidance time reasons are identified why students are not participating in Dual Enrollment and the adjustments are made.

It is the hope this study will act as a catalyst for future studies, both quantitative and qualitative, to explore topics as they pertain to students' experiences and participation in the Dual Enrollment program. Based on the methodology and conclusions, the researcher recommended the following for future research:

1. More research needed to determine how to encourage minority students to participate in Dual Enrollment programs.
2. More research needed to determine the effect of student participating in Dual Enrollment as early as their sophomore year. This would be useful in determining the effects of variables such as age in effectively implementing the Dual Enrollment program.

3. More research needed on the topic of outcome of students who participated in the Dual Enrollment program versus participating in the Advanced Placement program or non-Dual Enrolled students.
4. Since Dual Enrollment programs have grown steadily not only in the number of students participating but also in the number of credit hours earned. More studies are needed to determine if participants of Dual Enrollment programs are completing their degrees in fewer than four years.
5. More research needed on the topic of the effects on the high school climate due to the increased Dual Enrollment students leaving high school and enrolling as full-time college students and graduating with their Associate Degree and high school diploma at the same time.

Dissemination

Dissemination of this research could include sharing collected data with the current administration and faculty from the institution of data collection. This could be presented in a report or a formal research presentation at a conference or seminar. This research could also be shared with other institutions interested in Dual Enrollment at the secondary and post-secondary levels. Lastly, this research could also be disseminated through a peer reviewed article or abstract for an online or Career and Technical Educational journal.

Two groups who would be interested in the results of the study would be the Georgia Department of Education Career, Technical, and Agricultural Education (CTAE) Department where the Dual Enrollment program falls under the Transition Career Partnerships department for student in students in grades 9-12 and local school districts.

One task would be advocate for a tracking system of students who have participated in Dual Enrollment and non-Dual Enrollment students and their journey after high school to provide more research and data about the success of the Dual Enrollment program.

Workshops on the Dual Enrollment process and the students' perception regarding the benefits of the Dual Enrollment program would be helpful to local school districts, since they oversee the implementation of the Dual Enrollment initiatives that are passed down from the Legislators. The attendees of the workshops would range from district office Dual Enrollment coordinators, counselors, school administrators, teachers, parents, and industry & business leaders in the community.

Concluding Thoughts

Dual Enrollment participation continues to grow each year. The program was designed to give high school students the opportunity to earn high school and college credit(s) at the same time. The goal of the program was to offer students the opportunity to experience college, prepare for college, and to earn a college degree in less time. Throughout the study the students who participated in the Dual Enrollment program felt that the program was a positive experience and their participation helped them to prepare for what college life entailed.

One of the concerns that emerged from the research was the absence of minority males participating in the Dual Enrollment program. What are the reasons? Is it the lack of advertisement or is it their participation in extracurricular and other high school activities that they would prefer over Dual Enrollment? To ensure the goal of college access and availability to all students this concern needs to be addressed. The other concern involved the suggestion from the students that they would advise students to

choose Dual Enrollment courses over Advanced Placement courses. This suggestion needs to be brought to the forefront of local administrators because this could affect the schools' Advanced Placement enrollment and the need of personnel trained to teach the classes. If the desire for Advanced Placement courses is to continue, there must be an evaluation of that program benefits to maintain the students' interest and desire to stay on the high school campus and enroll in the courses.

The Dual Enrollment program offers so many opportunities to students who are academic-focused and/or career-focused. The career-focused programs would be especially helpful for the students who do not plan to attend a four-year college, plan to attend a technical school, enter the workforce, or on the verge of dropping out of high school.

Many of the students in this study participated more in the academic-focused courses, but the career-focused Dual Enrollment opportunities were available. Both areas need to be promoted in order for students to be knowledgeable of all their options. The opportunity to graduate from high school with not only a high school diploma, but with technical skills, career certificates and degrees, and college credit(s) at a cost savings for students and parents is just too much to overlook. It is not high school as usual, it is not the high school of yesteryear because it is the high school of the future trying to meet the needs of the coming generations. Whether students need the traditional high school environment to be successful or the Dual Enrollment environment local school systems must be ready to accommodate what is best for all students.

