

THE DUAL ENROLLMENT CHALLENGES OF FIRST-GENERATION APPALACHIAN
COLLEGE STUDENTS: A HOLISTIC SINGLE-CASE STUDY

by

Cecil Todd Bennett

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

The purpose of this holistic single-case study was to describe the dual enrollment experiences of first-generation Appalachian college students in Southwest Virginia. The theory guiding this study was Tinto's theory of college student retention as it related to first-generation Appalachian college students who have taken dual enrollment courses. To further understand the challenges faced by these students the following research question was posed: What are student, teacher, and administrator descriptions of the challenges faced by first-generation college students taking dual enrollment courses in Southwest Virginia? Subquestions served to investigate the role of dual enrollment courses on the college involvement, college retention, and degree completion of first-generation Appalachian college students. The participants for this study included 11 individuals who were first-generation Appalachian college students who graduated from high school and were enrolled in dual enrollment courses in high school; dual enrollment instructors; school guidance counselors or principals; and dual enrollment program administrators. Data were collected via individual interviews, online focus group interviews, and reflective journals. Data were analyzed by transcribing interviews, identifying and grouping themes, and constructing a narrative that can provide information on the experiences of first-generation college students taking dual enrollment courses in the Appalachian region. Findings indicated parents may not have had the knowledge to support their children who were taking dual enrollment courses academically; however, they were able to significantly support them emotionally and financially throughout the process. This study also found dual enrollment courses are a generally positive experience for first-generation students in the Appalachian region and the support of their parents played a key role in this positive experience.

Keywords: Appalachia, college students, dual enrollment, first-generation, persistence.

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Dedication

I would like to dedicate this manuscript to my family who have stood by me patiently while I completed my degree. I would like to thank my wife, Michelle, who had to do a lot by herself throughout this whole process, but never gave up. I would like to thank my parents for always stepping in to lend a hand when I needed them and always encouraged me. I would also like to dedicate this manuscript to my daughter, Ryleigh, who had to see me working a lot even before she even understood why; she is the reason for my drive to continue my education so that she can have a better life.

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List of Abbreviations

Advanced Placement (AP)

Grade Point Average (GPA)

Institutional Review Board (IRB)

Socioeconomic Status (SES)

No Child Left Behind (NCLB)

CHAPTER ONE: INTRODUCTION

Overview

Students in rural communities are less likely than any other demographic subgroup to remain continuously enrolled in college (Byun, Irvin, & Meece, 2015). This lack of continuous enrollment has been traced to socioeconomic problems and the level of preparation that schools in the rural Appalachian region provide (Byun et al., 2015). In rural Appalachia, students are having to choose college over going straight into the workforce because of an economy that is becoming less dependent on the coal industry that is in steep decline (Balesteir, 2016). Many of these students from the rural Appalachian region are choosing a pathway different from their parents who did not attend college (Balesteir, 2016). Some of these rural Appalachian students are attempting to gain an advantage over students who begin college with no credit by taking part in dual enrollment courses to obtain credits and experience college before they matriculate to a four-year institution or community college after high school (Fouriezos, 2017). However, some first-generation college students in rural Appalachia are experiencing unique challenges while taking dual enrollment courses, and these challenges follow them while attending college. For example, students in the central Appalachian region have the lowest college completion rates in the country (Armstrong & Zaback, 2014). Therefore, the current study was conducted to understand student perceptions of their dual enrollment experiences.

Chapter One begins with background information on the historical, social, and theoretical importance of the dual enrollment experiences of first-generation Appalachian college students. The chapter also contains an explanation of my situation to self and relationship to the issue being studied. Finally, the chapter includes a formal statement of the problem, the purpose of the research, the significance of the study, the research questions, and significant definitions.

Background

This investigation of the experiences of first-generation Appalachian students taking dual enrollment courses has a rich background. Moreover, the history of the dual enrollment program, the social benefits that occur when first-generation Appalachian students take dual enrollment courses, and the theoretical foundations for the study are all vital to understanding the need for this study.

Historical Context

A dual enrollment student is one who student takes a course for college credit while still in high school, simultaneously earning credit at the college and high school level (Hoffman, 2012). Dual enrollment began in the 1970s and has grown exponentially since its inception (Young, Slate, Moore, & Barnes, 2014). Initially, dual enrollment programs included expansions to course opportunities, providing an accelerated means for high school students to earn post-secondary degrees at an accelerated pace (Young et al., 2014). Dual enrollment has now been shown to increase student readiness for college and has contributed to students being more likely to graduate from college on time in comparison with students who do not take dual enrollment courses (Young et al., 2014).

The No Child Left Behind Act of 2001 (NCLB) expanded the vision of dual enrollment programs because of a nationwide issue of low college completion rates in the late 1990s (Hoffman, 2012). The purpose of NCLB's dual enrollment emphasis was to increase student ability to transition to college or the workforce upon graduation of high school (Hoffman, 2012). The emphasis on the importance of college credit and preparedness that began with the NCLB, continued through other initiatives, including the American Graduation Initiative, the American Diploma Project, and Achieving the Dream; all were all programs initiated by President Obama

(Hoffman, 2012). Since the enactment of the NCLB, students who have taken dual enrollment are more likely to be accepted in college and complete degrees than are those students who did not take dual enrollment courses.

The mission of dual enrollment has changed since its inception. Originally, dual enrollment was supposed to be a pathway for students who could be classified as academically gifted (Taylor & Pretlow, 2015). However, since its inception, dual enrollment has become a pathway forward to prepare students for their transitions to college and to careers (Taylor & Pretlow, 2015). According to Taylor and Pretlow (2015), “there were 1.2 million students participating in dual enrollment” during the 2002–2003 academic year” (p. 3). That number “grew 66% to about 2.0 million dual enrollment students by the 2010–2011 academic year” (Taylor & Pretlow, 2015, pp. 3–4). This increase in dual enrollment students is partly explained by a changing landscape of dual enrollment programs. Now, instead of simply being a pathway for advanced students, dual enrollment programs are being utilized in different ways.

Students who took dual enrollment courses have also received higher grades and required less remediation while taking other college courses when compared to their peers who did not take dual enrollment courses (Crouse & Allen, 2014). Dual enrollment courses are now being viewed as a means of remediation of college-readiness skills and college preparation for all students, and not just the academically advanced students for whom they were originally intended (Giani, Alexander, & Reyes, 2014). Similarly, high schools and colleges are beginning to realize the overall benefit of dual enrollment programs. High schools and colleges both realize that the post-graduation outcomes of high school students and the retention rates for colleges and universities are positively impacted by dual enrollment courses (An & Taylor, 2015). Dual enrollment courses are also making college more affordable to students by offering

them courses at a reduced cost, which is lowering the overall cost of college for many individuals (Crouse & Allen, 2014).

Social Context

Only 30% of Central Appalachian students complete bachelor's degrees within 8 years of enrollment in college, compared to the national average of 50% completion (Armstrong & Zaback, 2014). In some communities in Central Appalachia, less than half of the students who begin college complete a degree (Wright, 2012). Young et al. (2014) similarly noted that, "Dual credit classes then afford the opportunity for rural students to enroll in college classes at reduced costs, giving rural students the experience of college prior to attending as a freshman" (p. 83). Furthermore, students who reside in rural communities are also more likely to take part in dual credit programs than are students in urban areas (Young et al., 2014). The impact of the college-readiness benefits on students taking dual enrollment courses is another area that should be explored throughout the Appalachian region.

Many students who are in the Appalachian region are more likely to be classified as first-generation college students. According to Bryan and Simmons (2009), only 17.7% of all adults in the Appalachian region have a college degree, which is significantly lower than the national average of 24.4%. Also, the poverty rates in the Appalachian region are much higher than the national poverty rates, with the median family income in the Appalachian region only reaching 84% of national median income (Bryan & Simmons, 2009). Of the 25 poorest counties in the country, five can be found in the Appalachian region (Hlinka, Mobelini, & Giltner, 2015). The Appalachian region is experiencing an industrial transformation as the demand for natural resources that have provided the economic backbone of the communities has caused a loss or

reduction in income for many families, which can have a devastating effect on the economies of small communities (Pulley, 2014).

Dual enrollment courses also provide a type of school choice, which was described by Nelson and Waltz (2017) as “intraschool choice rather than interschool choice” (p. 388). In rural areas where school choice is limited by the number of private and charter schools in an area, which is often zero, dual enrollment courses offer students the ability to take advantage of choosing their pathway forward without having to move from their home schools. Students get to choose whether they want to continue with the high school curriculum, or with the curriculum of a local community college. Nelson and Waltz also pointed out that the marginalized groups that benefit from dual enrollment programs usually show gains when compared to other students from their own marginalized groups, but these benefits are not always equal when compared to nonmarginalized groups. Also, according to Mangan (2019), there are concerns that first-generation students and students who come from low-income backgrounds are less likely to benefit from taking dual enrollment courses at the same level as other students.

However, Mansell and Justice (2014) found that a student being a first-generation student, or having his or her parents not attend college, is one barrier to taking dual enrollment courses. Dual enrollment has been shown to especially benefit first-generation students, even though being a first-generation student has been demonstrated to be a barrier to students taking dual enrollment courses (Mansell & Justice, 2014). Research needs to be done to explore ways to capture the experiences of first-generation students taking dual enrollment courses to determine what was both positive and negative about their experiences. First-generation Appalachian students, theoretically, should benefit from dual enrollment courses if

assistance can be provided for them to overcome any barriers that exist while taking the dual enrollment courses.

Theoretical Context

In his theory of retention, Tinto (1982) posited that colleges need to develop programs and supports to keep students in school. The theory of retention also suggests that students who are more prepared for college are more likely to persist in college (Tinto, 1982). One of the most important aspects of the theory of retention is that researchers must understand why students stay in college to be able to understand how to retain them. A guiding principle of the theory of retention is that institutions should allocate resources to determine why students choose to stay in college (Tinto, 2006). Beyond that, Tinto (2006) also stated that it is more important for institutions to understand how to help students succeed in their programs, rather than just focusing on why they are not staying. A key aspect of the present study is that the key participants in dual enrollment programs were asked how to better assist first-generation students who are taking dual enrollment courses.

As previously mentioned, the Appalachian region contains a high number of low socioeconomic status (SES) students. Tinto (2006) asserted that college completion is often a task that is out of the reach of low-income students. There is a gap between the degree attainment between low-income and high-income students (Tinto, 2006). Tinto's (2006) theory aligns with the belief that students who are enrolled in dual enrollment programs fare better in college than those students who were not enrolled in dual enrollment courses in high school; therefore, these dual enrollment programs help students persist to degree completion once they attend college. The present study addressed how dual enrollment programs provide remedial

opportunities and other ways that dual enrollment programs aid in college student retention for first-generation college students.

When students are taking dual enrollment courses, they are exposed to college coursework and, at times, the college atmosphere while taking courses on a college campus. According to Astin's (1984) theory of student involvement, students are more likely to persist in college if they are exposed to the college environment and involved in the college experience prior to attending college, like they would be in dual enrollment programs on both high school and college campuses. Therefore, taking dual enrollment courses can provide students exposure to the college experience that could help them persist to degree completion. Of the five basic postulates of the theory of student involvement, two relate to the present study specifically. First, Astin postulated that the amount students learn in educational programs is directly proportional to how much students are involved in an educational program. This postulate relates to the present study as I aimed to determine the level of how much students were involved in the dual enrollment program and the impact their involvement had on their educational experiences in dual enrollment programs. Another of Astin's postulates regards educational policies that could only be evaluated by their ability to add to student involvement. The present study was conducted to determine what policies assist first-generation students to succeed and become more involved in dual enrollment courses in the Appalachian region.

Astin's (1984) theory of student involvement especially pertains to students who take dual enrollment courses as part of cohorts that attend classes on college campuses and are involved in the college experience. Astin argued that students who are involved in the college experience will be more likely to persist to degree completion. The present study was conducted to determine how dual enrollment courses, and the college involvement that comes with taking

dual enrollment courses, helps students persist to a degree. Atherton (2014) found that first-generation college students were significantly more likely to be less academically prepared for college than their peers who did not complete dual enrollment coursework. Research needs to be done on first-generation Appalachian college student experiences while taking dual enrollment courses and the support available to them while they are taking courses.

Situation to Self

I am a dual enrollment instructor from Appalachia. I am not a first-generation college student because my father obtained an associate's degree, but I deal with first-generation students daily. I only took three dual enrollment courses in high school, but I can remember not knowing how to deal with the stress and pressure that came with the extra coursework I was taking. My father's college experience allowed him to provide me guidance while taking the courses I did, and if it was not for this guidance, I would have been lost in the college process.

Throughout my teaching career, I have noticed that many of the students that struggle with dual enrollment coursework appear to be the students whose parents did not attend college. For example, through conversations with former dual enrollment students who have gone on to college or chosen to not to continue their college careers beyond high school graduation, I have learned that students' experiences with dual enrollment are not always positive. Some students have told me that they believed taking dual enrollment courses was a great decision, while others have told me that they wish they had never taken a dual enrollment course. It appears, through my conversations with these students, that many of the students who wish they had never taken dual enrollment courses were first-generation students. Students who have expressed regret over taking dual enrollment courses believed they were not adequately prepared for the stress and

workload of dual enrollment courses and were not being effectively supported by the school they attended.

My motivation for conducting the study was to assist students who struggle with dual enrollment coursework and suffer negative consequences because of their experiences in dual enrollment. I view dual enrollment as a positive experience for all students who plan to go to college, but I wanted to know why some students do not perceive their dual enrollment as a positive experience. From a philosophical perspective, my study utilized an epistemological assumption because I attempted to get as close as possible to the subjects being researched (Creswell, 2013). I also approached the study from a social constructivist perspective, which involves attempting to find meaning in a situation by examining the experiences of others, and that is what I attempted to do through this research (Creswell, 2013). The following philosophical assumptions drove the research. Ontologically, I obtained the input from as many students, teachers, principals, counselors, and program administrators as possible to develop usable themes in the findings of the study. From an axiological perspective, I acknowledged that I have some biases about what I perceived to be the benefits and drawbacks of dual enrollment for these students. Epistemologically, I attempted to remove this bias by striving to remove my personal feelings on dual enrollment and what I preconceived student experiences to be while taking dual enrollment courses, to the best of my ability, during this process.

Problem Statement

There is a gap in research giving voice to first-generation Appalachian college students who have taken dual enrollment cohort courses. Recent economic conditions have caused many in the Appalachian region to shift away from relying on unskilled manual labor jobs in coal-related industries after graduation to seeking secondary educational opportunities, and then using

this education to either move away from the Appalachian region or contribute to the future economic development of that region (Wright, 2012).

Many students in the Appalachian region are of low SES, and many socioeconomically disadvantaged students who take dual enrollment courses in high school are more likely to go on to attend college and complete degree programs than are those who do not take those courses (Talyor, 2015). Studies have also shown that dual enrollment courses increase student grade point averages (GPAs) and performance in college (Allen & Dadgar, 2012; An, 2015; K. L. Hughes, 2010). However, Kanny (2015) found both benefits and drawbacks when students took dual enrollment courses. Research into the dual-enrollment challenges of first-generation Appalachian college students can help schools develop programs to adequately support the unique needs of these students and encourage more dual enrollment participation in the area to support the shifting culture and economic needs of the rural Appalachian region. Therefore, the problem of this holistic single-case study was first-generation Appalachian college student experiences in dual enrollment in Southwest Virginia.

Purpose Statement

The purpose of this holistic single-case study was to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia. In this research, dual enrollment was generally defined as the act of taking college classes while still enrolled in high school. First-generation students were defined as students whose parents did not attend college (Atherton, 2014; Hoffman, 2012). The theories guiding the current study were Tinto's (1982) theory of college student retention and Astin's (1984) theory of student involvement as they relate to the retention and student involvement of first-generation Appalachian college students who have taken dual enrollment courses.

Significance of the Study

The study is empirically significant because it adds to the literature on dual enrollment programs. This study also aligns with regional studies and program studies conducted by An and Taylor (2015), Crouse and Allen (2014), Allen and Dadgar (2012), Ganzert (2014), and An (2015), who found that dual enrollment programs benefitted a wide variety of students, but also presented some students with a unique set of problems. The current study additionally contributed to the literature on Appalachia, similar to the studies of Wright (2012), by examining the experiences of the current generation of first-generation college students. This study is also empirically significant because it addressed An's (2015) position that more research is needed regarding the impact of dual enrollment courses on student preparedness for college.

This study is theoretically significant because it aligns with Tinto's (1982) theory of college retention and Astin's (1994) theory of student involvement. The current study results are relevant to first-generation college students taking dual enrollment courses, dual enrollment instructors, high school principals, high school guidance counselors, and dual enrollment program administrators from the Appalachian region because it was an examination of student experiences, which can provide beneficial data for all parties to utilize in the future.

Furthermore, results of this study have a practical application because the findings should benefit students, counselors, and dual enrollment personnel at the college level in the Appalachian region by providing them with a framework within which they can develop programs to support their first-generation college students. Finally, school counselors and college program administrators can benefit from the findings of this study because it included the voices of those who have been impacted by the phenomenon of the experiences of first-generation Appalachian students taking dual enrollment classes. The examination of student

experiences while taking dual enrollment courses illustrates some of the challenges and benefits the students experienced while taking these courses. School counselors and program administrators can use the feedback from the individuals obtained during the course of this study to design program modifications and supports for the first-generation students involved.

Research Questions

This holistic single-case study of the dual enrollment experiences of first-generation Appalachian college students in Southwest Virginia was guided by a central research question and three subquestions

Central Research Question

What are student, teacher, and administrator descriptions of the challenges faced by first generation college students taking dual enrollment courses in Southwest Virginia?

Young et al. (2014) determined that Appalachian students complete college degrees much less frequently than students who have not taken dual enrollment courses, but dual enrollment is a major determining factor in college success; therefore, this research question was used to understand the experiences of Appalachian students in dual enrollment courses.

Research Subquestions (SQ)

SQ1. What are student, teacher, and administrator perceptions of the ways in which Southwest Virginia's dual enrollment programs impact college degree completion for first-generation students and retention after those students go to college?

An (2015) asserted that research needed to be done to determine how dual enrollment courses prepared students for college. Bryant and Nicolas (2011) determined that first-generation college students would experience gains in college retention rates by tracking, along with individual or group assistance throughout the high school process. First-generation students

from the Appalachian region have also been shown to have special challenges when they go on to college, thus research needs to be done to see what interventions could assist them in high school to prepare them for these challenges (Bradbury & Mather, 2009).

SQ2. What are student, teacher, and administrator perceptions of the ways in which Southwest Virginia's dual enrollment programs impact student college involvement?

Astin (1984) found that the student learning of a program is determined largely by the level of student involvement in the program. Students taking dual enrollment courses increases college involvement because of immersion in the college atmosphere. Dare and Nowicki (2015) demonstrated that one of the benefits students experience from dual enrollment courses is the exposure to the college environment. Research needs to be done to see to what extent the dual enrollment programs in Southwest Virginia increase college involvement.

SQ3. What are student, teacher, and administrator perceptions of the ways in which Southwest Virginia's dual enrollment programs impact student involvement and college degree completion for first-generation Appalachian college students?

Kanny (2015) stated that there were many drawbacks to dual enrollment participation; therefore, this subquestion was aimed to determine what those drawbacks were for the participants. Astin (1984) determined that college student involvement increases student degree completion, so SQ3 was aimed to determine how the first-generation students in the Appalachian region are being impacted by dual enrollment programs.

Definitions

1. *Central Appalachia*—Central Appalachia is the area of Appalachia that contains Virginia, Kentucky, and West Virginia (Wright, 2012).

2. *College readiness*–College readiness is the measure of which a student is prepared for college in the areas of knowledge, self-efficacy, motivation, academic skills, discipline, and aspirations (Arnold, Lu, & Armstrong, 2012).
3. *Concurrent enrollment*–Concurrent enrollment is the practice of students taking college coursework at a high school from a teacher with the credentials to teach a college course (Hanson, Prusha, & Iverson, 2015)
4. *Dual enrollment courses*–Dual enrollment courses are courses where students earn college credit while in high school, either via courses at the high school, on a college campus, or in an online environment (Hoffman, 2012).
5. *First-generation college students*–First-generation college students are students who had neither parent complete a college degree (An, 2012).
6. *Retention*–Retention is the ability of a college to keep a student enrolled in classes until they complete a degree (Tinto, 2006).
7. *Socioeconomic status (SES)*–SES is the financial wellbeing of the student and his or her family (Eshelman & Rottinghaus, 2015).
8. *Student involvement*–Student involvement is the amount of physical and mental energy that a student devotes to the college experience (Astin, 1984).
9. *Underserved student populations*–Underserved student populations include students from ethnic minority families, families in which no one has attended college in the past, and low SES (Taylor, 2015).

Summary

The purpose of this holistic single-case study was to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest

Virginia. It is important to understand the experiences of first-generation Appalachian college students who have taken dual enrollment courses. Since its inception in the 1970s, dual enrollment has become a crucial part of the education system in the areas of college readiness (Young et al., 2014). The Appalachian region has some of the lowest college completion rates in the nation, and dual enrollment can help students in the area persist to completion of college degrees (Armstrong & Zaback, 2014; D'Amico, Morgan, Robertson, & Rivers, 2013). The principle that dual enrollment will benefit Southwest Virginia and the Appalachian region is grounded in Tinto's (2006) theory of student retention and Astin's (1984) theory of student involvement. As a dual enrollment instructor in the Appalachian region, my motivation for the current study was to assist students who struggle with dual enrollment coursework and suffer negative consequences because of their experiences in dual enrollment.

CHAPTER TWO: LITERATURE REVIEW

Overview

Chapter Two begins with the theoretical background for this study into first-generation Appalachian college students taking dual enrollment courses. This chapter also includes an examination of how the issue of first-generation Appalachian students taking dual enrollment courses relates to Tinto's (1982) theory of retention and Astin's (1984) theory of student involvement. The chapter concludes with a review of related literature on first-generation Appalachian college students taking dual enrollment courses. The Appalachian region, dual enrollment courses, first-generation college students, the benefits and limitations of dual enrollment courses, and the role of dual enrollment in Appalachia are all examined.

Theoretical Framework

Two theories provide the framework for this study on understanding first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia. Tinto's (1982) theory of college retention and Astin's (1984) theory of student involvement were both used to guide this study. Both theories provided a framework for why this study of first-generation Appalachian college students participating in dual enrollment programs is important.

Theory of College Retention

The first theory used to guide this study was Tinto's (1975) theory of college retention. Tinto (2006) developed the theory of retention because colleges were unable to utilize previous retention data to aid in gains in student retention. Tinto (2006) stated, "It is one thing to understand why students leave; it is another thing know what institutions can do to help students succeed" (p. 6). Dual enrollment courses are offered to provide students opportunities to take

college coursework early and remain in college to persist to a degree, thus the theory of student retention applies to dual enrollment courses. Another of the guiding principles of this theory of retention is that colleges should commit resources and focus on developing programs to help students stay in college (Tinto, 2006). The theory of student retention was important in this study because dual enrollment programs are designed by colleges to help students prepare for college and become more likely to persist to completion.

Another key aspect of Tinto's (2006) theory of retention as it related to this study is how colleges serve low-income students. Tinto (2006) noted, "For too many low-income students, access to higher education has become a revolving door, the promise of a Bachelor's degree unfulfilled" (p. 12). Many of the low-income students in the Appalachian region are subject to the same fate of beginning college programs, but not completing them. Since Appalachian students have been academically underprepared for college in the past, research needs to be done on how remedial college education relates to the college retention of low-income students (Tinto, 2006). This idea of retention relates to this study because many students in the rural Appalachian region are classified as low-income. Remedial programs and retention also relate to this study because dual enrollment programs are supposed to be preparatory programs that eliminate the need for remediation once they arrive at college.

Tinto's (2006) theory that low-income students are less likely to complete college than are high-income students also relates to the present study. In society, access to higher education for low-income students has increased and caused the gap between high-income and low-income students who attend college to decrease; however, there is still a substantial gap between the completion rate of a 4-year degree for these low-income and high-income students (Tinto, 2006). Dual enrollment is one of the ways that schools can attempt to close the degree completion gap

between low-income and high-income students. The current study was framed using Tinto's (2006) theory on retention because of the degree completion gap in the Appalachian area, and research needs to be done to determine how dual enrollment programs in that area help or hinder those students.

Finally, Tinto's (2006) theory of retention related to the present study because of the implications of the study on college persistence for students. The theory of retention suggests that colleges should focus on finding ways to provide opportunities for students to attend and persist to degree completion in college. A key aspect of this study was the need to examine a dual enrollment program to see how it meets the needs of first-generation Appalachian college students. The study of first-generation college students relates to Tinto's (2006) theory of retention because dual enrollment has been demonstrated to assist students, especially first-generation and low-income students, with college persistence (An, 2015; An & Taylor, 2015; Crouse & Allen, 2014).

Theory of Student Involvement

Another theory that relates to this study was Astin's (1984) theory of student engagement in higher education. Alexander Astin developed the theory of student engagement as a faculty member at the University of California in Los Angeles. Astin defined involvement as "physical and psychological energy that the student devotes to the academic experience" (p. 518). Being involved impacts college persistence, and a student who is involved spends much of his or her time on the college campus, joins and participates in student organizations, and has frequent interactions with individuals at the college, both students and faculty (Astin, 1984). The theory of student involvement relates to the current study of first-generation Appalachian students in a dual enrollment program because dual enrollment courses are a form of college involvement.

The theory of student involvement relates to this study through two of Astin's (1984) "five basic postulates" of student involvement theory (p. 519). The first applicable postulate is the concept that "the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program" (Astin, 1984, p. 519). A goal of this study was to increase the involvement and participation of first-generation Appalachian students in dual enrollment programs, through examination of the quality of the student involvement in these programs. By improving and including the voices of students involved in dual enrollment programs, students will be more likely to experience learning and personal growth in the dual enrollment program. Another of the postulates related to dual enrollment programs is "the effectiveness of any educational policy or practice directly related to the capacity of that policy or practice to increase student involvement" (Astin, 1984, p. 519). Some of the goals of this current study were to examine how rural Appalachian dual enrollment programs serve first-generation students and to increase the involvement of students in dual enrollment courses in hopes of increasing their success and improving their experiences.

Another way the theory of student involvement relates to first-generation students taking dual enrollment courses, was the idea that taking dual enrollment courses consists of students taking part in the college experience, which can result in college persistence. One key element of the theory of involvement is that when students are involved in the college experience, then they will be more likely to persist to a degree. This study was aimed to examine ways first-generation Appalachian students are currently involved in dual enrollment programs and how first-generation Appalachian students can become more involved in dual enrollment programs in the future.

Another of the elements of the student involvement theory that impacts this study was how faculty members of both the high schools and colleges play a role in student involvement in the dual enrollment program. The student involvement theory suggests that faculty should focus on student motivation and involvement as a means of retention (Astin, 1984). This study was focused on how faculty members of dual enrollment programs can increase the student motivation and involvement of first-generation students in dual enrollment programs. Another important aspect of the student involvement theory that relates to student retention is that student support services play an important role in keeping students involved and supported in the college process (Astin, 1984). One of the main features of this study was to determine what supports are currently in place for first-generation Appalachian college students and what supports students describe that need to be in place.

Related Literature

Several researchers have examined elements that were also included in this study (An, 2013, 2015; Cowan & Goldhaber, 2015; Ganzert, 2014; Hoffman, 2012; Kanny, 2015; Karp, 2012). There have also been studies on education and the Appalachian culture, dual enrollment programs, and first-generation college students (An, 2012; Gibbons & Borders, 2010; Gibbons Rhinehart, & Hardin, 2016; Hoffman, 2012; Wright, 2012). These studies informed the need for this present study.

Appalachian Culture and Education

The physical location and geographic features of the Appalachian Mountains have isolated the region from the rest of the country (Elam, 2002). This isolation has created a culture within the Appalachian region that has resulted in an insider versus outsider mentality. Consequently, the education system has been shaped by communal bonds and hard work, but

education has been mostly shaped by poverty for generations (Elam, 2002). Educational opportunities in the Appalachian region have also traditionally been viewed as less important than earning income to support one's family (Tang & Russ, 2007). Because of this perception, individuals in the past have chosen to sacrifice the possibility of a college education in favor of immediately beginning careers in the manual labor jobs readily available in the coalfields of Southwest Virginia and Eastern Kentucky (Tang & Russ, 2007).

The Appalachian region, however, is changing; the coal industry has been steadily declining since 2007. In 2000, there were nearly 18,000 coal mining jobs in Virginia and Kentucky, largely concentrated in far Southwest Virginia and Eastern Kentucky (Hodge, 2016). In 2015, however, there were only 9,000 coal production jobs in those same states (Hodge, 2016). As a result, this steady decline has caused a major economic and cultural shift in these coal-dependent communities. According to Pulley (2014), "In a rural area, when the local economy is dependent upon a natural resource, such as coal, and either the manufacturers leave or the demand for the natural resources goes away, this can devastate a rural area" (p. 50). Many communities in rural Southwest Virginia and Eastern Kentucky have become devastated, and this devastation has left many of the young people searching for answers.

When the members of the previous generations were graduating high school, many of them had the option of forgoing a college education and going straight into coal-related jobs, but that option has all but disappeared for the current generation of high school and college students. Wright (2012) argued that population declines in rural areas may be causing distress for rural populations, but the pursuit of higher education can be one of the ways that the populations provide opportunities for future generations. Furthermore, higher education can be a pathway for rural communities to transition to new job opportunities and different economic

opportunities. Some lawmakers in Southwest Virginia are attempting to shape the future of the region by attracting jobs and training programs in the field of cybersecurity and drone technology industries (Bellows, 2017). Wright (2012) also asserted that education can provide the remaining members of a population a means to sustain themselves and remain within the local population, instead of providing them a way out of the community.

Economic programs are designed to bring job growth to rural areas to replace job losses from the coal industry. However, for the communities in the Appalachian Mountains to reinvent themselves, the inhabitants need to determine how to capitalize on their strengths and find some way to improve the economic industries that they have (Balesteir, 2016). In the Appalachian region, programs are being developed to retain students and provide them with education and career training that is not coal-dependent. Research into retention programs in the rural Appalachian region has demonstrated that these programs need to be tailored to meet the specific needs of the community (Hlinka, 2017). In the Appalachian region, individuals who have continued their education can provide a model for students to follow as they go forward. This modeling is one of the ways that students can develop the desire and need to go on to continue into higher education (Rasheed Ali & Saunders, 2008). In the Appalachian region, and especially in the households of first-generation students, the lack of role models for students has caused a “negative feedback loop” that causes students to lose interest in higher education (Rasheed Ali & Saunders, 2008). Dual enrollment programs can provide role models and support systems for students who would not have role models otherwise. Research needs to be done to determine what role dual enrollment courses and programs can play in the future of the education of the students from this area.

First-Generation College Students

Because of the economic and cultural shift occurring in Appalachia, many of the students from that region are first-generation college students. First-generation college students are “the first in their family to pursue postsecondary education” (Gibbon et al., 2016, p. 1). These students are part of a population that suffers from unique challenges in high school and when attempting to choose and enroll in a college. For example, a study of first-generation college students who enrolled in 4-year colleges revealed 74.6% of those students did not finish a degree within 4 years (DeAngelo, Franke, Hurtado, Pryor, & Tran, 2011).

The high school environment can often be a challenging environment for first-generation students who are seeking an opportunity to go to college. Therefore, these students may seek help from teachers, parents, and counselors. Unfortunately, not all teachers and counselors are trained in meeting the needs of first-generation college students. In a study examining the effects of the American School Counselor Association model of counselor training, Bryant and Nicolas (2011) demonstrated that one effective way of assisting first-generation college students was tracking them, focusing on data that were relevant to helping students succeed in college to determine which students needed the most help. Bryant and Nicolas (2011) also observed that small-group or large-group interventions can be effective when targeting and assisting first-generation college students and their parents.

First-generation students from the Appalachian region were found to have significant challenges while attending college (Bradbury & Mather, 2009). These challenges included loneliness, a lack of free time, and a lack of resource management skills, which colleges may not be equipped to help these students overcome (Bradbury & Mather, 2009). Also, first-generation students have experienced a feeling of disconnect from their families and found it difficult to be

able to discuss their experiences at college with their family members who had not attended college (Gibbons et. al, 2016). Some of these students have even reported experiencing achievement guilt, similar to survivor guilt, because they were experiencing academic opportunities that their parents never had (Pratt, Harwood, Cavazos, & Ditzfeld, 2017). First-generation college students have also reported that they struggled with the transition to college because they lacked the social capital gained from a parent attending college (Atherton, 2014). These first-generation students have also reported that their college experience was impeded because they were unable to obtain college-related information from their parents and were unable to discern where to obtain the information on their own (Gibbons et al., 2016).

Additionally, first-generation students have reported they would have benefited from a mentor or mentorship program (Gibbons et al., 2016). Mentorship programs have been demonstrated to assist first-generation students with the transition to college (Ware & Ramos, 2013). Students who had strong familial support systems were able to transition well to college, but the ones who did not have strong family support required other support systems at the college level to be successful (Wang, 2014). However, there is not a plateau that students reach in which they are automatically considered college-ready; college readiness is a process that is ongoing and requires ongoing support, especially when students are first-generation college students (Schademan & Thompson, 2016). Research needs to be done to determine how dual enrollment programs in the Appalachian area serve the specific needs of these students.

Dual Enrollment

The practice of enrolling students in college courses began in the 1970s, but it began to take its current form in 2001 after the passage of the NCLB (Hoffman, 2012). Dual enrollment began as an opportunity for advanced students with superior grades to take college courses, but

the emphasis on increasing students' college-readiness when they graduated high school has highlighted the importance of dual enrollment in the current education system (Hoffman, 2012). Initially, the first state to implement a dual enrollment program was Minnesota (Nelson & Waltz, 2017). Minnesota's aim was to provide more academic opportunities for high school juniors and seniors, while also promoting a more rigorous curriculum for these advanced students (Nelson & Waltz, 2017). Eventually, other states adopted statewide dual enrollment programs, and now all states have dual enrollment programs except for Alaska (Nelson & Waltz, 2017).

Dual enrollment is beneficial for students because it allows them to gain college experience and credit while still in high school, which has been researched through several studies. An and Taylor (2015) found that "dual enrollment is arguably in the best interest of both high schools and colleges, because it is likely to improve high schools' post-graduation outcomes and colleges' retention and graduation outcomes" (p. 19). High schools that have dual enrollment programs experience benefits in student achievement and student acceptance to college (Dutkowsky, Evensky, & Edmonds, 2009). Additionally, as more students are entering college with math and English skills that are at a remedial level, dual enrollment courses have been shown to reduce the need for remediation (Abraham, Slate, Saxon, & Barnes, 2014). While dual enrollment courses were originally designed to allow the more advanced students exposure to the college environment and coursework, they now also serve as a means of remediation and college preparation for all students (Giani et al., 2014). Dual enrollment programs have also been demonstrated to predict subsequent postsecondary enrollment on the same level as GPA and other academic background factors (Lichtenberger, Whitt, Blankenberger, & Franklin, 2014). Many schools offer advanced placement (AP) classes to also prepare students for college coursework, but AP courses are often not offered in small rural school districts, and when the

courses are offered they often do not match true college-level coursework (Klopfenstein & Lively, 2012).

An and Taylor (2015) found that students who took part in dual enrollment programs displayed more college readiness after 1 year of college than the students who did not complete dual enrollment courses. It can be argued that these numbers are overestimated because only advanced students take dual enrollment courses, but Allen and Dadgar (2012) demonstrated that dual enrollment contributed to a higher college GPA, even when controlling for other variables, such as high school grades and test performance. Furthermore, An and Taylor also found dual enrollment to be more beneficial for students who were of low SES than those of high SES. Since many communities of rural Appalachia are economically distressed, dual enrollment has a special benefit for the students of that region.

There are many other benefits of dual enrollment programs for all students. For instance, dual enrollment has been shown to give “psychological reassurance to high school students that they have the ability to make the transition to college” (Crouse & Allen, 2014, p. 495). Students who take dual enrollment classes were reported to be more likely to attend college immediately after high school and not delay college enrollment (Cowan & Goldhaber, 2015). Also, Crouse and Allen (2014) found that students who took dual enrollment courses earned better grades than did traditional enrollment students in Iowa community college courses. These findings demonstrate that the students in Iowa schools benefitted from the diverse dual enrollment course offerings. Additionally, Illinois students who took dual enrollment courses were reported to complete bachelor’s degrees at a rate of 28%, while their peers who did not complete dual enrollment courses completed bachelor’s degrees at 19% (Blankenberger, Lichtenberger, & Witt, 2017). In a study on dual enrollment participation in North Carolina, Ganzert (2014) found that

students who took dual enrollment courses in high school maintained higher GPAs in their first year of college than those students who did not take dual enrollment courses. Students who took dual enrollment courses in North Carolina also graduated at higher rates than students who did not take dual enrollment courses (Ganzert, 2014).

Dual enrollment courses not only provide challenging coursework for advanced students, but they also provide a way for students and schools to avoid the negative effects of becoming disinterested during their senior year (Lile, Ottusch, Jones, & Richards, 2017). This phenomenon, commonly referred to as “senioritis,” occurs when high school students become disengaged and uninterested during their senior year of high school (Heller, 2001). This disengagement and loss of interest can sometimes result in students failing classes and negatively impacting their futures (Heller, 2001). The U.S. Department of Education formed a commission on making the senior year of high school a more meaningful experience, and the commission found that one of the ways to achieve this was to make the senior year more meaningful to the future of the student (MacGregor, 2007). Dual enrollment helped students and school systems mitigate the impact of senior disengagement by providing them challenging coursework that students viewed as being more meaningful and that high school seniors stated would make them more engaged during their senior year (MacGregor, 2007).

A comprehensive study of dual enrollment programs indicated that dual enrollment courses are being used to prepare college-ready students for the stresses of college, but recently there has been a push to attract additional lower and middle-performing students to increase college access to all (T. R. Bailey & Karp, 2003). Dual enrollment programs also prepare students for the challenges of college, demonstrate the basic skills students will need in college, expose students who would not normally be considered college-bound to a college program,

improve student motivation through higher expectations, and lower the cost of college for students (T. R. Bailey & Karp, 2003). Additionally, T. R. Bailey and Karp (2003) also indicated that dual enrollment programs are becoming more necessary because

recent state and local fiscal crises have given added impetus to a strategy that appears to be able to telescope high school and college and thereby save money for students, state governments, local governments, or some combination of all three. (p. 20)

Dual enrollment programs will play a vital role in college access and affordability of college for the coming generation, so programs need to be formulated in such a way that they are providing optimal benefits for students and are not causing them undue harm once they reach college.

Students obtain many additional benefits by taking dual enrollment courses. One benefit of taking dual enrollment courses is the completion of college credits early, at a reduced rate, which can lead to early college graduation (Crouse & Allen, 2014). Moreover, taking dual enrollment classes has been shown to have a positive impact on student access to and success in college (Karp, 2015). While taking dual enrollment courses, students are exposed to the process of going to college, which includes the expectations, the behaviors, and the interpersonal interactions included in the college experience (Karp, 2012). Consequently, dual enrollment programs provide students an opportunity to not only earn college credit while in high school, but they also provide students with the opportunity to take part in the experience of college before they are attending college as full-time students. Students who are able to take on the role of college student early often benefit from the exposure to the college environment and are generally successful once they go on to a 4-year university (Karp, 2012). Therefore, the goal of dual enrollment programs is not only to provide credit to high school students, but to also help students be successful once they attend college.

Students have reported that they experienced benefits from taking dual enrollment courses by being exposed to the life of a college student, taking more challenging courses, having a wider selection of coursework to choose from, and being able to take courses that interested them (Dare & Nowicki, 2015). Thus, dual enrollment courses not only help students gain college credit while in high school, but the students who take dual enrollment courses have been shown to also attain more credits once they attend a college or university (Allen & Dadgar, 2012). Additionally, dual enrollment has also been shown to reduce the rate of remediation required by students when they enroll in college as freshmen (Crouse & Allen, 2014). It can be argued that the benefits of dual enrollment are just typical of the kind of academic student targeted by dual enrollment courses in high school due to their motivation and engagement. However, An (2015) concluded that dual enrollment still benefitted students, even when considering factors such as student motivation and engagement. Dual enrollment benefits college-ready students, but those benefits are realized by all students who take place in the program, regardless of college-readiness. Because of these benefits, high schools and colleges that offer dual enrollment programs are viewed as providing a valuable resource to the community, while incurring little cost and requiring little effort (Helfgot, 2001). More research needs to be done to determine the benefits and drawbacks dual enrollment programs have for first-generation Appalachian college students, and how to minimize the drawbacks and emphasize the benefits.