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APPENDICES

Appendix A.....	Telephone Interview Protocol Questions
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APPENDIX A

Telephone Interview Protocol Questions

1. What/who influenced you to participate in the Dual Enrollment Program while in high school?
2. How did you benefit from your participation in the Dual Enrollment Program?
3. What do you see as some of the advantages to being enrolled in a Dual Enrollment class?
4. What was the greatest benefit of taking a college level course in high school?
5. How did participating in the program influence your aspirations to attend or not to attend college?
6. What were your thoughts and beliefs about college before participating in the Dual Enrollment Program and how did your thoughts and beliefs change after participating in the program and entering college?
7. What skills did you gained by taking a Dual Enrollment course such as test taking, writing skills, teamwork, motivation, etc.?
8. Did your anxiety of going to college decrease after you took a college level course in high school?
9. What are you doing now and how was your current status impacted by participating in Dual Enrollment.
10. Do you have any other comments about your Dual Enrollment experience?

APPENDIX B

Online Survey Protocol Questions with Informed Consent Embedded

Dual Enrollment (Move On When Ready) Experience while attending Veterans High School

Informed Consent Form – Online Survey and Telephone Interview

I. Purpose:

The purpose of this project is to understand the perception of the Dual Enrollment program from graduates who have participated in a Dual Enrollment class. I am conducting a study about high school graduates' Dual Enrollment experience and the influence on College Readiness.

II. Procedures:

1. You are being asked to participate in an Online Survey and a Telephone Interview about your perception of Dual Enrollment as a 2016 graduate who participated in Dual Enrollment.
2. A copy of the Informed Consent form to participate in the study including the Online Survey and the Telephone Interview will be the first page of the Online Survey.
3. By selecting the "Agree" checkbox under the Electronic Consent agreement at the bottom of the page, you will be indicating your consent to having read the Informed Consent, to agreeing to participate in the online survey and the telephone interview and that you are 18 years of age or older.
4. Then you will be taken to the survey questions where you will also indicate consent by typing your name, date, email address, and the best contact telephone number in the comment box.
5. The survey will take approximately fifteen minutes or less and contains six questions.
6. You will be asked to rate your perception of your Dual Enrollment preparation, to rate the extent that you agree or disagree with statements about Dual Enrollment, to indicate what you are currently doing, and to answer two demographic questions.
7. After the survey is completed, all data will be transmitted and kept confidential and secured for analyzing.
8. You will be contacted to review your consent to participate in the interview and to set-up a date and time to conduct the telephone interview.
9. You will be assigned a number that will be known only to the researcher for the interview and during the data reporting.
10. You will be emailed prior to the interview date, the ten interview questions asking about perceptions regarding Dual Enrollment experiences and the influence on college readiness.
11. The interview will be recorded on a digital device and data will be transcribed for analysis purposes only.
12. You may withdraw from the interview at any time (even after you have consented to the survey and interview).
13. You will be offered a copy of the interview transcript to review for accurate interpretation and placement of responses.
14. Once all survey data and interview transcripts are compiled, they will be coded to find common themes among the surveys and interviews using the common comparative method and kept confidential and secured for analyzing.
15. There is a possibility that the data will be used in future research projects.

III. Possible Risks or Discomforts:

There are no possible risks involved in this research study. The researcher will minimize discomfort by assuring anonymity and confidentiality to the participant. Survey and the telephone interview responses will be kept confidential by the researcher.

IV. Potential Benefits:

There will be no direct benefit to you for participating in this study. The information for the study may however provide future Dual Enrollment students, parents, and educators with an understanding of the program and how it relates to the college readiness of participating students.

V. Costs and Compensation:

You will not receive any compensation for participating in this study. Participation in this study is strictly voluntary. This study does not cost anything.

VI. Confidentiality:

All data collected in this study will be kept confidential. All data will be kept for one year after the study. After one-year is completed, the data will be discarded. All data collected in the survey will be transmitted securely over the internet and your IP address will not be recorded or linked to you. Survey results and interview transcripts will be stored in a locked file cabinet or on a laptop with the password protected and responses will not be linked to the participants.

VII. Withdrawal:

Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

For additional information about this research project, you may contact the Principal Investigator, Sherry W. Johnson at 478-396-9817 or johnson_sherry1@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

Electronic Consent: Please select your choice below. Clicking on the "Agree" button, indicates that:

-You have read the above Informed Consent Form

-You voluntarily agree to participate in the Online Survey and the Telephone Interview

-You are 18 years of age or older

Agree-----If you agree, please type your name, today's date, email address, and best contact telephone number in the text box.