High School and College On-Campus Dual Enrollment Courses

Dual enrollment courses are offered in different forms in various forms in schools. For example, some courses are offered by high school teachers who are qualified to teach dual enrollment courses, some are taken on college campuses, while others are taken as online courses

in a distance-learning environment. Each of these course delivery methods are different, and each has its own set of benefits and challenges.

A popular method of dual enrollment course delivery is for high schools to offer college courses on their high school campuses by high school instructors who are credentialed to teach college courses. To teach dual enrollment courses, high school instructors must have a master's degree with at least 18 hours of postgraduate credit in the subject offered (Khazem & Khazem, 2015). However, some college instructors believe the dual enrollment courses on high school campuses being offered do not match the academic quality of high school courses (Ferguson, Baker, & Burnett, 2015). Some colleges have even stopped accepting dual enrollment credits if they were also used to satisfy high school credit requirements (Dodge, 2012).

Ferguson et al. (2015) questioned college professors on their perceptions of dual enrollment programs and students to examine these perceptions. Even though some professors reported believing that dual enrollment courses were not of the same difficulty, Ferguson et al. (2015) found that the courses taught on high school campuses were at the same level of difficulty, if not more difficult, compared the same course offered on a college campus. Therefore, students who take dual enrollment courses are receiving an equal, if not more difficult education than students who take standard college classes after high school. One of the most important factors that determines whether a dual enrollment course played a role in a student's future success was course rigor (Whissemore, 2012). Jones (2017) asserted that colleges should provide their best instructors for dual enrollment courses to ensure that proper rigor is achieved in dual enrollment courses to negate the criticism of improper academic quality. Therefore, students who took dual enrollment courses on a high school campus may not have gotten identical benefits to students taking other methods of dual enrollment, but they still reported they

were more comfortable when they eventually went to college and had a better understanding of the college process.

Another method of dual enrollment instruction delivery is for students to participate in dual enrollment courses on college campuses. Instructors teach cohorts of high school students on a college campus, with community college faculty delivering college-level courses to high school students (Grubb, Scott, & Good, 2016). Cohort programs on college campuses usually consist of groups of students from the same high school taking classes together on a college campus, either with other high school students or blended with traditional community college students (Cassidy, Keating, & Young, 2010). This helps eliminate the questions of course quality and provides the college administration with more oversight of the students (K. L. Hughes & Edwards, 2012). However, many college instructors are not necessarily familiar with the unique learning needs of high school students, which results in these instructors experiencing challenges with student engagement and supporting students' needs (K. L. Hughes & Edwards, 2012). Hoffman and Voloch (2012) argued that these courses should not be offered to high school students on college campuses because the original courses were not designed for high school students or the high school environment. Because of this argument, there needs to be a study of college-level learning and how the learning of high school students can fit into the college environment (Hoffman & Voloch, 2012). Consequently, the issue becomes how the developmental courses these dual enrollment students take fit into the college landscape and whether these students should be scored and evaluated as rigorously as adult college students or as the developing high school students that they are (Hoffman & Voloch, 2012). Therefore, the setting in which dual enrollment courses are offered is an important consideration for the support

systems available to the students. Research needs to be done to determine how to provide support for first-generation students who are enrolled in each type of dual enrollment program.

Dual Enrollment Courses and First-Generation Students

The unique needs of first-generation students mean they need guidance through the dual enrollment and the college matriculation process. One way that first-generation students can begin to get the college experience while still in high school is through dual enrollment or dual credit courses. These courses do not always provide a true college experience, but they can still provide benefits for first-generation college students. Dual enrollment courses can benefit all students, but they can especially benefit first-generation college students. A group of K-12 educators stated that dual enrollment was especially beneficial to first-generation students and taking dual enrollment classes helped underrepresented groups experience that they can complete college-level work while building their academic confidence when asked what benefits dual enrollment provided for students (Kilgore & Wagner, 2017). Ndiaye and Wolfe (2016) also determined that early college programs and dual enrollment classes helped first-generation students graduate high school and persist to college more often than their peers who were first-generation students who did not take dual enrollment courses.

Moreover, An (2013) found a positive relationship between students taking dual enrollment courses and then going on to earn a college degree. Also, students who took dual enrollment courses in high school were found to be nearly twice as likely to go to college and complete a degree as other students, even when controlling for economic variables (Adams, 2012). Dual enrollment also demonstrates to first-generation students that they are capable of completing postsecondary coursework (Vargas, Hooker, & Gerwin, 2017). Students who are first-generation students and of a low SES have demonstrated success in terms of grades and test

scores, even when they entered the program with lower GPAs and test scores (Roach, Garmaz Vargas, & David, 2015). First-generation students have also been shown to benefit more from taking dual enrollment courses than do students whose parents went to college (An, 2013).

However, the experiences of first-generation students in dual enrollment courses are not necessarily identical to the experiences of students with college-educated parents. An (2013) discovered that “participation differences in dual enrollment account for almost none of the attainment gap between first-generation students and students with college-educated parents” (p. 69). However, while there were few differences in the attainment gap, there was a difference in the level of college preparedness of the first-generation students. In the study, students all left the program at different levels of college preparedness because they entered the program at different levels of college preparedness, and the program alone was not enough to make up the differences in those levels (An, 2013). For that reason, research needs to be done on how dual enrollment programs with first-generation students deal with this issue and how to close the gap in the level of college preparedness of first-generation students with college-educated parents within dual enrollment programs.

First-generation college students, especially in the Appalachian region, are often from lower-income families and they are less likely to achieve the educational goals than the students whose parents attended college (Gibbons et al., 2016). These students have also been found to be more likely to have issues adjusting to college and feel unprepared for the college coursework and atmosphere (Gibbons et al., 2016). The students who are most unprepared for college are students of low SES, minority students, and first-generation college students (A. N. Hughes & Gibbons, 2018). Also, the lack of parental knowledge about the college environment and academics has been reported as a barrier for first-generation college students (Irlbeck, Adams,

Akers, Burris, & Jones, 2014). First-generation college students reported difficulties with many aspects of college life. Even classifying students as first-generation students can cause social barriers for them on college campuses (Wildhagen, 2015). First-generation college students were found to have struggled with managing time and lack the study skills to adapt to the rigorous coursework and material that college presented (Gibbons et al., 2016). Another of the challenges present for first-generation students is their inability to adapt to the atmosphere of independence perpetrated by colleges and function independently in the college environment (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). Stephens et al. (2012) found that first-generation college students benefited from more interdependent college programs that allowed first-generation students to interact and receive support from others, rather than functioning independently.

One aspect of how first-generation students fare in dual enrollment programs that needs to be explored is the level of comfortability and stress that these students feel while navigating the process of taking dual enrollment courses. Not only does this comfortability and stress level impact how students react to taking dual enrollment courses, but they can also act as a barrier for students to take these early college courses. Mansell and Justice (2014) found that many of the students who come from homes in which a high school degree is the highest degree obtained by their parents are more likely to be intimidated by being the first individual in their family to attend college. Research needs to be done to determine what teachers, counselors, and administrators can do to make the prospect of taking dual enrollment courses and the action of taking the courses for first-generation students less intimidating and make these students more comfortable.

Demographics and Dual Enrollment

One of the main features of a dual enrollment program is that the program should provide access to college credit and college experience to all students, but some student groups choose not to participate or do not get the same benefits as others. Johnson and Brophy (2006) conducted a study on a rural school district to determine the factors that influenced student participation in dual enrollment courses. Johnson and Brophy found that rural students took dual enrollment courses to be provided with the opportunity to try out college and signal to themselves whether they were college-ready. However, Johnson and Brophy found that while dual enrollment was supposed to bridge the gap between income levels in students and provide, mostly free college education to all students, there was a disproportionate number of students among the social classes of those who participated. The researchers also discovered that, even if dual enrollment courses were widely available to low-income students, most of the students who participated in dual enrollment courses were from higher-income families (Johnson & Brophy, 2006). Johnson and Brophy postulated that this variance between social classes was because of the perceived value of the social capital provided to the different socioeconomic classes that went along with participating in dual enrollment courses. Students who came from lower socioeconomic classes were less likely to take dual enrollment classes because they were unable to recognize, or did not value, the social capital that taking the courses provided (Johnson & Brophy, 2006).

An (2013) researched the impact of dual enrollment programs on students of low-income students, or low SES, as opposed to students of middle class or affluent family backgrounds. An (2013) determined “approximately 26% of college students from the bottom quartile of the income distribution attained a college degree by age 25 as compared to 59% of college students

from the top quartile of the income distribution” (p. 59). In agreement with the research by Johnson and Brophy (2006), An (2013) also found that students who were from higher SES were more likely to participate in dual enrollment than students of low SES. However, An (2013) uncovered some benefits for the students of low SES who took dual enrollment courses.

Dual enrollment courses helped prepare all students for college, but they helped low SES students most of all (An, 2013). While there are fewer low SES students taking dual enrollment courses, the research indicates that these low SES students could benefit more from dual enrollment classes. Therefore, program policies and studies need to focus on encouraging students of low SES to take dual enrollment courses (An, 2013). However, school systems need to reach a solution and a means to shrink the inequality between the social classes in dual enrollment participation. Therefore, there needs to be an investigation into the impact of dual enrollment on students from predominantly low socioeconomic areas, such as is being done in this study.

Other factors such as race and gender also play a role in student decisions to take dual enrollment courses. Pretlow and Wathington (2014) examined the impact of Virginia Governor Mark Warner’s 2005 educational reforms which were aimed to utilize dual enrollment to increase college degree attainment. Pretlow and Wathington also examined the demographics to determine whether the plans implemented by the governor impacted all students equally. In the study, the researchers found disparities between the overall population of students and the makeup of the student groups of students participating in dual enrollment courses (Pretlow & Wathington, 2014). For instance, White and female students took more dual enrollment courses than any other subgroups, while all other population groups were underrepresented in dual

enrollment courses when compared to other students in their high school graduating class (Pretlow & Wathington, 2014).

In Virginia, the fastest growing social groups in the state are the groups who are the most underrepresented in dual enrollment courses (Pretlow & Wathington, 2014). Pretlow and Wathington (2014) also discovered a disparity between the number of students who were taking dual enrollment courses and matriculating on to college, identifying “almost 15% of dual enrolled students who did not matriculate” (p. 51). These findings indicate a need for greater participation from students of underserved demographic populations and SES; therefore, the current study was an investigation of the ways to better support some of these populations while taking dual enrollment courses.

Dual Enrollment Benefits in Appalachia

The primary goal of dual enrollment programs is to allow students to gain college credit while in high school, but there are also expansions that can be made to dual enrollment programs for different populations. Dual enrollment courses are especially beneficial for schools in rural communities because they allow small schools to expand curriculum and some federal funds have traditionally been available to allow schools to fund teacher education to teach dual enrollment courses (Stimpson, 2016). Dual enrollment also benefits high schools and community colleges because schools and colleges receive government funding for dual enrollment courses and colleges can boost their enrollment numbers with dual enrollment students (Stimpson, 2016).

Economically distressed regions, such as rural Appalachia, are searching for ways to equip their rising adults with new job opportunities and skills to combat the economic challenges that they face when they will graduate. In a study on the impact of dual enrollment on

economically distressed and nondistressed communities, D'Amico et al. (2013) discovered no difference in the college persistence of students who took dual enrollment courses when they compared the persistence rates of distressed and nondistressed populations, which could provide an opportunity for these distressed and nondistressed communities to enhance the quality of the local workforce.

While the cost of dual enrollment may be high for localities in the rural Appalachian region, the potential impact on the local economy in the future provides a compelling argument for expansion of dual enrollment programs despite the cost (Hansen, Jackson, McInelly, & Eggert, 2015; Stephenson, 2014). A dual enrollment program in Kentucky found that students experienced college courses at reduced costs, increased awareness of higher education, and higher student interest in college (Stephenson, 2014). In addition, Hansen et al. (2015) examined the writing of students in a history class and compared the writings of students that took college writing courses on campus to those who took dual credit courses and concluded that students who took dual credit courses in high school were similarly prepared for college writing as those students who took other precollege courses (Hansen et al., 2015). This finding is significant because they determined that the students who took dual enrollment were as equally prepared for college courses as students who took similar courses on campus.

Rodriguez, Hughes, and Belfield (2012) also conducted research on the benefits of dual enrollment on locations with ethnic minority students from economically depressed regions and determined the students who took dual enrollment courses had to take fewer remedial courses than students who did not take dual enrollment courses. However, the dual enrollment courses present in the study were provided through a program that had remedial support. Rodriguez et al. (2012) were successful in large part because the students were offered support and counseling

services from their schools in conjunction with their courses. Research needs to be done on the impact of dual enrollment courses on students in the Appalachian region to determine the impact of dual enrollment programs on students when they enter the local workforce.

School districts traditionally have criteria to determine which students can take dual enrollment courses, which eliminates the opportunity for some students to have access to credits and the help they will need in college. Most states have minimum GPA requirements for students to take dual enrollment programs, with Louisiana having the lowest GPA requirement of 2.0 on a 4.0 scale (Nelson & Waltz, 2017). Dual enrollment programs are generally also restricted to juniors and seniors, and only a few states provide exceptions for freshmen and sophomores once they have met certain requirements (Nelson & Waltz, 2017).

An and Taylor (2015) studied the potential benefits for the students who were not traditionally served by dual enrollment programs. Throughout this study An and Taylor determined that state policymakers should investigate the benefits of lowering the eligibility requirements to provide more opportunities for student dual enrollment participation to ensure that more students are college-ready. In a study done in an Oklahoma school district, lowering state-mandated requirements for students taking dual enrollment courses slightly and providing those students who would have missed the old standards with support provided the same benefits for all students, regardless of initial test score on the entrance exams (An & Taylor, 2015). Research supports using the passage of state standardized tests as an entrance exam for dual enrollment courses because these state tests predict success as well current tests (Kingston & Anderson, 2013). Additionally, dual enrollment also provides an opportunity for lower-achieving students to form realistic expectations of their college prospects and make college decisions accordingly (Lile et al., 2017). Dual enrollment, however, cannot consist of classes

that are less difficult versions of the college class offered at the community college campus because this could negatively impact the students (Pierce, 2017). Rather than lessening the requirements for admittance into dual enrollment programs, research needs to be done on how students in rural Appalachia could be better supported while taking dual enrollment courses and what supports could benefit first-generation college students taking dual enrollment courses.

Many of the students in the rural Appalachian region are the first members of the family to experience college, and they are not part of a tradition that includes college experience. Dual enrollment courses can make the transition to the college experience more viable for students who are experiencing college for the first time in their families. Pretlow and Patteson (2015) described the potential benefits of dual enrollment for these first-generation college students as an effective transition tool for many students other than the traditional high-achieving student. Many students who are first-generation college students can find themselves outside of the category of high-achieving students. Research needs to be done on how to make dual enrollment a more effective transition tool for these students in the rural Appalachian area.

Many of the students in the Appalachian region are of low-SES, and dual enrollment has a specific impact on low SES students. In a study of how dual enrollment impacts students of low SES, An (2013) found that dual enrollment aids in academic preparation for many different types of students, but especially benefits lower SES students. Ozmun (2013) found that dual enrollment programs were a positive influence on the college transition process for underserved populations. Jones (2014) also found that dual enrollment participation facilitated a more effective high school to college transition for students who were not classified as high-achieving. Research needs to be done to determine how dual enrollment programs in rural Appalachian areas impact low SES students.

Limitations of Dual Enrollment

While there has been much research into the overall positive impact of dual enrollment courses on the majority of students (An, 2013), there have also been some limitations uncovered that need to be researched as well, especially as they pertain to first-generation students. One of the first limitations of dual enrollment is that it negatively impacts some students. Students not only experience benefits from dual enrollment courses, but they also experience negative impacts as well (Kanny, 2015). Therefore, while certain students are experiencing the benefits of earning credit early, getting acclimated to the college atmosphere, and preparing for college-level coursework, they are simultaneously being negatively impacted in some instances. If students are ethnic minority or low SES students, need support systems not offered by high schools, or do not perform well in dual enrollment courses, they may be negatively impacted by dual enrollment courses.

Research indicates that dual enrollment programs provide benefits to minority students; however, ethnic minority students do not receive equitable benefits from dual enrollment programs when compared to non-ethnic minority students (Nelson & Waltz, 2017). Therefore, both the negative and positive impacts of dual enrollment programs on students should be studied to influence program and policy decisions. Additionally, since dual enrollment provides students with both positive and negative experiences, high schools and colleges must work together to maximize the benefits while minimizing the drawbacks (Kanny, 2015). It is essential to minimize the negative experiences of first-generation college students in rural Appalachia.

One of the major impediments to dual enrollment coursework for many of the students of low SES is the inability to afford dual enrollment classes. Dual enrollment courses are often offered at a reduced cost compared to the costs students would pay for the same course on a

college campus, but they do not have the same financial assistance available to them that students receive when they graduate high school (Kronholz, 2011). Students who do not have a high school diploma are not eligible for any form of financial aid from the federal government, which can present a barrier for students who struggle financially (Kronholz, 2011). To combat this, the U.S. Department of Education has begun testing pilot programs that allow the Pell grant system to fund dual enrollment courses to determine whether using Pell grants for dual enrollment courses could be a viable means to make college more affordable; however, this dual enrollment Pell grant program is not yet widely available (Whissemore, 2015).

One of the biggest negative impacts of dual enrollment programs is that they do not offer the same types of support systems that college campuses do to students taking the same courses (Taylor, 2015). One issue that students face while taking dual enrollment courses is their lack of cognitive maturity for some of the coursework they must complete (Taczak & Thelin, 2014). When students take dual enrollment courses, some students who may traditionally receive support services, such as tutoring and mentorship, are not getting those supports from their high schools. There is a need to study underserved high school students taking community college courses because community colleges have been similarly criticized for providing inadequate support for their underserved students (Taylor, 2015). First-generation college students taking dual enrollment courses are an underserved population and a lack of support could be a barrier to their success in dual enrollment courses, which could translate to their overall college experience later. Successful dual enrolment programs have support systems such as mandatory study groups, tutoring, individual advising, transition assistance, and progress reports (Gonzalez & Chavez, 2009). Because of the findings of Taylor (2015) and Gonzales and Chavez (2009), research needs to be done to see what support systems are currently in place for first-generation

college students taking dual enrollment courses and what programs could benefit them and give them a similar experience to those students taking the courses on a college campus.

Potential drawbacks for students who do not perform well in dual enrollment courses also exist. Students who perform well in dual enrollment coursework have been shown to persist to high school graduation and subsequently enroll in college immediately upon graduation more frequently than their peers who did not take dual enrollment courses (Cowan & Goldhaber, 2015). However, students who performed poorly in dual enrollment courses were more likely to enroll in college later than their classmates who did not take dual enrollment courses and less likely to complete a 4-year degree (Cowan & Goldhaber, 2015). Also, these low-performing students were more likely to either drop out of high school or not complete their degree on time than the students who performed better in their dual enrollment courses (Cowan & Goldhaber, 2015). These students who performed poorly in dual enrollment courses were not students who were originally identified as being at-risk of dropping out; however, they were among the highest achieving students who were chosen to participate in dual enrollment. As a result of this negative impact of performing poorly in dual enrollment courses, Cowan and Goldhaber (2015) recommend weighing the risk versus reward for students when considering them for dual enrollment placement and implementing further screening and support systems for students who wish to take dual enrollment. Even when dual enrollment coursework has benefited students, studies show this benefit can disappear after the third year of college (Burgette & Magun-Jackson, 2008). This study was aimed to research the ways that schools can support these students who are at risk of performing poorly in dual enrollment courses.

Another of the limitations of dual enrollment programs is often a lack of communication between high school and colleges. The dual enrollment credits that students receive in high

school do not always transfer to the institutions of higher education that students attend (Kilgore & Wagner, 2017). Consequently, students who go on to attend private or out of state 4-year institutions often discover that credits earned in dual enrollment courses will not transfer (Kilgore & Wagner, 2017). Students taking dual enrollment courses often are not made aware of the possibility that the dual enrollment credits they take will not transfer before they pay for and take the courses (Kilgore & Wagner, 2017). Scholars note the responsibility for communicating whether credits will or will not transfer is that of the program director, guidance counselors, and teachers, but the credit transfer issue is often not disclosed to the students (Kilgore & Wagner, 2017).

For programs to be successful and meet the needs of all students, high school and colleges must collaborate more effectively to develop strategies to help underserved students succeed. Studies show that high school teacher and personnel support has a direct correlation with positive outcomes with a p value of $p = -.48$ for prospective first-generation students (Gibbons & Borders, 2013). Therefore, one of the ways that this collaboration can be done is to develop unified goals and outcomes for both the high schools and colleges involved in the dual enrollment partnership to ensure student success. Pretlow and Wathington (2013) found that counselors and mentors from the community college system could help increase the transition to the college atmosphere for dual enrollment students. Dual enrollment programs are more likely to succeed when high schools and colleges work together with similar perspectives and desired outcomes (Howley, Howley, Howley, & Duncan, 2013). Howley et al. (2013) also found that an occasional financial burden can be placed on school districts and colleges that can lead them to encourage students to take dual enrollment courses when it may not be beneficial for the

students. Howley et al. (2013) provided suggestions for colleges and high schools to form more effective dual enrollment partnerships.

Dual enrollment programs are most successful when they have advance planning, community support and consistent instructors (Lukes, 2014). Howley et al. (2013) suggested that dual enrollment partnerships could be improved by encouraging shared leadership among all groups; while maintaining consistent communication between all groups. Additionally, having educators rely more heavily on face-to-face encounters instead of relying on email for communication was also a strategy that Howley et al. (2013) suggested. Howley et al. (2013) also argued for better alignment of resources and schedules, maintaining a dialogue about impediments to the program's success for all institutions, increasing collaboration while reducing competition between institutions, using individuals to increase communications between the participating institutions, collaborating with the community, and developing better budgets.

Additionally, Hoffman and Voloch (2012) claimed that dual enrollment program staff play important roles in defining the space of their programs, so they need to have a voice in the programs. Dual enrollment program staff are the ones who are directly dealing with the students by advising and counseling them, while attempting to best meet the needs of the students and the college faculty, giving the dual enrollment staff a unique perspective (Hoffman & Voloch, 2012). Students and parents of the students who are potential dual enrollment students have often been handicapped by poor communication from high schools and colleges (Mansell & Justice, 2014). Many students do not take dual enrollment courses because they, along with their parents, are not adequately informed of the benefits that dual enrollment can offer them (Mansell & Justice, 2014). Because of the input the staff can have, research needs to be done, at both the college and high school level, on how to develop more effective partnerships to meet the needs of and

communicate with underserved students, such as first-generation college students taking dual enrollment courses.

Dual enrollment has an impact on both students and institutions. Some college institutions agree that dual enrollment benefits them by increasing enrollment numbers and aiding in student recruitment (Kinnick, 2012). However, this increase in enrollment is not always a positive experience for institutions. Some institutions expressed concern about the quality of their courses because of the minimal amount of tuition students pay (Kinnick, 2012). Therefore, while institutional enrollment numbers may appear to be positive, the money is not coming in from students at the same rate as those who are traditionally enrolled (Kinnick, 2012).

Input from multiple stakeholders, such as students, instructors, counselors, and program administrators, is crucial to an understanding of how to best serve first-generation college students taking dual enrollment courses. Dual enrollment programs from the rural Appalachian region need to be studied to determine how their impact on the needs of first-generation college students taking dual enrollment courses. A focused and student-centered education requires that educators consider the motivation for students enrolling in dual enrollment courses so that the dual enrollment programs can be designed in a way that ensures that the students who the dual enrollment programs most benefit are enrolling in the programs (Dare, Dare, & Nowicki, 2017). Many students take dual enrollment courses to better prepare for college, while simultaneously getting ahead of other students; however, many college administrators design their dual enrollment programs under the assumption that students are simply preparing for college (Dare et al., 2017). This finding is significant for students similar to those in the Appalachian region;

program designers and facilitators need to clearly understand student motivation for taking dual enrollment courses to properly design and provide support for dual enrollment programs.

There needs to be more research to consider student perspectives because students are the ones with the most at stake in the programs and they are the ones that receive the direct benefits. Azimzadeh, Koch, and Rollins (2015) argued that more research needs to be done to determine the factors that impact dual enrollment students so these factors can be addressed. To better understand how to serve the dual enrollment students, an investigation must take place into how dual enrollment programs are currently serving the targeted population. Azimzadeh et al. (2015) noted it is important for researchers to cultivate information directly from high school students because they are the ones receiving the benefit and taking these suggestions into account when making policy decisions. Because of the potential benefit from this input, research needs to be done that takes multiple perspectives into account when considering how to best serve the needs of first-generation Appalachian college students taking dual enrollment courses.

Summary

The theories of Tinto (1982) and Astin (1994) were used to provide a theoretical framework for this study. Literature related to the Appalachian areas, the benefits and limitations of dual enrollment courses, and the benefits and limitations of dual enrollment for first-generation college students were provided in Chapter Two. There has been much research concerning the role that dual enrollment coursework plays in college persistence and the types of students that benefit from dual enrollment courses. There has also been much research to show that dual enrollment can be a useful tool to assist high school seniors to determine their preparedness for college. However, no research exists studying first-generation Appalachian college students in dual enrollment courses. Therefore, this study of first-generation

Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia is both relevant and needed.

CHAPTER THREE: METHODS

Overview

The purpose of this holistic single-case study was to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia. Chapter Three presents the overall design of the study and the methods used to collect data from the participants. Additionally, the chapter delineates the methods of analysis, explains the measures used to ensure trustworthiness, and acknowledges the ethical concerns of the study. The chapter concludes with a concise summary

Design

This was a qualitative study conducted to describe the experiences of first-generation Appalachian college students in Southwest Virginia. A qualitative holistic single-case study is best utilized when researchers need to understand the experiences of people and describe them (Creswell, 2013). Traditionally, in qualitative research, the main research tool that is used to gather data about participants is the researcher (Creswell, 2013). Additionally, there have been studies completed on Appalachian college students in the past (Mansell & Justice, 2014; Wright, 2012), first-generation college students (An, 2013; Gibbons et al., 2016), and students who have taken dual enrollment courses (An & Taylor, 2015; Crouse & Allen, 2015; Ganzert, 2014; Kanny, 2015); however, no studies have attempted to describe the experiences of first-generation Appalachian college students taking dual enrollment courses.

Historically, case studies have been traced in American culture back to the Chicago school of sociology (Yin, 2014). Around 1950, participant observation research appeared as a method of data collection that rendered traditional case study research to be irrelevant (Yin, 2014). However, case study research emerged again as a research method in the 1980s to

transform into the current design of case study research practiced today (Yin, 2014). A qualitative holistic single-case study was utilized for this study and the dual enrollment program was defined as the case for investigation. Traditionally, a case study “is preferred when examining contemporary events, but when the relevant behaviors cannot be manipulated” (Yin, 2014, p. 12). The challenges facing first-generation students in dual enrollment programs in the Appalachian region are contemporary issues that cannot be manipulated. Although there are many different types of case studies, a holistic single-case study was utilized for this study because a holistic single-case study is often utilized when “no logical subunit can be identified or when the relevant theory underlying the case itself is holistic in nature” (Yin, 2014, p. 55). In this instance, the case that was defined for the current study was the dual enrollment program itself. Since the dual enrollment program does not have any logical subunits that can be defined, a holistic design was used instead of an embedded design that examines more than one unit at a time.

Research Questions

This holistic single-case study of the dual enrollment experiences of first-generation Appalachian college students in Southwest Virginia was guided by a central research question and three subquestions

Central Research Question

What are student, teacher, and administrator descriptions of the challenges faced by first-generation college students taking dual enrollment courses in Southwest Virginia?

Research Subquestions

SQ1. What are student, teacher, and administrator perceptions of the ways in which Southwest Virginia's dual enrollment programs impact college degree completion for first-generation students and retention after those students go to college?

SQ2. What are student, teacher, and administrator perceptions of the ways in which Southwest Virginia's dual enrollment programs impact student college involvement?

SQ3. What are student, teacher, and administrator perceptions of the ways in which Southwest Virginia's dual enrollment programs impact student involvement and college degree completion for first-generation Appalachian college students?

Setting

The setting for this holistic single-case study was in the central Appalachian region of far Southwest Virginia. Towns in rural Southwest Virginia have a large population of economically depressed Appalachian students. A recent study indicated that more than half of the population cannot afford basic necessities, such as food, shelter, and heat; there is a 15–20% unemployment rate and up to 35% of the population who are employed cannot afford basic necessities (O. Bailey, 2017). The setting for this study was also chosen because the towns in Southwest Virginia have been economically impacted by the recent loss of coal production resulting in a bleak long-term economic outlook; nearly half of the coal production jobs in the area have ceased to exist since 2007 (Hodge, 2016). Because of the loss of coal-related job opportunities, Southwest Virginia is in search of a new pathway forward and many students are choosing to be the first generation of their families to go to college. Consequently, community, school, and legislative leaders in the area are attempting to move away from the coal industry and allow the area to become a hub for the cybersecurity and drone technology industries (Bellows, 2017).

To aid in reaching these new goals, it is important to understand the challenges of first-generation students when taking dual enrollment courses because dual enrollment can be a stepping stone for successful college completion for many of the students in the Appalachian region. High school students in Southwest Virginia take dual enrollment classes through a local community college when they are either juniors or seniors in high school. These dual enrollment classes are offered either at the high schools, online, or on campus, via college cohort programs. All of these dual enrollment programs are administrated by a program administrator at the college and the guidance counselors at the high school level.

Participants

A total of 11 participants were solicited for the study. This study utilized four distinct groups that included six first-generation college students who have taken dual enrollment courses, three dual enrollment instructors, and three school guidance counselors or principals. Purposive and snowball sampling were utilized to select participants for this study. Purposeful sampling was used because the participants had to match the role of first-generation college student, dual enrollment instructors, guidance counselors, principals, and program administrators within the Appalachian region. However, in a case study, the researcher must defend the need for choosing the specific participants within the case (Creswell, 2013). Therefore, instructors were chosen as participants for the study because they are crucial to the success of dual enrollment programs and play a key role in the professional development of the instructors and the advancement of the dual enrollment programs (Hanson et al., 2015). Guidance counselors “are not only the central point of contact for students enrolling in concurrent class, but they are also the point of contact with community college staff” (Hanson et al., 2015, p. 73). Finally, principals “pave the way to make the concurrent enrollment programs successful by promoting,

valuing, and offering the programs in their schools” (Hanson et al., 2015, p. 73). To be selected for this study, a student must have been a first-generation student from the program area who took dual enrollment courses in high school.

Current college enrollment or pass or failure of dual enrollment courses were not factors in considering subjects for this study. Teachers, counselors, and principals were selected from the dual enrollment program being studied. Students were selected by contacting guidance counselors, teachers, and principals from high schools and college student support services to determine which students met the criteria. Guidance counselors, teachers, principals, or student support services workers then referred students to determine if they would be willing to participate.

Procedures

Following a successful defense of the research proposal, permission from the Institutional Review Board (IRB) of Liberty University and the community college that facilitates the dual enrollment program was sought to conduct research. After IRB approval was obtained from both institutions, the guidance counselors from local high schools and the student services department at the local community college that facilitated the dual enrollment program identified potential participants for the study. Teachers, guidance counselors, principals, and program administrators were contacted to solicit their participation in the study. The guidance counselors, teachers, principals, or student support services employees helped to identify the students and I contacted the potential participants to determine their interest in participation in the study. The students were contacted and, once they agreed to be part of the study, I obtained their informed consent to participate in the study. As a pilot study, the questions were presented to three students who have taken dual enrollment courses. Questions were revised based on the responses of the pilot

study.

Then, individual interviews, either in person or electronically via a video chat service such as Skype or other electronic means, were conducted with each participant. Interviews were conducted with students first and, after student interviews were conducted, interviews were conducted with teachers, principals, counselors, and program administrators. The results from the student interviews were then used to guide some of the questions for the teacher, counselor, principal, and administrator interviews based on student perceptions of their dual enrollment experiences. All interviews were audio-recorded for concurrent data analysis.

After the interviews were completed, I transcribed the interviews. After the interviews were transcribed, I read the interviews and made notes on the responses provided by the subjects from the interviews. After the notes were made based on the responses from the interviews, I read the interviews and identified common or recurring perceptions and responses. Data from the interviews were organized into categories and themes. The themes were then analyzed, and a narrative was constructed based on the analysis of the themes. After the themes were analyzed, an online focus group interview was conducted with questions based on the themes that emerged from the individual interviews. The focus group interview participants were sent a link to the focus group discussion board and their responses were again analyzed for recurring perceptions and responses, which were organized into themes. The focus group themes were then woven into the narrative. Each of the participants was sent a copy of the narrative to review before the narrative was submitted.

The Researcher's Role

I am a dual enrollment instructor in the Central Appalachian region. As the researcher in this study, I bracketed out all preconceived notions about dual enrollment instruction to fairly

analyze the data that were collected. I utilized my background knowledge on the topic of dual enrollment courses and first-generation college students to inform my role as the researcher. I personally interviewed the participants and analyze the data. Throughout my career, I have observed many students who appeared to be both positively and negatively impacted by their dual enrollment experiences. Many of the first-generation students that I have observed have taken dual enrollment courses without full comprehension of what taking dual enrollment courses means. I have also observed many first-generation students take courses they do not need for the institutions they are planning to attend or not take the courses they will need for these institutions because of their lack of knowledge and understanding of the dual enrollment process. From my observations, first-generation students are generally more uninformed about the process of preparing for college because of a lack of parental guidance and support. I did not interview my current or former students for this interview because of a possible conflict of interest. My current or former students may not have felt comfortable speaking to me about their dual enrollment experiences when I was the dual enrollment instructor.

Data Collection

Data collected for this holistic single-case study included individual interviews, a focus group interview, and reflective journaling.

Individual Interviews

One of the most efficient and effective ways to collect data in a qualitative study is through interviews (Creswell, 2013). Data were collected through individual interviews that were audio and video recorded. Following are the open-ended interview questions with the central research question (CRQ) and/or the research subquestion (SQ) noted in parentheses for each.

1. Why did you take dual enrollment courses? (CRQ)
2. What made you want to go to college even though your parents did not go to college?
(CRQ)
3. Describe your experience taking dual enrollment courses. (CRQ)
4. What part of the dual enrollment program helped you the most and why? (SQ2)
5. How did dual enrollment courses prepare you for college? (SQ1)
6. Is there anything you regret not learning during your high school career that you believe would have helped you in college? (SQ3)
7. What were some challenges you faced while taking dual enrollment courses? (CRQ)
8. How did the school or program help you with these challenges? (CRQ)
9. How could the school or program have better helped you with these challenges? (CRQ)
10. What role did your parents play in helping prepare you for college? (CRQ)
11. What advice would you give a student whose parents did not attend college before they took dual enrollment courses and then go on to college? (SQ3)
12. Is there anything else that you would like to mention about your dual enrollment experience?

Questions 1 and 2 addressed student motivation for taking dual enrollment courses because McCord and Roberts (2014) found that “students’ intrinsic motivation is essential to success” in dual enrollment programs (p. 402). Question 3 was focused on the experience of taking dual enrollment courses because Karp (2012) determined that understanding student dual enrollment experiences is key to implementing successful dual enrollment programs that will ensure the success of students once they attend college. Question 4 was focused on the benefits

of dual enrollment because several studies have demonstrated the benefits of dual enrollment courses (An, 2015; An & Taylor, 2015; Crouse & Allen, 2014; Ganzert, 2014).

Question 5 addressed the role of dual enrollment courses in college preparation because An (2013) found that dual enrollment courses positively impacts students when preparing them for college. Questions 6 through 9 addressed the challenges that are faced by students in dual enrollment courses because Kanny (2015) found that there were benefits and disadvantages that occur simultaneously while students took dual enrollment courses. Questions 6 through 9 are also relevant because An (2103) and Mansell and Justice (2014) found that first-generation students also experience difficulties and special challenges while taking dual enrollment courses.

Question 10 dealt with the role of parental support while taking dual enrollment courses because Wang (2014) found that parents influenced the college transition process even if they had not been to college themselves. Questions 11 and 12 promoted reflection on the experiences of the student, which relates to the importance of the experiences of students. Following are the open-ended interview questions for instructors with the central research question (CRQ) and/or the research subquestion (SQ) noted in parentheses for each.

1. What do you view as the most important part of the dual enrollment program for students? (SQ1)
2. Have you ever had first-generation students in your classes? (CRQ)
3. What have you noticed that makes these students different from other students? (CRQ)
4. What are some challenges that these students faced while taking dual enrollment courses?
(CRQ)
5. How does the current dual enrollment program assist these students with these challenges? (SQ2)

6. How could the program better help these students with these challenges? (SQ2)
7. What factors cause the students who graduate from this program to be likely to go to college and complete degree programs? (SQ3)
8. What advice would you or do you give to first-generation students as they take dual enrollment courses and prepare for college? (CRQ)
9. Is there anything else that you would like to mention about first-generation students taking dual enrollment courses? (CRQ)

Question 1 addressed the benefits of dual enrollment programs from the instructor perspective because Hanson et al. (2015) found that instructors have a unique perspective on dual enrollment courses. Question 2 was simply a background question to establish that instructors have had first-generation students in their classes. Question 3 was focused on the differences in first-generation students and non first-generation students because An (2013) found that those students had different dual enrollment experiences.

Questions 4 through 6 addressed the challenges faced by first generation students in dual enrollment courses because Kanny (2015) found that there were drawbacks to dual enrollment courses. In addition, An (2013) and Mansell and Justice (2014) found that first-generation students experienced difficulties and special challenges while taking dual enrollment courses.

Question 7 dealt with college retention, which relates to the Tinto's (1982) theory of college retention used to guide this study. Questions 8 and 9 are questions to cause the instructor to reflect on student experiences in the program as a whole. Following are the open-ended interview questions for counselors and principals with the central research question (CRQ) and/or the research subquestion (SQ) noted in parentheses for each.

1. What role do you play in the dual enrollment program? (CRQ)

2. What interactions do you have with dual enrollment students? (CRQ)
3. What differences have you noticed between first-generation college students and other students? (CRQ)
4. What challenges do you observe that first-generation students face that other students do not face? (CRQ)
5. How do you equip your teachers to help students deal with these issues? (SQ2)
6. How is the program designed to assist first-generation students with the challenges they face? (SQ1)
7. What advice would/do you give to first-generation students as they take dual enrollment courses and prepare for college? (CRQ)
8. Is there anything else you would like to add about the experiences of first-generation students taking dual enrollment courses? (CRQ)

Following are the open-ended interview questions for program administrators with the central research question (CRQ) and/or the research subquestion (SQ) noted in parentheses for each.

1. What role do you play in the dual enrollment program? (CRQ)
2. What interactions do you have with dual enrollment students? (CRQ)
3. What differences have you noticed between first-generation students and other students? (CRQ)
4. What challenges do you typically notice first-generation students having while taking dual enrollment courses? (CRQ)
5. How is the program designed to help the students as they face these challenges? (SQ2)
6. What advice would you give to teachers, counselors, and principals to help them deal with the problems first-generation students face? (SQ2)

7. What advice would/do you give to first-generation students as they take dual enrollment courses and prepare for college? (CRQ)
8. Is there anything else you would like to add about the experiences of first-generation students taking dual enrollment courses? (CRQ)

In the principal, counselor, and administrator interviews, Questions 1 and 2 were focused on the benefits of dual enrollment programs from the guidance counselor or principal perspective because Hanson et al. (2015) found that guidance counselors and principals have a unique perspective on dual enrollment courses. Questions 3 and 4r are about the differences in first-generation students and non first-generation students because An (2013) found that those students had different dual enrollment experiences.

Questions 4 through 6 dealt with the response of the program to the challenges of first-generation students because Azimzadeh et al. (2015) found that those developing the programs should understand and address underserved populations through program changes and adaptations. Question 7 addressed college retention, which relates to Tinto's (1982) theory of college retention that was used to guide this study. Questions 7 and 8 were intended to prompt the principal, counselor, or administrator to reflect on student experiences in the program.

Focus Group Interview

After interviews were completed, an online focus group interview, consisting of six participants, was conducted with questions that emerged from the themes found in the individual interviews. Focus groups are useful because instead of trying to survey large groups, researchers typically "would not enlarge the focus groups but would instead assign interviewees to several smaller focus groups" (Yin, 2014, p. 112). The focus group interview consisted of a discussion board with seven prompts that allowed the participants to discuss their dual enrollment

experiences and expand on information uncovered during the individual interviews. The participants were divided into groups of the participating groups: students, teachers, counselors, and administrators. Each group was presented with the same questions. Following are the open-ended focus group interview questions with the central research question (CRQ) and/or the research subquestion (SQ) noted in parentheses for each.