Disagree----If you disagree, please select and click Done to end the survey

Please do not forward this email as its survey link is unique to you.
[Unsubscribe](#) from this list

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*** 1. Electronic Consent: Please select your choice below. Clicking on the "Agree" button, indicates that:**

-You have read the above Informed Consent Form

-You voluntarily agree to participate in the Online Survey and the Telephone Interview

-You are 18 years of age or older

Agree-----If you agree, please type your name, today's date, email address, and best contact telephone number in the text box.

Disagree----If you disagree, please select and click Done to end the survey

Name:

Date:

Email Address:

Best Contact Telephone #:

2. Please rate how well you perceived that your Dual Enrollment experience prepared you in each of the following areas with 4 being extremely well and 1 being not well.

	4---Extremely Well	3---Very Well	2---Somewhat Well	1---Not Well
Oral Communications Skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing Skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading Comprehension Skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Study Habits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical Thinking/Problem Solving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Read each statement and indicate the extent to which you agree or disagree with 5 being Strongly Agree and 1 being Strongly Disagree.

	5---Strongly Agree	4---Somewhat Agree	3---Neither Agree or Disagree	2---Somewhat Disagree	1---Strongly Disagree
Dual Enrollment classes challenged me more than my standard high school courses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I obtained additional confidence toward taking college courses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dual Enrollment classes kept me motivated to strive for better grades in high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dual Enrollment classes kept me motivated to stay in high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that participating in Dual Enrollment classes, increased my chances of my college success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend that all high school students take Dual Enrollment classes while in high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. What are you currently doing?

- Attending a Technical or 2-year College
- Attending a 4-year College/University
- In the Military
- Employed
- Unemployed
- Other (please specify or indicate college part-time or full-time or Working part-time or ufull-time)

5. What is your gender?

- Female
- Male
- Not listed

6. Which race/ethnicity best describes you? (Please choose only one.)

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic
- White / Caucasian
- Multiple ethnicity / Other (please specify)

Done

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See how easy it is to [create a survey](#).

[Privacy & Cookie Policy](#)

APPENDIX C

Superintendent's Designee Consent to Conduct Study



SUPERINTENDENT OF SCHOOLS
DR. MARK SCOTT

BOARD MEMBERS
MR. FRED WILSON, CHAIRMAN

HELEN HUGHES, VICE CHAIRMAN
LORI JOHNSON
DR. RICK UNRUH

DAVE CROCKETT
HOKE MORROW
BRYAN UPSHAW

DATE: May 22, 2018
TO: Sherry Johnson
Veterans High School
FROM: Sharon Moore
Director of Professional Learning
SUBJECT: **RESEARCH APPROVAL REQUEST**

Your request to conduct research for your graduate program at Columbus State University is approved. The purpose of your research study, "A Mixed Method Descriptive Study of High School Graduates' Dual Enrollment Experiences and the Influence on College Readiness", is to understand the perception of the Dual Enrollment program from graduates who have participated in a dual enrollment class. You are conducting a study about high school graduates' Dual Enrollment experiences and the influence on College Readiness. The timeframe for this research study is one year from the date of system approval.

Thank you for submitting your IRB, research proposal, interview questions, survey, consent form, and the principal approval letter.

Please keep in mind that you will be responsible for compiling the data for your research. The staff at Veterans High School and the Departments of Assessment & Accountability and Technology Services is unable to compile data for your research. Board policy also prohibits the use of system email for personal research. Please also remember student and teacher anonymity is of utmost priority for this research project.

I have attached to this approval e-mail the Houston County Schools Requirements for Conducting Research.

I wish you the best as you work toward earning your graduate degree. Please let me know if I may be of any assistance to you again in the future.

cc: Cindy Flesher
Chris Brown

P.O. Box 1850 • PERRY, GEORGIA 31069
(478) 988-6200 • FAX (478) 988-6259
WWW.HCBE.NET

APPENDIX D

Consent from School Principal to Conduct Study



VETERANS HIGH SCHOOL

Dr. Christopher Brown, Principal
Mr. Mark Antley, Assistant Principal
Dr. Amy Barbour, Assistant Principal
Mr. Herbert Chambers, Assistant Principal
Mrs. Sherry Johnson, Assistant Principal
Dr. Jeff Washington, Assistant Principal

April 23, 2018

Dear Dr. Christopher Brown,

My name is Sherry Johnson and I am a doctoral student in the Department of Counseling, Foundations and Leadership at Columbus State University. I am conducting a study about high school graduates' Dual Enrollment experiences and the influence on College Readiness.