1. What are some challenges that you believe first-generation students face in dual enrollment programs today? (CRQ)
2. What is the most crucial skill or understanding that dual enrollment programs can provide for first-generation students? (SQ1)
3. What do you believe dual enrollment programs could do to better prepare first-generation students for college? (SQ2)
4. How do you believe first-generation students differ from other students? (CRQ)
5. Do you believe there any negative aspects of dual enrollment courses? (SQ2)
6. Who do you believe benefits the most from dual enrollment courses? (CRQ)
7. What would you tell a student before they take dual enrollment courses? (CRQ)

Reflective Journaling

The final form of data collection for this study was reflective journaling. Journaling has become a popular method of data collection within qualitative case studies because it allows the researcher to obtain data without having to be present and presents the subject with an opportunity to reflect when not in the presence of the researcher (Creswell, 2013). Participants were given journals at the conclusion of their individual interviews and were asked to journal any thoughts and feelings they had on the questions asked during the interviews. The participants were also asked to write down any memories they may later recall on the

experiences of first-generation Appalachian students taking dual enrollment courses. The participants were given a schedule of specified times to write in their journals, and the journals were collected on a specific date.

Data Analysis

One of the most challenging aspects of a case study occurs during the data analysis stage because “the analysis of case study evidence is one of the least developed aspects of doing case studies” (Yin, 2014, p. 133). The first step in the analysis stage of this study was transcribing the interviews verbatim. I listened to each interview once, then on the second listening I transcribed each interview verbatim. During the initial read-through of the transcripts, I took notes about the important themes and details that emerged through each of my interviews and attempted to note any initial impressions that I had while going through the interviews. My notes represent my initial thoughts and impressions about what was being stated in the interviews. These notes allowed me to determine the meaning of the participants’ statements.

Memoing was also utilized because memos “essentially conceptualize your data” (Yin, 2014, p. 135). The memos were primarily used to track the reoccurring ideas during the individual interviews. Memoing occurred when I looked for recurring ideas and themes that came up during multiple interviews. Memoing occurred in multiple ways. First, I made memos by hand. After this initial analysis, I used the software program NVivo to analyze the data in all of the interviews, focus group questions, and journals. These reoccurring ideas allowed for the grouping of ideas that were repeated from multiple participants. I listed common ideas, then preliminarily grouped and listed them as codes using this qualitative data analysis program. Using the program NVivo allowed me to track the most important ideas and responses from each individual interview while scanning for themes and repeated ideas. This program sorted words

and phrases that were repeated multiple times, which allowed me to begin to group words and phrases together to determine what themes were emerging throughout the analysis process.

While analyzing these ideas, I studied outputs to determine emerging patterns. Furthermore, the patterns were “conceptually primitive (lower) than the initial ‘how’ and ‘why’ research questions that might have led to [the] case study in the first place” (Yin, 2014, p. 134). Patterns of speech or reoccurring words that occur in multiple interviews were identified. Repeated words, phrases, or common ideas were also noted to indicate similarities in the participant responses. These themes were then analyzed to determine where they fit in conjunction with the research questions this study was aimed to answer. Common themes based on these repeated words, phrases, or ideas were identified and grouped. These groups were then analyzed and organized by overarching themes. These themes were then also grouped into four major, overarching themes and groups of subthemes that both related to those themes and sought to answer the research questions presented in this study. Subsequently, the overarching themes were identified and drove the narrative and analysis for the remainder of the study. After themes were identified, they were developed into a narrative to help individuals understand the unique needs of first-generation college students taking dual enrollment courses and how to address them in the future.

Trustworthiness

Different methods were used to ensure the trustworthiness of this study. The following sections include details of these methods, including credibility, dependability, confirmability, and transferability.

Credibility

Credibility was first established through triangulation. Triangulation of data occurs by having the researcher corroborating the same finding through the collection of information from multiple sources (Yin, 2014). Data were collected from the perspectives of different types of individuals for this study, which aimed to reach an overall conclusion by examining the responses of the different groups. The information from the individual interviews was then compared to the information from the focus group interviews and the journals. This comparison of the data collected from the interviews, the focus group interviews, and the journals allowed me to produce a clear picture of the data from different sources.

Dependability and Confirmability

Dependability was established through peer review and member checking. Through member checking “the researcher solicits participants’ views of the credibility of the findings and interpretations” (Creswell, 2013, p. 250). Throughout the process, a panel of my peers was consulted on all research matters, and they monitored all research techniques and findings. The participants were all provided with a copy of the transcript and their input provided member checking. Confirmability was also established through member checking and preservation of all research findings and records to demonstrate that all findings came from the research and not my own biases.

Transferability

Transferability was established by bracketing out my experiences and biases by removing my preconceived notions and biases from the research process. I acknowledged my preconceived notions of the research topic in the study. Transferability was established through the use of rich, thick description in the narrative, which “allows readers to make decisions

regarding transferability” (Creswell, 2013, p. 250). This rich description ensured that elements from the interviews and journals were not excluded or overlooked throughout the research process.

Ethical Considerations

There were many ethical considerations for this study. One of the first ethical considerations was the privacy of individuals who agreed to be in the study. To protect their privacy, pseudonyms were used for all participants and the sites in the study. To protect the privacy of all individuals and institutions, no identifying information of any kind was used. Another ethical consideration for this study was data security. To ensure the security of all information gathered during the study, all data were archived on password-protected computer drives which were secured in a locked file cabinet to which I have the only key. No data were left in public areas and only I have access to any of the data from the study. The final ethical consideration for this study is the potential negative impact of the study findings on the participants. For example, all individuals were made aware of the potential negative impact of the information given during their interviews. All participants were provided with, and were required to sign, a document that outlined all potential negative impacts of the study. If, at any point during the study, any individual had concerns about the negative impact of the study, I would have addressed his or her needs, or I would have released that individual from the study and not use any information provided by that individual in the study.

Summary

This holistic single-case study was conducted to examine the challenges of first-generation Appalachian college students taking dual enrollment courses. The purpose of this holistic single-case study was to understand first-generation Appalachian college student

perceptions of their dual enrollment experiences in Southwest Virginia. Data were collected through individual interviews, online focus group interviews, and reflective journaling. Data were then analyzed by reading, memoing, and translating the data into themes and a narrative. The responses provided from the multiple perspectives provided a framework for understanding the dual-enrollment experiences of first-generation Appalachian college students.

CHAPTER FOUR: FINDINGS

Overview

Chapter Four includes a presentation of the findings from the research conducted in this case study. The purpose of this qualitative case study was to examine the challenges of first-generation college students in the Appalachian region who took dual enrollment courses. The chapter includes narrative descriptions of the study participants and the case. In addition, the results from the study are organized in the chapter according to the themes discovered, followed by an explication of the ways the data collected and the themes discovered, helped answer the research questions of the study.

Participants

Participants were selected for this study using purposive and snowball sampling. This type of sampling is used because the researcher “can purposefully inform an understanding of the research problem and the central phenomenon of the study” (Creswell, 2013, p. 154). Criteria for the selecting of participants was as follows: a first-generation college student who took dual enrollment courses, a dual enrollment instructor who has taught first-generation students, a principal or counselor who has worked with first-generation students taking dual enrollment courses, or a program director who has overseen a dual enrollment program that has served first-generation college students, all of whom had to be in the Appalachian region. The study consisted of six students, two instructors, two guidance counselors, and one principal (see Table 1).

Table 1

Participant Demographics

Name	Gender	Age	Ethnicity	Group
April	Female	21	Caucasian	Student
Bettie	Female	19	Caucasian	Student
Eva	Female	36	Caucasian	Student
Jennifer	Female	32	Caucasian	Student
Jonah	Male	42	Caucasian	Counselor
Kelli	Female	19	Caucasian	Student
Kim	Female	45	Caucasian	Instructor
Mark	Male	25	Caucasian	Student
Nick	Male	50	Caucasian	Principal
Pam	Female	36	Caucasian	Instructor
Stacy	Female	43	Caucasian	Counselor

April

At the time of the study, April was a 21-year-old college student attending a 4-year university and working on a degree in nursing. April is unique to this study because she was diagnosed with a learning disability in high school. While she took dual enrollment courses in high school, she was on an individualized education plan, but participated in her dual enrollment courses without any accommodations. Her perspective was unique because she was one of the first students on an individualized education plan in her school to take a dual enrollment course. The only dual enrollment course that she took in high school was dual enrollment English. April took dual enrollment courses to “get an early start in my college career” and to “slowly introduce how college would be.” She also “wanted to be the first person in my family to graduate college” and make her family “proud.”

Bettie

At the time of the study, Bettie was a 19-year-old college student attending a 4-year university who is planning on becoming a teacher after she graduates from college. Bettie's father is a coal miner who was impacted by the recent decline in the coal industry in the area. While in high school, Bettie took English, math, and history dual enrollment courses. She credited these courses with her being on track to finish college a semester earlier than she would have without dual enrollment courses, which will result in tuition savings for her. Bettie stated that she took dual enrollment courses "in high school in order to get a head start with my future college career."

Eva

At the time of the study, Eva was a 36-year-old registered nurse. She completed dual enrollment courses while enrolled at a small private Christian school. Dual enrollment courses were not offered on-site at her school, so she had to travel to the community college to take all of her dual enrollment courses and she was the first student at the school to do so, which presented her with a unique set of challenges. After high school graduation, she took general studies courses at a 4-year institution, but did not finish her degree. Eight years after her high school graduation, she completed her nursing degree at the same institution where she completed her dual enrollment courses. She had been a nurse for 10 years. Eva described her motivation for taking dual enrollment courses: "I had already met graduation requirements so I thought taking some college courses would be beneficial."

Jennifer

At the time of the study, Jennifer was a 32-year-old nurse. She took her dual enrollment courses in a small public school. Since her school did not offer all of the dual enrollment courses

she wanted to take on-site, she took courses both at the high school and on the college campus. She took math, science, English, and history dual enrollment courses while in high school. After her high school graduation, she began school at a 4-year university, but dropped after 1 year. She went back to community college 4 years later to become a licensed practical nurse. She went back to school to become a registered nurse 4 years after she finished that degree. She finished that degree 3 years later while working full time. Jenifer described her specific motivation for taking dual enrollment courses:

In high school I was always top of my class and was very competitive. I learned early in high school that dual enrollment courses could raise my GPA even further, so that was my initial incentive for taking those classes. Other reasons for taking those classes were receiving an advanced diploma and possibly shortening my college career by completing credits before graduating high school.

Her parents were not her only motivation for taking dual enrollment courses, “I also had a passion early on to become a medical doctor, which made me strive for excellence.”

Jonah

At the time of the study, Jonah was a guidance counselor at a high school. Jonah had been a guidance counselor for over 8 years and has worked at two different high schools during that time. He is a first-generation college student and credits his experiences as a dual enrollment student as the reason he was able to attend college. He came from a low-income family and a high school guidance counselor recognized his potential and gave him special permission to take dual enrollment courses at a local community college during his senior year of high school even though the concept of dual enrollment courses was relatively new at the time. Jonah’s high school guidance counselor supported him by personally paying for his course

materials and occasionally providing him transportation to his classes. He stated that he strives to be able to help students like his guidance counselor was able to help him. This sentiment relates to a personal story that he told during the interview about his experience as a first-generation college student taking dual enrollment courses:

When I was a first-generation student, I faced a lot of challenges. I was in high school in the late '90s, so dual enrollment courses were not as common. However, a counselor at my school noticed that I was bright and needed to be challenged my senior year, so he signed me up for classes at a community college and he would take me and pick me up every day because he knew I did not have a way to get there because my family did not have enough money for me to have a car. If it had not been for this person, I may not have ever gone to college because I had no one in my life who was encouraging me to go to college.

Kelli

At the time of the study, Kelli was a 20-year-old college student. She took dual enrollment courses in a public school setting. One thing that makes Kelli unique is that she took dual enrollment courses as part of a cohort of students who took entirely dual enrollment courses during her senior year and was able to graduate with her associate degree before she graduated from high school. She comes from a single-parent, low-income household and dual enrollment enabled her to enroll in her 4-year college as a junior. Kelli described her motivation for taking dual enrollment courses: "I wanted to have a quicker start to college, and I had already finished most of the general credits I needed to graduate."

Kim

At the time of the study, Kim was a dual enrollment mathematics teacher who had been teaching dual enrollment students for 3 years. She taught dual enrollment precalculus classes. Kim is not a first-generation college student. Kim's mother was also a dual enrollment instructor. She has taught only dual enrollment courses in one school. When asked about the most important part of the dual enrollment experience, Kim said "I think the most important part of the dual enrollment program is that it prepares students for life after high school. It not only provides them with college credit, but it also exposes them to the college experience."

Mark

At the time of the study, Mark was a 25-year-old chemical engineer who had completed dual-enrollment courses while enrolled in small public school. Mark was able to take dual enrollment courses online and with on-site instructors at his high school. After his high school graduation, he went on to an out-of-state, 4-year university where he completed a degree in chemistry. He was working as a chemical engineer for a large chemical company and had been doing so for 6 months. Mark took dual enrollment courses to get early access to college. He said, "I took dual enrollment courses because I knew I wanted to go to college, and I knew they would give me a head start on that." He also said that he went to college because he "wanted a good job doing something that I enjoyed as opposed to something that just pays the bills."

Nick

At the time of the study, Nick was a principal at a school where dual enrollment courses are offered. Nick has been instrumental in the implementation of new dual enrollment courses and programs in his school and his division, including recruitment of new dual enrollment instructors and assisting with the development of the dual enrollment cohort program that allows

students to obtain associate degrees before high school graduation. He was a first-generation college student, but dual enrollment courses were not offered when he attended high school. He has a master's degree in mathematics and a doctorate in education leadership. He also taught dual enrollment courses when he was still a teacher. He had been a school administrator for the last 15 years, first serving as an assistant for the first 9 years and a principal for the last 6. Nick's role as principal allowed him to have influence over the dual enrollment program at his school. He described his role: "I mostly oversee the dual enrollment program as a whole. I deal with the community college whenever a problem arises."

Pam

At the time of the study, Pam was a dual enrollment English teacher who had been teaching dual enrollment students for 5 years. She is a first-generation college student and also took dual enrollment courses in high school. She was partially motivated to become a dual enrollment instructor because she was a first-generation college student and dual enrollment courses greatly benefited her as a student. She has taught in dual enrollment in two school divisions, so her perspective is not limited to one school or even one county.

Stacy

At the time of the study, Stacy had been a guidance counselor for the last 10 years. She began her career in guidance as a middle school guidance counselor, but had been at the high school level for the last 5 years. Stacy was not a first-generation college student, but she coordinates dual enrollment schedules for students and guides them through the application and all college processes and procedures. Stacy's perspective is vital to this study because whenever a student has a problem in a dual enrollment course, she was the person in her school that they turned to for assistance and, many times, these are first-generation college students. She also

worked closely with the local community college to ensure that students are properly supported. When asked about her role in the dual enrollment program, she responded,

I am a guidance counselor that deals with seniors and juniors, so I make student schedules and help them figure out which classes they need. I also coordinate with the dual enrollment department at the college to coordinate testing, payment, and deal with any issues that arise.

I sometimes even have to play the role of college advisor, but I am less comfortable playing that role.

Case Description

The case for this study included the site where the study was conducted, the Appalachian region. The site, Appalachia, was selected for the study because of the lack of research on the challenges faced by first-generation dual enrollment students in that area. The setting for this study was an entire region that was served by the same community college for dual enrollment courses, and students who attended different high schools in that region. A total of 11 participants, who were all involved in the dual enrollment process in some way were included in this study. Purposive and snowball sampling were used for this study since students and staff members had to be involved in the dual enrollment process to participate in the study (Creswell, 2013).

Results

The following are the data analysis results of this qualitative case study which was guided by one central research question and three research subquestions. Triangulation was accomplished by collecting data through individual interviews, an online focus group, and journal entries. Case and subunits were obtained by using a systematic analysis technique by

which patterns were identified. The single-case design provided the structure for the major themes and subthemes that were investigated in terms of the case analysis. The challenges of first-generation students in the Appalachian region were examined. The following section is organized thematically and according to the research questions of the study.

Major Theme 1: Parents

The first major theme that appeared during data analysis was parents. Participants, both student and staff, both mentioned the influence of parents on first-generation dual enrollment students. Some subthemes that emerged from the theme of parents were emotional support, lack of knowledge, and parental financial struggles (see Table 2).

Table 2

Major Theme 1: Parental Support

Major Theme 1: Parents	
Subtheme	Code
Parental support	Parents (45), Helped (62), Support (19)
Parental lack of knowledge	Didn't know (16), Didn't understand (15)
Financial struggles	Poverty (1), Better job (1), Access (5), Money (2)

Parental support. The first subtheme of Major Theme 1 was that parents of first-generation college students were supportive of their children in several different ways. April stated that her parents supported her by encouraging her to go to college: “Having parents who do not go to college tell you that if you want to live a good life, you need to go to college to be successful.” According to Bettie,

My parents helped me financially . . . [and] encouraged me to continue my education, so I would be able to get a better job to sustain myself. . . . My parents have always stressed

that grades and a good education were important. They encouraged me to take as many college classes as I could while still in high school.

Eva stated that her parents “really encouraged me to attend college.” She also stated that her parents “always taught me a good work ethic and that I could control my future and that I get what I give.”

Jennifer described her parents’ support for her during her dual enrollment experience: “My parents were always successful in their careers, but neither had a college degree. They were always passionate about my education and success in life, pushing me to make the most out of myself.” She also stated that her parents were supportive during her dual enrollment and college experiences: “First and foremost, my parents paid for all my college expenses.” She also stated that “They were also there for emotional and moral support.” Kelli also described her parents as a support system for her while she was taking classes:

While my parents couldn’t help me understand the subjects I was learning, I felt that I had a really good support system. My parents were always there to remind me that I could accomplish anything I put my mind to. . . . My parents were there for me and supported me even when I felt like the school was not supporting me in in certain situations.

Mark pointed out that his parents “mostly encouraged me to go to college because they understood the importance of higher education.”

Parental lack of knowledge. The next subtheme that emerged from Major Theme 1 was the lack of knowledge about dual enrollment classes or content and the problems that arise because of this lack of knowledge. First, students mentioned repeatedly that their parents were unable to assist them in certain situations because they did not have the knowledge to help them.

April stated, “My parents helped me financially; however, where they did not learn to the level where I was at in school could not help me with my work.” She also mentioned her parents and their lack of knowledge about her dual enrollment courses when she was asked about what advice she would have for other first-generation college students: “Your parents will not be able to help you in your classes and all they want to do is help you.” Bettie pointed out that even though her parents encouraged her to take dual enrollment courses, “My parents and I didn’t know much about college since they never went.” Kelli mentioned her parents’ lack of knowledge about her classes when mentioning their support: “While my parents couldn’t help me understand the subjects I was learning, I felt that I had a really good support system.” Mark stated, “a lot of support at home in some ways, but they still do in others. My parents were very helpful and encouraging to me, but they did not really know anything about taking college courses.”

Several of the staff members interviewed mentioned how parental lack of knowledge about the dual enrollment process caused conflicts between parents of first-generation students and dual enrollment instructors, counselors, and principals. Kim remarked about the parents of first-generation students: “The parents of first-generation students are different as well because they are more willing to attack me over their students and blame me when students do not complete work on time or to college standards.” Nick also described his role in dealing with the parents of dual enrollment students: “I also deal with their parents. It is not customary for college instructors to deal with parents, so I try to deal with parents for the instructors as much as I can.” He described some challenges that he had with some of the parents of the dual enrollment students:

On more than one occasion, I have had parents who came in angry about a certain situation in a dual enrollment course, who, once things were calmed down, confided that they never went to college and they felt like they didn't know how to help their son or daughter when they had some type of problem in their classes.

Also, when asked about the challenges that first-generation students face while taking dual enrollment courses, he stated, "These students also do not always have the same support from family who are not familiar with college classes. The parents don't necessarily always understand the demands of these classes."

Stacy also discussed some of the encounters she has had with the parents of first-generation college students: "Some of the biggest problems I have had with parents were because they didn't understand what it means to take college courses or they had unrealistic expectations for their children's performance in those courses." She then spoke about the challenges that some parents of dual enrollment students face:

I deal with angry parents all the time and the angriest seem to be the ones who have not been to college and have no experience with how college courses will truly work.

We try to give our students an experience that is as close to an actual college experience as possible and sometimes parents who have never been through the college experience have trouble understanding why we do things the way we do.

Stacy was also asked about what makes first-generation students from other students. She responded that she is not always sure which students are first-generation students, but "the students who I have known to be first-generation students . . . I have noticed that they are not prepared for the difficult nature of the college classes and their parents are not necessarily prepared either."

Parent financial struggles. Another subtheme that emerged from Major Theme 1 was the impact of parental financial struggles on first-generation college students. Kelli cited her parents' financial struggles and lack of job stability as one of her motivations for taking dual enrollment courses and pursuing a college degree. She stated, "After seeing my parents struggle to find jobs without a degree, I knew it was the best way to have job security in the future." Jonah, now a counselor, mentioned his experience of financially struggling as a first-generation college student:

However, a counselor at my school noticed that I was bright and needed to be challenged my senior year, so he signed me up for classes at a community college and he would take me and pick me up every day because he knew I did not have a way to get there because my family did not have enough money for me to have a car.

Most of the comments regarding parent financial struggles impacting first-generation dual enrollment students came from teachers, counselors, and principals. Nick explained one disadvantage faced by many first-generation students: "A lot of first-generation students live in poverty as well, and do not have access to the same technology as other students." Pam also mentioned lack of access to technology as a disadvantage of these students: "For many students, they also struggle with internet access and computer availability, as many don't have consistent access at home." Stacy mentioned the cost impact of first-generation college students taking dual enrollment courses, she said that some of the students who

struggle to pay with dual enrollment courses are the same ones who would get full financial aid next year and not have to pay for classes. Sometimes it does not make financial sense for students to take dual enrollment courses.

Major Theme 2: Academic Preparedness

The second theme that appeared during data analysis was study skills. Both student and staff participants mentioned the lack of study skills as a challenge for first-generation students taking dual enrollment courses. Some subthemes that emerged from the theme of study skills were time management, study skills, and student expectations (see Table 3).

Table 3

Major Theme 2: Academic Preparedness

Major Theme 2: Academic preparedness	
Subtheme	Code
Time management	Prepared (12), Time management (21), Deadlines/due dates (5)
Study skills	Study (7)
Student expectations	Expectations (12), Expect (3)

Time management. The first subtheme that emerged from Major Theme 2 was the time-management skills among first-generation students in dual enrollment courses. April mentioned that one of her regrets from high school was a misunderstanding of how time would need to be managed once she got to college: “I wish I knew that I would have to be more dedicated to work on my own time for classes while working.” She also stated that the hardest part for her was “reading.” She also “wished I had more time to complete my work and understand that the pace [they] were going at was nothing compared to what was to come in college.” She mentioned that dual enrollment programs did not necessarily prepare her for the time challenges of college and that programs could be improved by “preparing the students with how fast-paced college will be and letting them understand how they will only be in that college class about two days a week.” April also stated that the school should have been “telling the students how they will have to make time to work on that class between [their] work or [their] free time.” The only time-

management issue mentioned by Eva was that she struggled with “juggling two schedules as far as when classes started for the year and when it ended, as well as exams and school delays.”

Bettie, however, mentioned that she benefitted from learning how to manage her time better in her dual enrollment courses: “In the beginning, at times, [taking dual enrollment classes] could be overwhelming. As the classes progressed, [taking dual enrollment classes] taught me how to manage my time and that really helped when I actually started college.” She also said, “One challenge that was tough was trying to get all my assignments done while giving my time up towards the team as well. Although times were very hard, I managed to complete all of them and turn them in.” She pointed out that taking dual enrollment courses “taught me how to keep a set schedule when working with high school classes and college classes.”

The instructors, counselors, and principal also had views on the time-management skills of dual enrollment students. Kim first mentioned time management when she stated,

Most of the students who fail my course are first-generation students because they do not anticipate that the work is going to be as difficult as it is and the due dates are actually firm due dates.

The ones who fall behind and give up are the ones who fail, and I think that is true from what I remember of college.

Finally, Kim suggested, “I think that there should be some type of class or workshop with all students who are taking dual enrollment courses to go over the expectations of the instructors and talk to them about time management and study skills.”

Nick also stated, “More first-generation students struggle with the demands of college courses. They often underestimate the coursework, or the time-management skills needed to complete the assignments they have.”

Study skills. The second subtheme that emerged from Major Theme 2 was study skills. One of the biggest challenges mentioned by both students and staff members was first-generation college students lacking or acquiring the study skills required to complete college-level coursework. Jennifer had the most to say about her lack of study skills when taking dual enrollment courses. She also stated that her high school experience made it necessary for dual enrollment to prepare her for college. She stated that she came from

a very small high school where the teachers were more capable of 1:1 attention. This was helpful in a learning environment, but I feel now as if I was coddled a bit too much; wasn't prepared for the real world.

She stated that dual enrollment courses helped her “learn how to actually study.” She stated that before college, “I never had to put forth an effort for good grades; never studied.” Jennifer was grateful for the difficulty of the dual enrollment courses because “I felt like my friends who struggled slightly in high school were potentially more successful in difficult college classes because they had built great studying habits over the years, where I had not.” She described her dual enrollment courses as a “wakeup call that I needed to put forth more effort and learn studying strategies that I had not learned thus far.” She mentioned that the high school could have better prepared her by offering “college prep classes; but I don't think [they] offered anything like that.”

Other students also echoed the sentiments that Jennifer provided. Kelli stated, “I felt that dual enrollment gave me a more realistic view of the workload involved in college courses because until that point I didn't have to study or prepare for assignments like I have to for college.” Similarly, Mark also stated he was most benefited by the rigor of the courses, “The greater challenge of dual enrollment helped me the most. Most of the high school classes did not

challenge me in the least, but some of the dual enrollment classes required harder work.” In relation to that, he said, “The greatest challenge taking dual enrollment courses was that I had to learn to apply myself to a greater level than in my high school courses.” He also said, “The teachers [and] professors were all quite helpful while taking the courses and did not let us slack off as much as in regular high school classes.” Bettie also mentioned her reliance on a calculator prior to college classes: “One thing I regret not learning the most in high school was to not always rely on a calculator in classes.” She stated this was a problem because “Now, in college, calculators are taken away from us and I am having to reteach myself elementary math.”

Student expectations. Another subtheme that emerged under Major Theme 2 was student expectations. Many of the staff members mentioned how one of the challenges faced by first-generation students taking dual enrollment courses was that students did not have accurate or realistic expectations of dual enrollment courses. One of the individuals that had the most to say about student expectations was Jonah. When he was asked about the differences between first-generation students and other students, he stated,

I am a first-generation college student and when I grew up in a more urban setting and I remember not knowing a thing about college. I think that still is true today.

I see a lot of first-generation students who do not have a plan and are just taking courses because they see other students doing so.

He also indicated that first-generation students “oftentimes do not have anyone who is pushing them to take dual enrollment courses at home and they don’t always understand what courses they need to take and what all is involved in taking those courses.”

Kim also had strong opinions on the expectations of first-generation students. When asked about what she thought makes first-generation students different, she remarked,

Not all first-generation students are the same, just like all non-first-generation are not the same. However, from my experience, some first-generation students do not have realistic expectations of what dual enrollment courses entail and some have no expectations at all. Pam also mentioned student expectations. When asked about the most important part of the dual enrollment program, she stated, “Students are able to learn the expectations associated with college classes as they acclimate to the necessary self-discipline need to be successful.” When she was asked about what makes the first-generation students different from other students, she responded, “Many of these students are somewhat unsure of the expectations. Most are unsure of their eventual goal; they’re taking the college classes because they know that they are seeking to achieve a higher degree than their family.” She even went on to mention student expectations again when she was asked about what advice she would give first-generation college students:

I think first-generation students should have realistic expectations too. For a lot of my students, success is measured by getting all A’s in all of their classes, but I try to explain to them that sometimes success can be measured by being the first person in their family to get a degree, no matter if it was earned with all A’s or not.

Stacy also mentioned student expectations. When speaking about the biggest problems that first-generation students face, she stated, “The lack of knowledge about how college works is the biggest problem.” She went on to say, “College classes and high school classes are very different in a lot of ways, but when students and parents only have experience with high school classes, taking college classes can be a bit of a shock.”

Major Theme 3: Student Support

The third theme that appeared during data analysis was student support. Both student and staff participants mentioned the lack of study skills as a challenge for first-generation students

taking dual enrollment courses. Some subthemes that emerged from Major Theme 3 were school support, peer support, and student knowledge of support services (see Table 4).

Table 4

Major Theme 3: Student Support

Major Theme 3: Student support	
Subtheme	Code
School support	Support (19), School (61)
Classroom support	Class (25)
Knowledge of support services	Services (4)

School support. The first subtheme that emerged from Major Theme 3 was mentorship. Several of the participants mentioned mentorship in some way during their interviews. When April was asked about how the school could have better helped her face the problems she had while taking dual enrollment courses, one area she focused on was mentorship and her need for mentorship:

I wish I had someone to help me with my questions and to help me understand better like how high school takes the time to make sure everyone understands. There is tutoring, but that can only help a person so much.

Bettie also described some of the challenges that she faced while taking dual enrollment courses. She stated that the dual enrollment program or her high school “could have been more understanding. But from my experience, they always were so I didn’t have any issues.” Eva, however, had a different view of her school’s support of her dual enrollment process: “The school did not help much. It was basically me figuring it out.” However, she felt that this was partially because “it was not really problems that [the school] could help with.” Mark felt his school did not offer him an adequate amount of dual enrollment courses: “The school could have

offered more dual enrollment courses to help me further my education and prepare myself for the college experience.”

Jennifer did not have a good experience with her high school relating to her dual enrollment experience:

My school was almost zero help to me. If there was someone there involved in the program, I was unaware of their existence. I think more guidance would have greatly benefitted me.

They could have been much more involved in our progress. They helped us sign up for classes then turned us loose. No accountability, no guidance, and no follow up.

I’m sure that has changed over the years, but I realize now how important that should have been to my teachers [and] guidance counselor.

The staff perspective was different than the student perspective in the area of student support. Jonah described the way he helps students in the dual enrollment program in his position as guidance counselor:

Whenever a student has a problem in a dual enrollment course, they usually come to guidance first. I do whatever I can to give the student the tools and advice they need to succeed in their classes. If there is a problem in a specific class, I do what I can to bring in the teacher and work together to find a solution. If we can’t find a solution, I pass the problem up to the administration.

He then described how the current dual enrollment system is set up to assist first-generation students: “The program is not designed to deal with first-generation college students specifically. The program is designed to make sure that all students succeed and there are no real special programs to help first-generation students with dual enrollment courses.”

When Kim was asked about the current support systems for first-generation dual enrollment students at her school, she said,

There are specific programs at our school, such as Educational Talent Search, who target first-generation college students for college visits and other things like that, but fall short of supporting first-generation students when they need help in dual enrollment courses.

When asked how to better support these students, she remarked, “If there was just some program that students could go to get support while they are taking dual enrollment courses, I think all students would benefit, not just dual enrollment students.” Pam thought that the program could better help these students by offering “better access to college advisors who can direct students and help them work toward specific goals. Colleges and high schools could also work together to develop a tutoring option for students who feel they need more help with coursework.” Pam also offered a suggestion for helping dual enrollment students on the school level:

I think that there should be some type of class or workshop with all students who are taking dual enrollment courses to go over the expectations of the instructors and talk to them about time management and study skills.

To better prepare first generation college students, dual enrollment classes could include instruction regarding the general college experiences [and] requirements: GPA, required credits, residency requirements of four year universities, options for majors, minors (and requirements), transferring credits, etc.

Nick also described how the school is set up to help first-generation students in dual enrollment classes. When he was asked about the program and its supports for first-generation students, he stated,

The program is designed to help all students get college credit and there is support for all students. . . . There is no specific support system in place for first-generation students.

All students can get tutoring and assistance from the college itself, but a lot of first-generation students don't take advantage of those services.

Stacy also mentioned the services of her school. When she was asked about some of the programs that are in place to support first-generation college students, she spoke about programs like "Upward Bound and Educational Talent Search that can help first-generation students as they prepare for college and they can provide support for first-generation students if those students request it. However, students don't use that support very often."

Classroom support. The next major theme that appeared under Major Theme 3 was classroom support. Some of the participants mentioned peer support as one of the benefits of dual enrollment courses. When April was asked to describe the challenges she faced while taking dual enrollment courses, she stated that taking dual enrollment courses in high school was made easier for her by having peers that she knew in the class with her: "Having someone else with you going through the same class helps you understand you are not alone and they know how hard the class is as well." When she was asked about how the current dual enrollment program meets the needs of first-generation college students, Pam explained that students are able to experience challenges "that a college class can present while having the support of a teacher who understands their transitional state. Students are also surrounded by others who are experiencing similar challenges, so they can 'rely upon the support of classmates.' "

Student knowledge of support services. Another subtheme that emerged under Major Theme 3 was the knowledge a student had about the support services available to them. Both student and staff participants had different opinions regarding how much students knew about

the college services that were available to them as dual enrollment students and how they should find out about these services. First, Jennifer stated, “Outside of the classroom I learned that those professors were extremely difficult to reach.” She said there was help available, but it was not always accessible to her: “There were tutoring programs available to me, but I was involved in many sports and extracurricular activities and could never attend those tutoring sessions that were available.” Jennifer was aware of the programs that the college offered to support her, but they did not meet her needs. When Pam was asked what advice she would have for first-generation students as they take dual enrollment courses and prepare for college, she said,

As a first-generation college student myself, I would suggest that students rely upon their advisors and be open about their reservations and struggles. There are many services and opportunities that are available to students that they may not be aware of: tutoring, counseling, and so on.

Major Theme 4: Dual Enrollment Experiences

The final theme that appeared during data analysis was dual enrollment experiences. Participants provided different experiences with first-generation dual enrollment students, both positive and negative, both from the staff and the student perspectives. Subthemes that emerged from the theme of dual enrollment experiences were positive experiences and negative experiences (see Table 5).

Table 5

Major Theme 4: Dual Enrollment Experiences

Major Theme 4: Dual Enrollment Experiences	
Subtheme	Code
Positive	Positive (5), Good (14)
Negative	Negative (5)

Positive experiences. One subtheme that appeared under Major Theme 4 was positive experiences. Many of the students who took dual enrollment courses reported positive experiences with their dual enrollment courses. When asked to describe her dual enrollment experience, Bettie described the many benefits. When asked about what benefited her most from college, she stated,

The classes themselves and the material of the class helped me the most. For example, in high school, I took a college English course which required me to write handfuls of papers over a period of time. Because I wrote so many, I was prepared for all the papers that were to come when I got in college.

She also stated that “Dual enrollment classes prepared me for college by giving me a touch of what college is really like.” Eva also described a positive dual enrollment experience:

I had a great dual enrollment experience. My high school worked with me on schedules and made it easy.

The ability to get a taste of college life without the full-blown stress of going to college full time helped a lot. It was almost like a trial run of college for me

Knowing what college professors expected before I was a full-time student was very helpful. I experienced the college class life without dealing with the college social life all at once.

Mark had an overall positive experience while taking dual enrollment courses: “I had a great experience taking most of my dual enrollment courses. They showed me how different college was than high school.” Jonah also pointed out some of the positive experiences of dual enrollment that he has observed:

In my role as a counselor I see first-generation students every day who are excited to take dual enrollment courses because they view dual enrollment as a jumping-off point for them and their college careers. I see a lot of first-generation students who are excited to go to college because their parents never did, and it makes them feel good.

Kim also described the positive experiences that she had as a dual enrollment instructor. She said “There is nothing more rewarding than watching a first-generation college student become college-ready in my class and then go on to be successful at a 4-year university or community college.”

Negative experiences. Another of the themes that emerged from Major Theme 4 was the theme of negative experiences. Some students and staff members recalled negative experiences while either taking dual enrollment courses or dealing with first-generation students taking dual enrollment courses. Eva reported some positive experiences, but also some negative experiences while taking dual enrollment courses:

I started these classes as a 15-year-old junior, which was very intimidating in itself. . . .

Being a 15-year-old junior, I had to rely on my working parents to drive me to the college and then rely on friends to get me back to the high school for my other classes.

She also faced the challenge of managing her study habits and her assertiveness: “When I had questions for my professor, I was too intimidated in the classroom setting to ask questions.”

Kelli also had a negative experience relating to her dual enrollment experience. She described a negative experience with one of her classes:

I had one professor that I felt just didn’t understand the way I learned, but I felt if they would have adjusted their teaching style like how some of my college professors try to do, I would have done better.

Despite this class being a two-part class, I was allowed to only complete the first semester so that I could maintain my GPA. While this was helpful, the school tried to tell me multiple times that I would not receive credit for the first section, when I actually did on my college transcript.

She felt the school could have been more helpful: “When the school noticed that I was not getting the material, it would have been helpful if they had information to get into contact with tutors.”

Research Question Responses: Central Research Question

Information obtained from the data sources used in this study was used to answer the central research question and all three subquestions. The central research question of this study was as follows: What are student, teacher, and administrator descriptions of the challenges faced by first-generation college students taking dual enrollment courses in Southwest Virginia? Through the individual interviews, focus group, and journals, participant perceptions of the dual enrollment challenges faced by first-generation college students in the areas of parents, academic preparedness, and student support.

Throughout the interviews, focus groups, and journals, many of the participants noted the lack of parental support systems in place for first-generation students taking dual enrollment courses (Major Theme 1). During the interviews, many of the individuals cited a lack of support at home as one of the biggest challenges facing dual enrollment students whose parents did not go to college (Major Theme 1). According to Kim, “A lot of first-generation students do not have the same type of parental support that other students have at home.” Pam also stated, “These students also do not always have the same support from family who are not familiar with college classes.” Jonah also said, “I think that one thing that current first-generation students

also face is that they oftentimes do not have anyone who is pushing them to take dual enrollment courses at home.”

The perception of parental support differed when it came to the students who were interviewed for the study. While the counselors, teachers, and administrators viewed first-generation students as lacking support at home, some of the students disagreed with this sentiment. Kelli stated,

While my parents couldn't help me understand the subjects I was learning, I felt that I had a really good support system. My parents were always there to remind me that I could accomplish anything I put my mind to.

Bettie also stated, “My parents have always stressed that grades and a good education were important. They encouraged me to take as many college classes as I could while still in high school.”

While lack of parental support was one issue that was mentioned by several of the teacher, administrator, or counselor participants, one of the themes that was restated several times was the lack of parental understanding of the college process and the problems caused by that lack of understanding (Major Theme 1). This issue resulted in frustration for both parents and school staff. Jonah pointed out that parents “don't always understand what courses they need to take and what all is involved in taking those courses.” Pam also said, “The parents don't necessarily always understand the demands of these classes.” Stacy similarly stated, “I deal with angry parents all the time and the angriest seem to be the ones who have not been to college and have no experience with how college courses will truly work.” Kim recounted, “The parents of first-generation students are different as well because they are more willing to attack me over

their students and blame me when students do not complete work on time or to college standards.” Nick also stated,

I have had parents who came in angry about a certain situation in a dual enrollment course, who, once things were calmed down, confided that they never went to college and they felt like they didn’t know how to help their son or daughter when they had some type of problem in their classes.

While most of the staff perspectives focused on parental support and knowledge as the biggest challenge faced by the dual enrollment students, the students themselves viewed the lack of study-skills development as one of their biggest challenges while taking dual enrollment courses (Major Theme 2). Many of the students mentioned the lack of study skills required to learn the more difficult content or the lack of time-management skills to keep up with the college pace (Major Theme 2). Bettie mentioned, “I was a varsity cheerleader which required a lot of time inside and outside of school. One challenge that was tough was trying to get all my assignments done while giving my time up towards the team.” Mark stated, “The greatest challenge taking dual enrollment courses was that I had to learn to apply myself to a greater level than in my high school courses.” April also said, “I wish I had more time to complete my work and understand, but the pace we were going at in high school was nothing compared to what was to come in college.” Jenifer added, “Dual enrollment mostly helped me learn how to actually study. . . . These dual enrollment classes were somewhat of a wakeup call that I needed.”

Research Question Responses: SQ1

SQ1 was used to investigate how students, teachers, and administrators perceive Southwest Virginia’s dual enrollment programs’ impact on college degree completion for first-generation students and retention once those students go to college. Academic preparedness was

a theme that related to this subquestion (Major Theme 2). First-generation student participants who take dual enrollment courses were reported to struggle with time management, study skills, and lack of knowledge (Major Theme 2). Students in the study reported a lack of study skills and time-management skills when entering dual enrollment classes, but also reported learning these skills while they took dual enrollment courses (Major Theme 2). Bettie stated, “In the beginning, at times, [taking dual enrollment classes] could be overwhelming. As the classes progressed, [taking dual enrollment classes] taught me how to manage my time and that really helped when I actually started college.”