I will be conducting this study using the following research questions:

1. To what extent did students perceive positive benefits of the Dual Enrollment program?
2. To what extent did students' Dual Enrollment experiences influence their educational decision after graduating from high School in 2016?

This research study has been approved by the Columbus State University Institutional Review Board, which insures that research projects involving human subjects follow federal regulations.

I am requesting permission to conduct my study with the 2016 graduates of Veterans High School in the Houston County School District. Requesting permission to utilize the Veterans High School list of 2016 graduates who participated in Dual Enrollment to recruit them to participate in my research study.

I will be conducting online surveys and telephone interviews after school hours. The time and location for the interviews will be at the graduates' convenience. Interviews will last approximately 30 - 60 minutes and will consist of questions related to their perceptions of their Dual Enrollment experience and the influence on College Readiness.

If you are willing to allow me to conduct my study utilizing the list of the 2016 Veterans High School graduates who participated in Dual Enrollment in this research study, please sign and return this letter to me.

Please let me know if you have any questions regarding this study. My telephone contact information is 478-396-9817 and my email is johnson_sherry1@columbusstate.edu.

Thank you for your time and consideration.

Sherry W. Johnson

Doctoral Student, Columbus State University

I, Chris Brown, give permission for Sherry Johnson to conduct a
(Print Name)

research study in the Houston County School District with Veterans High School 2016 graduates who participated in Dual Enrollment.

Christopher Brown
Printed Name/(Signature of Principal)

4-25-18
(Date)

340 Piney Grove Rd Kathleen, GA 31047
Phone: 478-218-7537 Fax: 478-218-7570

APPENDIX E

Participant Recruitment Email for Survey and Telephone Interview

Dear 2016 VHS Graduate,

My name is Sherry Johnson and I am a doctoral candidate at Columbus State University. I am conducting a study about high school graduates' Dual Enrollment experiences and the influence on College Readiness.

I am contacting you to see if you would be willing to participate in a research study.

To collect data for this study, I will be conducting an online survey via a web email link and a future telephone interview. The survey will take approximately 15 minutes or less and will consist of questions related to your perceptions of your Dual Enrollment experience and the influence on College Readiness. The interview will last approximately 30 - 60 minutes and will consist of ten questions related to your perceptions of your Dual Enrollment experience and the influence on College Readiness.

All participant responses will be kept confidential. Nothing you say will be attributed directly to you. No names or identifying information would be included in any publications or presentations based on these data, and your responses to this survey will remain confidential.

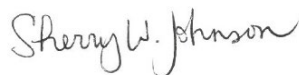
In addition, this research study has been approved by the Columbus State University Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations.

If you are willing to participate in the study, please respond to this email with a “Yes” to johnson_sherry1@columbusstate.edu. Then a web link to collect the Electronic Informed Consent Form will be sent with check boxes to Agree or Disagree. Clicking on the “Agree” button will indicate that you have read the Informed Consent Form, you voluntarily agree to participate in the Online Survey and Telephone Interview, and you are 18 years of age or older. Once your option is selected, you will advance to the survey where question #1 will include a text box for you to provide the following information: name, date, and best contact telephone number.

If you have questions, please feel free to email me at johnson_sherry1@columbusstate.edu or call me at 478-396-9817.

Thank you for your time and consideration.

Sincerely,



Doctoral Student

Columbus State University

APPENDIX F

Participant Follow-up Recruitment Email for Survey and Telephone Interview

Dear 2016 VHS Graduate,

My name is Sherry Johnson and I am a doctoral candidate at Columbus State University. I am conducting a study about high school graduates' Dual Enrollment experiences and the influence on College Readiness.

I am contacting you to see if you would be willing to participate in a research study. This follow-up email is being sent to remind you to respond if you would like to participate and have not already done so.

To collect data for this study, I will be conducting an online survey via a web email link and a future telephone interview. The survey will take approximately 15 minutes or less and will consist of questions related to your perceptions of your Dual Enrollment experience and the influence on College Readiness. The interview will last approximately 30 - 60 minutes and will consist of ten questions related to your perceptions of your Dual Enrollment experience and the influence on College Readiness.

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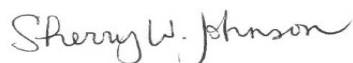
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If you have questions, please feel free to email me at johnson_sherry1@columbusstate.edu or call me at 478-396-9817.