Research Question Responses: SQ2

SQ2 was used to investigate how students, teachers, and administrators perceive the ways in which Southwest Virginia’s dual enrollment programs impact student involvement and college degree completion for first-generation Appalachian college students. In this study, the level of student involvement was best described by the lack of support that students received from the high schools and colleges they attended (Major Theme 3). As Nick stated, “There is no specific support system in place for first-generation students. All students can get tutoring and assistance from the college itself, but a lot of first-generation students don’t take advantage of those services.”

Research Question Responses: SQ3

SQ3 was used to investigate how students, teachers, and administrators perceive the ways in which Southwest Virginia’s dual enrollment programs impact student involvement and college degree completion for first-generation Appalachian college students? Student dual enrollment experiences was a theme that related to this subquestion (Major Theme 4). Students had both positive and negative dual enrollment experiences (Major Theme 4). Pam stated, “Dual

enrollment classes can be very beneficial to students because they can ease students into the world of higher education at a slower pace, offering more support to students during the transition.”

Summary

Chapter Four included a description of the challenges first-generation college students faced while taking dual enrollment courses. This study encompassed 11 participants who completed individual interviews. Participants also took part in an online focus group and completed reflective journals. The results section was organized thematically and according to the research questions of the study. The major themes and subthemes developed during data analysis supported information collected during this research. Through the use of individual interviews, a focus group interview, and reflective journals, four major themes emerged: (a) parents, (b) student academic preparedness, (c) student support, and (d) dual enrollment experiences.

Major Theme 1: Parents, addressed the role that parents play in the lives of first-generation students taking dual enrollment courses. The subthemes included parental support, parental lack of knowledge, and parental financial struggles. Next, Major Theme 2: Academic preparedness, addressed how academically prepared students were perceived to be by both students and staff members. The subthemes included time management, study skills, and student expectations.

Additionally, Major Theme 3: Student support, addressed how well students were supported throughout the dual enrollment process. The subthemes represented the different types of support, including school support, classroom support, and student knowledge of support services. Finally, Major Theme 4: Dual enrollment experiences, addressed the experiences that

students had while taking dual enrollment courses. The subthemes included positive and negative experiences.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this holistic single-case study was to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia. The chapter includes a summary of the study findings along with a review of how the central research questions and subquestions were answered. Then, the theoretical and empirical foundations from the literature are discussed. This study had theoretical, empirical, and practical implications, which are explained in this chapter. Finally, the limitations of this study, along with recommendations for future research are discussed. This chapter closes with a summary of the important conclusions drawn from this study.

Summary of Findings

This study utilized three different methods of data collection, including individual interviews, an online focus group, and journaling. The data that were collected created a holistic picture of the case of the challenges of first-generation students taking dual enrollment courses in the Appalachian region. The main source of data for this research study came from the individual interviews, which were recorded, transcribed, coded, and analyzed. A focus group and journals provided supplemental information for the interviews and further insight. Through the data analysis, four major themes and 12 subthemes emerged in response to the central research question and subquestions.

The central research question was as follows: What are student, teacher, and administrator descriptions of the challenges faced by first-generation college students taking dual enrollment courses in Southwest Virginia? The major themes that emerged were parents, student academic preparedness, student knowledge, and dual enrollment experiences. Throughout the

interviews, focus groups, and journals, many of the participants noted the lack of parental support systems in place for first-generation students taking dual enrollment courses. During the interviews, many of the individuals cited a lack of support at home as one of the biggest challenges facing dual enrollment students whose parents did not go to college. According to Kim, “A lot of first-generation students do not have the same type of parental support that other students have at home.” Pam also stated. “These students also do not always have the same support from family who are not familiar with college classes.” Jonah also said, “I think that one thing that current first-generation students also face is that they oftentimes do not have anyone who is pushing them to take dual enrollment courses at home.”

The perception of parental support differed when it came to the students who were interviewed for the study. While the counselors, teachers, and administrators viewed first-generation students as lacking support at home, some of the students disagreed with this sentiment. Kelli stated,

While my parents couldn't help me understand the subjects I was learning, I felt that I had a really good support system. My parents were always there to remind me that I could accomplish anything I put my mind to.

Bettie also stated, “My parents have always stressed that grades and a good education were important. They encouraged me to take as many college classes as I could while still in high school.”

While lack of parental support was one issue that was mentioned by several of the teacher, administrator, or counselor participants, one of the themes that was restated several times was the lack of parental understanding of the college process and the problems caused by that lack of understanding. This issue resulted in frustration for both parents and school staff.

Jonah pointed out that parents “don’t always understand what courses [their children] need to take and what all is involved in taking those courses.” Pam also said, “The parents don’t necessarily always understand the demands of these classes.” Stacy similarly stated, “I deal with angry parents all the time and the angriest seem to be the ones who have not been to college and have no experience with how college courses will truly work.” Kim recounted, “The parents of first-generation students are different as well because they are more willing to attack me over their students and blame me when students do not complete work on time or to college standards.” Nick also stated,

I have had parents who came in angry about a certain situation in a dual enrollment course, who, once things were calmed down, confided that they never went to college and they felt like they didn’t know how to help their son or daughter when they had some type of problem in their classes.

While most of the staff perspectives were focused on parental support and knowledge as the biggest challenge faced by the dual enrollment students, the students themselves viewed lack of study skill development as one of their biggest challenges while taking dual enrollment courses. Many of the students mentioned the lack of study skills required to learn the more difficult content or the lack of time-management skills to keep up with the college pace. Bettie mentioned, “I was a varsity cheerleader which required a lot of time inside and outside of school. One challenge that was tough was trying to get all my assignments done while giving my time up towards the team.” Mark stated, “The greatest challenge taking dual enrollment courses was that I had to learn to apply myself to a greater level than in my high school courses.” April also said, “I wish I had more time to complete my work and understand but the pace we were going at in high school was nothing compared to what was to come in college.” Jenifer added, “Dual

enrollment mostly helped me learn how to actually study. . . . These dual enrollment classes were somewhat of a wakeup call that I needed to put forth more effort and learn studying strategies that I had not learned thus far.”

SQ1 was used to investigate how students, teachers, and administrators perceive Southwest Virginia’s dual enrollment programs’ impact on college degree completion for first-generation students and retention once those students go to college. Academic preparedness was a theme that related to this subquestion. First-generation students who take dual enrollment courses were reported to struggle with time management, study skills, and lack of knowledge. Students in the study reported a lack of study skills and time management skills when entering dual enrollment classes, but also reported learning these skills while they took dual enrollment courses. Bettie stated, “In the beginning, at times, [taking dual enrollment classes] could be overwhelming. As the classes progressed, [taking dual enrollment classes] taught me how to manage my time and that really helped when I actually started college.”

SQ2 was used to determine how students, teachers, and administrators perceive Southwest Virginia’s dual enrollment programs’ impact on student college involvement. Student support was a theme that related to this subquestion. In this study, the level of student involvement was best described by the support that students received from the high schools and colleges they attended. Nick stated, “There is no specific support system in place for first-generation students. All students can get tutoring and assistance from the college itself, but a lot of first-generation students don’t take advantage of those services.”

SQ3 was used to determine how students, teachers, and administrators perceive Southwest Virginia’s dual enrollment programs’ impact on student involvement and college degree completion for first-generation Appalachian college students. Student dual enrollment

experiences was a theme that related to this subquestion. Students had both positive and negative dual enrollment experiences. As Pam stated, “Dual enrollment classes can be very beneficial to students because they can ease students into the world of higher education at a slower pace, offering more support to students during the transition.”

Discussion

The findings of this study relate to the empirical and theoretical literature on first-generation dual enrollment students in the Appalachian region presented in Chapter Two. Past empirical research has addressed dual enrollment, first-generation college students, and education in Appalachian regions. The theoretical framework for this study was based on Tinto’s (1982) theory of retention in relation to college students and Astin’s (1984) theory of student involvement. The data presented in this study aligned with the empirical and theoretical literature presented in Chapter Two. The following sections include discussion of how the findings from this study relate to the empirical and theoretical foundations in the literature regarding first-generation students taking dual enrollment courses in the Appalachian region.

Empirical Literature

The literature presented in Chapter Two was corroborated by the participants of this study. The study participants echoed many of the same issues brought up in the past research on first-generation students, dual enrollment courses, and education in the Appalachian region. However, there were no studies in which the experiences of first-generation students taking dual enrollment courses in the Appalachian region were directly examined. The following section includes an explanation of how this study relates to the past research and fills the gap in the literature on Appalachian first-generation students taking dual enrollment courses.

The first section in Chapter Two was focused on Appalachian culture and education. One point from the literature review was that the isolated Appalachian education system was shaped by communal bonds, hard work, and poverty (Elam, 2002). This was reinforced in the study through the responses of several participants. Eva stated that her parents “always taught me a good work ethic and that I could control my future and that I get what I give.” Another of the important pieces from that section addressed how the decline of the coal industry was causing the communities to be in distress, but higher education was one way that the distressed communities could create opportunities for future generations (Wright, 2012). Kelli stated, “After seeing my parents struggle to find jobs without a degree, I knew it was the best way to have job security in the future.”

The next section in Chapter Two contained literature related to first-generation college students. Much of the research on first-generation college students has been focused on the challenges of first-generation students. One of the challenges that first-generation students usually face in college is a lack of time- and resource-management skills (Bradbury & Mather, 2009). Several of the first-generation students from this study reported that time management was a skill that they either lacked before they took dual enrollment courses or gained as a result of dual enrollment courses. One of the major themes that emerged in this study under the area of academic preparedness was the theme of time management. April mentioned, “I wish I knew that I would have to be more dedicated to work on my own time for classes while working.” She even went on to stated that dual enrollment programs could be improved by “telling the students how they will have to make time to work on that class between [their] work or [their] free time.” Nick also stated of first-generation students, “They often underestimate the coursework, or the time-management skills needed to complete the assignments they have.” Another of the

important points from that section is that college readiness is an ongoing process that requires constant support and mentorship, especially when students are first-generation students (Schademan & Thompson, 2016). The need for mentorship was a significant subtheme that emerged in this study. April stated, “I wish I had someone to help me with my questions and to help me understand better like how high school takes the time to make sure everyone understands.” Eva also mentioned her dual enrollment experience, “The school didn’t help much, it was basically me figuring it out.”

The next section of Chapter Two was focused on literature relating to dual enrollment. One of the areas mentioned in that section related to dual enrollment as a means for college readiness. Dual enrollment courses not only offer students college credit, but they also assist students with being ready for college. In addition, dual enrollment programs serve as a means of remediation for students in preparation for college (Giani et al., 2014). This was also reinforced in the present study through the responses of several participants under the theme of study skills. Jennifer pointed out that taking dual enrollment courses was a “wake up call that I needed to put forth more effort and learn studying strategies that I had not learned thus far.” Mark also explained, “The greatest challenge taking dual enrollment courses was that I had to learn to apply myself to a greater level than in my high school courses.” Some of the other advantages stated in the research on general dual enrollment courses were that students benefitted from the diverse and more challenging course offerings (Crouse & Allen, 2014). According to Mark, “The greater challenge of dual enrollment helped me the most. Most of the high school classes did not challenge me in the least, but some of the dual enrollment classes required harder work.

Another of the important aspects of research on dual enrollment addressed the benefits that dual enrollment could have on college affordability and students with lower SES. T. R.

Bailey and Karp (2003) found that dual enrollment programs were being targeted toward students from lower SES backgrounds and making college more affordable for low SES students. Crouse and Allen (2014) also pointed out that one benefit of dual enrollment courses is the opportunity for students to earn college credits at a reduced rate. In the current study, no students mentioned the affordability of dual enrollment courses, but Stacy, the school guidance counselor, pointed out that students who

struggle to pay with dual enrollment courses are the same ones who would get full financial aid next year and not have to pay for classes. Sometimes it does not make financial sense for students to take dual enrollment courses.

So, while some students do experience financial benefits, some students actually end up paying more money than they would otherwise.

Another section of research from Chapter Two dealt with dual enrollment courses in relation to first-generation college students. Ndiaye and Wolfe (2016) found that first generation students who took part in early college programs and took dual enrollment courses were more likely to graduate high school and persist to college than their first-generation peers who did not take dual enrollment courses. An (2013) also found a positive relationship between dual enrollment coursework and degree obtainment. One possible reason for this is that dual enrollment coursework demonstrates to first-generation students that they capable of completing college coursework (Vargas et al., 2017). This seems to be reinforced through the responses of participants in the present study. As Kelli stated, “I felt that dual enrollment gave me a more realistic view of the workload involved in college courses because until that point, I didn’t have to study or prepare for assignments like I have to for college.”

Also identified in that section of the literature review was a need for research to be done into how high schools could close the achievement gap between first-generation students and students whose parents attended college. Many of the study participants had suggestions on how to help first-generation students that could assist in closing that achievement gap. This was evident under the theme of school support when several participants mentioned the need for mentorship. April stated,

I wish I had someone to help me with my questions and to help me understand better, like how high school takes the time to make sure everyone understands. There is tutoring, but that can only help a person so much.

Pam mentioned a mentorship program when she stated that students need “better access to college advisors who can direct students and help them work toward specific goals.”

Another important idea from the literature on general dual enrollment programs was that lack of parental knowledge about dual enrollment courses was a barrier for first-generation students (Irlbeck et al., 2014). This idea also became apparent throughout the current study, as many participants reported that parental knowledge was a significant barrier for the dual enrollment process with first-generation students. April mentioned on two different occasions during her interview that her parents did not have the knowledge required to help her with the dual enrollment process and that they could not help with in her dual enrollment course work. Many of the staff members involved in the study also reported issues that have arisen from the parental lack of knowledge regarding first-generation students’ challenges. According to Kim, “The parents of first-generation students are different as well because they are more willing to attack me over their students and blame me when students do not complete work on time or to college standards.” Both Nick and Stacy also mentioned angry conflicts with parents of first-

generation students that took place because of a lack of knowledge on the part of the parents. One important idea that came out of the student interviews was that even though some of the students felt like their parents did not have the knowledge to assist them with their classes, the parents did support them emotionally, which seemed to balance out the lack of knowledge. As Kelli mentioned, “While my parents couldn’t help me understand the subjects I was learning, I felt that I had a really good support system.” Mark also stated, “a lot of support at home in some ways, but they still do in others. My parents were very helpful and encouraging to me, but they did not really know anything about taking college courses.” It is also possible that parents thought that they were providing emotional support when they had altercations with the principals and counselors in this study.

Another area of literature from Chapter Two was on the benefits of dual enrollment in the Appalachian region. One of the most important factors of dual enrollment courses is that everyone involved in the process benefits in some way. High schools see benefits from advanced course offerings and colleges see benefits from increased enrollment numbers from dual enrollment students (Stimpson, 2016). Pretlow and Patteson (2015) described dual enrollment courses as a tool for students who were not traditionally thought as high-achieving students to transition to college. An example of that from this study is April, who was classified as a special-needs student with a reading disability in high school and dual enrollment courses helped ease her transition to college. She stated that the hardest part while taking her dual enrollment courses for her was “reading.” She also “wished I had more time to complete my work and understand that the pace [they] were going at was nothing compared to what was to come in college.”

The final area of research in Chapter Two was the section on the limitations of dual enrollment. One of the key takeaways from that section was that dual enrollment courses do occasionally have negative impacts on students as well as the positive ones (Kanny, 2015). Therefore, a goal of dual enrollment programs should be to minimize the drawbacks, while maximizing the benefits for all parties involved (Kanny, 2015). One of the themes that emerged related to this area in the current study was the student support subtheme. One of the ways to minimize the drawbacks of dual enrollment is to make sure that students are aware of support services and connecting students with these support services. April echoed the need for this when she stated,

I wish I had someone to help me with my questions and to help me understand better, like how high school takes the time to make sure everyone understands. There is tutoring, but that can only help a person so much.

Jonah stated, “The program is not designed to deal with first-generation college students specifically. The program is designed to make sure that all students succeed and there are no real special programs to help first-generation students with dual enrollment courses.” Nick also mentioned “There is no specific support system in place for first-generation students. All students can get tutoring and assistance from the college itself, but a lot of first-generation students don’t take advantage of those services.” Pam offered a suggestion for helping students navigate the dual enrollment process:

I think that there should be some type of class or workshop with all students who are taking dual enrollment courses to go over the expectations of the instructors and talk to them about time management and study skills.

To better prepare first generation college students, dual enrollment classes could include instruction regarding the general college experiences [and] requirements: GPA, required credits, residency requirements of four year universities, options for majors, minors (and requirements), transferring credits, etc.

This lack of support system or lack of knowledge about support systems could be a barrier for first-generation students. Research has shown that successful dual enrollment programs have support systems like mandatory study groups, individual advising, tutoring, and progress reports (Gonzalez & Chavez, 2009).

Additionally, research indicates that when students are taking dual enrollment courses and do poorly in them, they are more likely to enroll in college later than their peers who did not take dual enrollment courses, less likely to complete a 4-year degree on time, and more likely to drop out of high school (Cowan & Goldhaber 2015). Only one student interviewed in the present study reported performing poorly in a course. Kelli stated,

I had one professor that I felt just didn't understand the way I learned, but I felt if they would have adjusted their teaching style like how some of my college professors try to do, I would have done better.

Kelli went on to talk about how she was misled about how her college grade was going to be portrayed on her college transcript. This also supports the research of Kilgore and Wagner (2017), who indicated that many times students are not made aware of how their courses or credits will transfer before courses are taken and paid for. However, Kelli did not indicate that this experience negatively impacted her future college career in any way.

Theoretical Literature

The grounding theoretical concepts of this study were Tinto's (2006) theory of college retention and Astin's (1984) theory of college involvement. The first theory related to this study was Tinto's (2006) theory of college readiness and one of the main tenets of that theory was explained by Tinto (2006) in this way: "It is one thing to understand why students leave; it is another thing now what institutions can do to help students succeed" (p. 6). The main focus of this present study was to determine what could help students who were first-generation dual enrollment students in the Appalachian region succeed during their dual enrollment experience. Many of the study participants divulged ways they felt that the dual enrollment experience could be improved. Several of the participants brought up mentorship as a possible solution to improve the program. Some of the other suggestions to improve the dual enrollment program included a class to teach students and parents about the college process or a program at the high school level to ensure that students were aware of and able to utilize available college support programs. A guiding principle of Tinto's (2006) theory of retention is that schools should dedicate resources to focus on developing programs to help students stay in college. Many of the participants in this current study seemed to agree with this principle, calling for mentorship and programs to assist students become acclimated to the college process.

Another of the key principles guiding this study based on Tinto's (2006) theory of retention was how students from the Appalachian region have been unprepared academically and that research needed to be done on how remedial education related to the retention of low-income students. None of the students involved in the study identified themselves as specifically low-SES, but several mentioned their parents' financial struggles in the interviews. However, many participants mentioned the learning benefits of taking dual enrollment courses. Many

students interviewed explained that taking dual enrollment courses gave them the study skills necessary to be successful in college. Many of them stated that they did not have the study skills they needed to take college courses before taking dual enrollment courses, but learned those skills as a result of taking dual enrollment courses. This reinforces the idea that dual enrollment courses serve as a means of remediation and can increase retention.

Another theory supporting this study was Astin's (1984) theory of student engagement in higher education. This theory relates to the present study which was an examination of how students engaged with the dual enrollment process. One of the main facets of this theory is that student involvement in the college process is connected to persistence to degree completion (Astin, 1984). In this study, students described their involvement in the dual enrollment process by describing their dual enrollment experiences and the quality of that involvement. Throughout their responses, the individuals described many positive and negative experiences. Some students had positive dual enrollment experiences in which they were involved in the college process while still being in high school, making them more prepared for college. Students reported that their ability to perform college-level work and learn college-level study habits while still in high school, and sometimes surrounded by other dual enrollment students, eased their transition into the college process. Some students did report negative experiences, but these negative experiences did not decrease their college involvement.

The most crucial part of this theory as related to the study was the idea that students were taking part of the college experience and being involved in college while still in high school. Students and faculty members described the challenges that students faced while taking dual enrollment courses and being involved in the college experience. The greatest factor that appeared to be a barrier to college involvement, based on the information provided in the current

study, was lack of knowledge. Parents of first-generation students and the first-generation students themselves were reported to not have knowledge about dual enrollment and the college process in general, which caused conflicts to arise in both the staff and the student interviews. One detail that emerged from this study was that some students were not as involved in the college process as they could be because they did not have the knowledge of college services and programs that were available to them. Astin (1984) explained that access to student support services was a key element in keeping students involved and supported throughout the college process. Therefore, an important factor in keeping dual enrollment students involved in the college process is ensuring that students are aware of what support services are available to them and making sure that students are taking advantage of these services.