Thank you for your time and consideration.

Sincerely,



Doctoral Student
Columbus State University

APPENDIX G

Participant Recruitment Letter for Online Survey and Telephone

Dear 2016 VHS Graduate,

My name is Sherry Johnson and I am a doctoral candidate at Columbus State University. I am conducting a study about high school graduates' Dual Enrollment experiences and the influence on College Readiness.

I am contacting you to see if you would be willing to participate in a research study.

To collect data for this study, I will be conducting an online survey via a web email link and a future telephone interview. The survey will take approximately 15 minutes or less and will consist of questions related to your perceptions of your Dual Enrollment experience and the influence on College Readiness. The interview will last approximately 30 - 60 minutes and will consist of ten questions related to your perceptions of your Dual Enrollment experience and the influence on College Readiness.

All participant responses will be kept confidential. Nothing you say will be attributed directly to you. If you choose to provide contact information such as your phone number or email address, your survey responses may no longer be anonymous to the researcher. However, no names or identifying information would be included in any publications or presentations based on these data, and your responses to this survey will remain confidential.

In addition, this research study has been approved by the Columbus State University Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations.

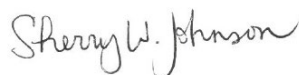
If you are willing to participate in the study, please send your email address to johnson_sherry1@columbusstate.edu.

Then a web link to collect the Electronic Informed Consent Form will be sent with check boxes to Agree or Disagree. Clicking on the "Agree" button will indicate that you have read the Informed Consent Form, you voluntarily agree to participate in the Online Survey and Telephone Interview, and you are 18 years of age or older. Once your option is selected, you will advance to the survey where question #1 will include a text box for you to provide the following information: name, date, and best contact telephone number.

If you have questions, please feel free to email me at johnson_sherry1@columbusstate.edu or call me at 478-396-9817.

Thank you for your time and consideration.

Sincerely,



Doctoral Student
Columbus State University

APPENDIX H

Participant Follow-up Recruitment Letter for Online Survey and Telephone Interview

Dear 2016 VHS Graduate,

My name is Sherry Johnson and I am a doctoral candidate at Columbus State University. I am conducting a study about high school graduates' Dual Enrollment experiences and the influence on College Readiness.

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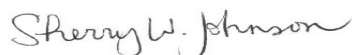
If you are willing to participate in the study, please send your email address to johnson_sherry1@columbusstate.edu.

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If you have questions, please feel free to email me at johnson_sherry1@columbusstate.edu or call me at 478-396-9817.

Thank you for your time and consideration.

Sincerely,



Doctoral Student
Columbus State University

APPENDIX I

Columbus State University IRB Approval

7/22/2018

Columbus State University Mail - Exempt Approval Protocol 18-115



Sherry Johnson [Student] <johnson_sherry1@columbusstate.edu>

Exempt Approval Protocol 18-115

CSU IRB <irb@columbusstate.edu>

Wed, Jun 6, 2018 at 12:11 PM

To: "Sherry Johnson [Student]" <johnson_sherry1@columbusstate.edu>, Michael Richardson

<richardson_michael5@columbusstate.edu>

Cc: CSU IRB <irb@columbusstate.edu>, Institutional Review Board <institutional_review@columbusstate.edu>

Institutional Review Board
Columbus State University

Date: 6/6/18

Protocol Number: 18-115

Protocol Title: A Mixed Method Descriptive Study of high school graduates' Dual Enrollment experiences and the influence on College Readiness

Principal Investigator: Sherry Johnson

Co-Principal Investigator: Michael Richardson

Dear Sherry Johnson:

The Columbus State University Institutional Review Board or representative(s) has reviewed your research proposal identified above. It has been determined that the project is classified as exempt under 45 CFR 46.101(b) of the federal regulations and has been approved. You may begin your research project immediately.

Please note any changes to the protocol must be submitted in writing to the IRB before implementing the change(s). Any adverse events, unexpected problems, and/or incidents that involve risks to participants and/or others must be reported to the Institutional Review Board at irb@columbusstate.edu or (706) 507-8634.

If you have further questions, please feel free to contact the IRB.

Sincerely,

Amber Dees, IRB Coordinator

Institutional Review Board
Columbus State University

*** Please note that the IRB is closed during holidays, breaks, or other times when the IRB faculty or staff are not available. Visit the **IRB Scheduled Meetings** page on the IRB website for a list of upcoming closures. ***