Implications

First-generation students taking dual enrollment courses is a key area of study in the Appalachian region. Previous research has been limited to dual enrollment courses, first-generation students, or students in the Appalachian region. None of that research has examined all of these things at the same time. This qualitative study was conducted to provide a voice for first-generation students taking dual enrollment courses and the staff that also play a crucial role in these courses and this college experience to fill that gap in the literature. The theoretical, empirical, and practical implications based on the findings of this study follow.

Theoretical Implications

College involvement and retention are two areas that are crucial to student success in college and are covered by the theories of Astin (1984) and Tinto (2006). One of the main implications of Tinto's (2006) theory of retention is that colleges retain students by helping them succeed. One of the main lessons I learned from interviewing participants in this study was that

students and teachers alike both agreed that the dual enrollment process helped the students to prepare for the challenges of college. While many of the student participants struggled at some point in their dual enrollment experiences, these struggles did not cause them to drop out of college, but prepared them for the actual college process beyond dual enrollment. None of the students that I interviewed for this study described the challenges that they faced during the dual enrollment process as barriers for their postsecondary college experience, but instead reframed those challenges as means of preparation for the rigors and challenges of college. Many students involved in the study described dual enrollment courses as having provided them with the study and academic skills they would need once they went on to college, thus helping them remain in college.

One of the key elements of the theory of college retention was explained by Tinto (2006) in this way: “It is one thing to understand why students leave; it is another thing know what institutions can do to help students succeed” (p. 6). One of the ideas to emerge from this present study is there are certain factors that determine the level of success students will have in dual enrollment courses, as evidenced through the description of the biggest dual enrollment challenges. The elements that are key to be successful in dual enrollment courses are (a) time management, (b) study skills, (c) student support, (d) student knowledge about support services, and (e) parental support. Colleges and high schools alike can help retain dual enrollment students and assist them with persisting on to college degree completion by providing support for them in these areas. Dual enrollment programs that can prepare students academically in the area of time management and study skills will give students the skills necessary to face one of the biggest challenges for students mentioned by several participants in this study, which will aid in college retention.

It is also important for schools to not only support students, but also to make sure that students are actively aware of what support services are available to them to ensure that they are able to fully take advantage of them. Finally, another way that institutions can help to retain students is by ensuring that they have the correct level of parental support. Students are not meant to be aided by their parents in the college environment, but the parents of dual enrollment students can be a crucial factor in the college retention of dual enrollment students. Parents of first-generation college students who did not go to college themselves should be educated on the dual enrollment and college processes to be able to support their students effectively as they go through dual enrollment courses and the transition on to other college institutions. If institutions are able to support students in these areas, they will be able to retain more dual enrollment students.

The second theory that guided the study was Astin's (1984) theory of college involvement. One of the basic postulates of the theory of student involvement is that "student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program" (Astin, 1984, p. 519). By taking dual enrollment courses, students are forced to take part in college-level activities and be involved in the college process. To increase student learning and development through taking dual enrollment courses, institutions need to focus on improving student involvement through positive learning experiences. Some of the positive learning experiences outlined throughout this study were students learning college-level material, students getting a taste of the college life without the full-blown stress of going to college, students understanding the expectations of college professors, and students learning that they have the ability to

complete college-level coursework. By ensuring that students have positive learning experiences like these, institutions could ensure that students have positive levels of college-involvement.

Another of the basic postulates of the theory of student involvement is that “the effectiveness of any educational policy or practice directly related to the capacity of that policy or practice to increase student involvement” (Astin, 1984, p. 519). The institutions involved in making decisions for dual enrollment programs have to take into account the level of involvement that dual enrollment students are taking in the college process. To do this, colleges and high schools should make policy decisions that will decrease the challenges faced by first-generation college students and increase student involvement. Some students reported that they felt as if they were on their own during the dual enrollment process and some felt like they had no support from their high schools. As Nick, a principal, pointed out, “There is no specific support system in place for first-generation students. All students can get tutoring and assistance from the college itself, but a lot of first-generation students don’t take advantage of those services.” Therefore, the high schools and colleges that are making dual enrollment policy decisions need to more effectively work together to increase student involvement and ensure that students have access to the supports that they need to be involved and be successful.

Empirical Implications

There is much empirical literature on the study of dual enrollment programs, first-generation students, and education in the Appalachian region. However, this study filled a gap in the literature by examining all three at the same time. One of the most important themes that emerged from this study was that parents of first-generation students did not always have the knowledge to support their children while taking dual enrollment courses, but they did support them in other ways. Several of the student participants in the study mentioned that their parents

did not know how to help them with the coursework or answer questions about their dual enrollment courses, but they were able to provide emotional support. This emotional support appeared to be a significant factor for each of the dual enrollment students. This indicates that parents who did not go to college can still provide significant support for students in dual enrollment courses by supporting them emotionally and financially throughout the dual enrollment process. Even the staff members that were surveyed pointed out that they had angry interactions with parents who did not understand the dual enrollment process. These angry reactions and encounters appear to be another type of support provided by these parents. These parents appear to be simply standing up for their children to provide support for them, when they lack the knowledge to solve whatever problem their child may be having during the dual enrollment process.

Another key empirical element that emerged during this study was that taking dual enrollment courses appeared to serve as a college-readiness program for first-generation students. Students reported that taking dual enrollment courses caused them to improve their time-management skills to complete the coursework. Students also noted that taking dual enrollment courses caused them to develop better study skills than they had previously learned in high school. This is significant because none of the students who were involved in the study mentioned that their parents were able to prepare them for any of these challenges and they had to learn on their own. This means that taking dual enrollment courses can serve as a college-readiness self-evaluation for first-generation students and allow them to determine whether they are college-ready or not and what skills they will need to develop to be college-ready when their parents may not be experienced enough with the college process to be able to assist them in those areas.

Yet another of the key empirical implications of this study is the description of the student and teacher expectations of the dual enrollment process. Many of the staff members who were interviewed for this study mentioned student expectations of dual enrollment courses as one of the challenges that students faced while taking these courses. According to participants in this study, students oftentimes take dual enrollment courses without a full understanding of what these courses will require of them. Many of the staff participants pointed out that some of the biggest challenges that students face involved the lack of knowledge about the discipline required to take college courses and the depth of knowledge and commitment the courses require in order for students to be successful. This lack of knowledge about the college process or the unrealistic expectations about outcomes in the college process, are challenges for first-generation college students when they lack the time-management or study skills necessary to be successful.

Another empirical implication of this study is that dual enrollment students are not effectively utilizing the support available to them. Therefore, first-generation dual enrollment students do not get the same support advantages as do typical college students. Many of the participants—both students and administrators—mentioned that there are support systems available for students, but students are not aware of them or were unable to use them. Jennifer mentioned that there was tutoring available, but she could not attend tutoring because of her high school extracurricular activities. Pam stated that she felt that there were services available for students that they were not aware of. Kelli stated that she would have used tutoring services, but her high school did not even inform her that tutoring services were available. Nick mentioned that there are many support services available to students, but students are not taking advantage of them. The school officials and the students had differing perspectives on why college support

services were not being used, but the common theme is that they were not being properly used by students.

Finally, another empirical implication that arose from this study is that for first-generation students in the Appalachian region, taking dual enrollment courses is generally a positive experience. Students face many challenges, as previously outlined in this study, but they also experience benefits. Many of the students reported that they obtained the time-management or study skills that they found useful in college coursework through their dual enrollment experiences. One student even described taking dual enrollment courses as a “wake-up” call that they were not prepared to take college courses before taking dual enrollment courses. Only minor negative experiences were described by the student participants. Even the ones who had negative experiences also described how their dual enrollment experiences were beneficial to them in some way. The first-generation students, many of whom many described themselves as having no prior knowledge about the college experience, were able to experience college while still in a high school setting, and this was generally beneficial to them.

Practical Implications

There are several practical implications that emerged from this study of the first-generation students taking dual enrollment courses in the Appalachian region. Several themes from the study should inform policy decisions moving forward for dual enrollment programs in the Appalachian region. One of the first major practical implications for this study is that understanding parental support and the role of parents in the dual enrollment process for first-generation students is key to improving the dual enrollment process for these students. One idea that emerged from this study is that parents sometimes do not have the knowledge to help their children with dual enrollment coursework or with the college process. However, many of the

participants in this study reported that their parents were able to support them in other ways and understanding and harnessing this support should be a key element of the dual enrollment programs for first-generation students.

Parents generally provide support for their children taking college courses. If a parent has had college experience, they will have a different level of knowledge and familiarity with the college process than the ones who did not. This does not mean that parents who have not had college experience will not want to support their children throughout the college process. Therefore, dual enrollment programs should have information available or training programs for the parents of dual enrollment students who have not had college experience themselves. The purpose of this training should be to inform parents of the expectations of dual enrollment courses and familiarize them with the college process. Several of the staff members interviewed for this study mentioned that the conflicts that they had with the parents of dual enrollment students had been because of a lack of knowledge about the dual enrollment process and this could help alleviate those problems.

Another of the themes that emerged that can have practical implications for policy decisions is the lack of study and time-management skills that students bring into the dual enrollment process. Dual enrollment program administrators should actively recognize this lack of study skills and implement programs to teach students study skills and time management skills prior to beginning dual enrollment courses. Students whose parents did not go to college and who may be unfamiliar with the intellectual and temporal demands of college could benefit from some type of course that would make them aware of these demands and give them the skills that they would need to meet these demands.

The evidence from this study also has practical implications beyond the scope of this study. This study only encompassed the examination of dual enrollment students who were also first-generation students. This study did not investigate first-generation students who did not take dual enrollment courses, but still went on to attend college after high school. If first-generation students are experiencing these challenges while taking dual enrollment courses, it can be assumed that first-generation students will also face these challenges if they face these problems after high school. Therefore, high schools should offer study skills and time-management programs prior to graduation to first-generation college students to assist them with preparing for the college process.

The final practical implication from this study was that many of the staff members interviewed for this study mentioned the disconnect between first-generation college students and programs designed to assist them at the college level. Therefore, there should be more effort placed on connecting first-generation students with these support services at the high school level. Students who take dual enrollment courses, but do not set foot on a college campus may have no way of knowing of the support available to them without someone at the high school level making them aware of these support programs. There should be training or information available at the high school level at multiple points during the semester to ensure that students are aware of and able to take advantage of all of the support programs that are available to them.

Delimitations and Limitations

There were both limitations and delimitations in this study. The first delimitation was the boundaries set for this study: first-generation students who took dual enrollment courses in the Appalachian region. This study was delimited to students who were already out of dual enrollment courses and who were already in, or had completed, college. This approach was used

to ensure that no students who were under 18 participated in the study and to ensure that each of the students selected for the study could look back on their dual enrollment experience as a whole and not evaluate their dual enrollment experience based on temporary challenges they may have been facing while taking dual enrollment courses. A holistic single-case study was chosen, and, therefore, was a delimitation for this study, to attempt to get a clear picture of all the individuals involved in the process of educating first-generation students in dual enrollment courses and to get multiple perspectives on the same case.

This study also had some limitations. The findings of the study, based solely on students from a small geographic region within the Appalachian region, had inherent sampling challenges. In addition, because of personnel changes on the IRB of the community college being studied, another limitation was the college providing the dual enrollment courses for this study did not grant IRB approval for this study until after data collection. Therefore, all of the data collection had to be focused on individuals associated with the high schools involved in the dual enrollment process and no data could be collected from college representatives. Finally, most of the students surveyed in this study were female because only one male responded to the request for participation.

Recommendations for Future Research

In consideration of the findings of this study, as well as the limitations and delimitations placed on the study, I have the following recommendations for future research. First, more qualitative research is needed regarding the specific challenges faced by low-SES first-generation students who take dual enrollment courses. This study did not include SES information as a requirement of the study, but much of the research on SES and dual enrollment indicates that SES is a factor in the dual enrollment experience, so future qualitative research

needs to be conducted in this area. More qualitative research also needs to be done from the college perspective on the experience of first-generation students in the Appalachian region since no one from the college level had input in this study. Originally, a phenomenological study was considered for this study, but a holistic single-case study was used, but perhaps a phenomenological study could have provided more diverse perspectives regarding the lived experiences of the participants on the issue.

Future research should also be completed using participants who chose not to go on to college because of negative dual enrollment experiences. The participants in this study all continued their college careers and none of them decided not to go to college after a negative dual enrollment experience. Further research is also needed to determine the challenges faced by students who ultimately decided not to pursue a college career after dual enrollment courses to determine if their challenges were similar or different from the challenges of those who continued on to college after completion of dual enrollment courses. Since most of the participants in this study had positive dual enrollment experiences, a study comprising individuals who had solely negative experiences could have produced different findings.

Future research should also be conducted on the challenges faced by students in different location types in the future. The students from this study were all from rural areas in the Appalachian region, and a study should also be done on students who live urban and nonrural areas to determine if they had similar challenges as the students from the Appalachian region. Students who live in rural areas are more likely to drop out of college or not remain continuously enrolled than are any other demographic subgroup (Byun et al., 2015). However, research needs to be completed on first-generation college students in different demographic and location-based

subgroups to determine if they have similar challenges of the students from that Appalachian region.

A quantitative study could be used to compare the first-year college experiences of students who were first-generation college students in the Appalachian region who took dual enrollment courses and the experiences of students who did not take dual enrollment courses. The present study only included an examination of the experiences and challenges faced by students who took dual enrollment courses. First-generation college students struggle with college completion in general, with one study finding that 74.6% of first-generation students who started college did not end up finishing a degree within 4 years (DeAngelo et al., 2011). A study should be done to compare those experiences to the experiences of first-generation college students who did not take dual enrollment courses to determine if they had a similar or different college experience than students who took dual enrollment courses. That study would allow researchers to determine whether or not dual enrollment courses truly provide any benefit for first-generation students or if they would have just obtained the skills they needed to attend college once they matriculated to college.

Another study that should be done on this subject is a study of the parents of first-generation college students and their experiences while their children were taking dual enrollment courses. This study included interviews with students, teachers, and administrators, but no interviews with parents. All of the individuals interviewed mentioned the impact of parents on the experiences of first-generation college students and some mentioned the interaction with those parents. To obtain a more holistic view of the subject, parents should be interviewed to obtain their perspective on the challenges they faced while trying to assist their students in navigating the dual enrollment process. Using the perspective of these parents,

programs could be better designed to assist parents with the challenges they will face while their children take dual enrollment courses.

Yet another area of research that should be done into the experiences of first-generation students taking dual enrollment courses in the Appalachian region is into the type of dual enrollment programs that should be explored. All of the students interviewed for this study took part in academic dual enrollment courses in conjunction with a community college. Research needs to be done into the experiences of these students who took dual enrollment courses either through AP courses, technical dual enrollment programs leading to industry certifications, or dual enrollment programs that took place on the campus of a university. All of these methods of dual enrollment course offerings are available in the Appalachian region and research should be done to determine if the students who took these types of dual enrollment courses faced different challenges or had different types of experiences than the students who took dual enrollment courses offered by community colleges.

Summary

This study was conducted to examine the experiences of first-generation students taking dual enrollment courses in the Appalachian region. There were several key findings and implications discovered throughout the data collection and analysis in this study. One of the most significant findings of this study was that first-generation students who took dual enrollment courses in the Appalachian region benefited from their dual enrollment experience. Students interviewed for this study pointed out that dual enrollment courses not only gave them early college credit, but also helped them develop the time-management and study skills they would need for college after high school. Another significant conclusion emerging from this study is that while parents may not have had the knowledge to support their children who were

taking dual enrollment courses academically, they were able to significantly support them emotionally and financially throughout the process. This study shows that dual enrollment courses are a generally positive experience for first-generation students in the Appalachian region and the support of their parents played a key role in this positive experience.

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APPENDIX A: IRB APPROVAL LETTER**LIBERTY UNIVERSITY**
INSTITUTIONAL REVIEW BOARD

August 1, 2018

Cecil Todd Bennett

IRB Approval 3388.080118: The Dual Enrollment Challenges of First-Generation Appalachian College Students: A Holistic Single-Case Study

Dear Cecil Todd Bennett,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

6. Collection of data from voice, video, digital, or image recordings made for research purposes.

Thank you for your cooperation with the IRB, and we wish you well with your research project.
Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

The Graduate School

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APPENDIX B: CONSENT FORM**CONSENT FORM****THE DUAL ENROLLMENT CHALLENGES OF FIRST-GENERATION
APPALACHIAN COLLEGE STUDENTS: A HOLISTIC
SINGLE-CASE STUDY**

Cecil Todd Bennett
Liberty University
School of Education

You are invited to be in a research study on the dual enrollment experiences of first-generation college students in the Appalachian region. You were selected as a possible participant because you were either a first-generation college student who took dual enrollment courses, or you were a teacher, principal, guidance counselor, or a program administrator who has been involved with first-generation students. Please read this form and ask any questions you may have before agreeing to be in the study.

Cecil Todd Bennett, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Participate in an interview, either in person or via some electronic means. This interview will be audio recorded for transcription.
2. Keep a reflective journal that you record any thoughts on the interview subject matter that you have after the interview.
3. Participate in an online focus-group that provides all participants in the study an opportunity to discuss the experiences of first-generation students taking dual enrollment courses.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits:

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a better understanding of the experiences of first-generation college students taking dual enrollment courses.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher or a transcription service will have access to these recordings.
- I cannot assure participants that other members of the online focus group will not share what was discussed with persons outside of the group.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study:

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Contacts and Questions: The researcher conducting this study is Cecil Todd Bennett. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at 276-708-5405. You may also contact the researcher's faculty chair, Dr. Randy Tierce at krtierce@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

The researcher has my permission to audio record me as part of my participation in this study.

Signature of Participant

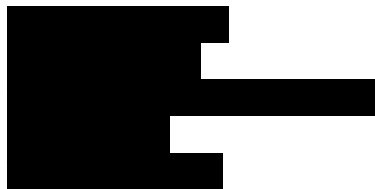
Date

Signature of Investigator

Date

APPENDIX C: PERMISSION TO CONDUCT RESEARCH LETTERS

[Insert Date]



Dear Dr. [REDACTED]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is The Dual Enrollment Challenges of First-Generation Appalachian College Students: A Holistic Single-Case Study and the purpose of my research is to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia

I am writing to request your permission to conduct my research in [REDACTED] and contact employees of [REDACTED] to participate in my research. No current students will be interviewed.

Participants will be contacted by me to request an interview. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval.

Sincerely,

Cecil Todd Bennett
Doctoral Student

[Insert Date]

[REDACTED]

Dear [REDACTED]

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is The Dual Enrollment Challenges of First-Generation Appalachian College Students: A Holistic Single-Case Study and the purpose of my research is to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia

I am writing to request your permission to conduct my research at [REDACTED] [REDACTED] and contact employees and students of [REDACTED] to participate in my research.

Participants will be contacted by me to request an interview. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval.

Sincerely,

Cecil Todd Bennett
Doctoral Student

APPENDIX D: RECRUITMENT LETTER

[Insert Date]

[Recipient]

[Title]

[Company]

[Address 1]

[Address 2]

[Address 3]

Dear [Recipient]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is The Dual Enrollment Challenges of First-Generation Appalachian College Students: A Holistic Single-Case Study and the purpose of my research is to understand first-generation Appalachian college student perceptions of their dual enrollment experiences in Southwest Virginia and I am writing to invite you to participate in my study.

If you are a first-generation college student from the Appalachian region, or if you are a teacher, guidance counselor, principal, or dual enrollment program director who has worked with first-generation students, and are willing to participate, you will be asked to participate in an interview, write journal responses, and participate in an online forum. It should take approximately one to three total hours for you to complete the procedures listed. Your participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, email the researcher at ctbennett1@liberty.edu.

A link to a consent document will be emailed to you as soon as you indicate that you will be willing to participate in the research. The consent document contains additional information about my research, but you do not need to sign and return it.

Sincerely,

Cecil Todd Bennett
Doctoral Student, Liberty University

APPENDIX E: INTERVIEW QUESTIONS

Open-Ended Interview Questions for Students

13. Why did you take dual enrollment courses?
14. What made you want to go to college even though your parents did not go to college?
15. Describe your experience taking dual enrollment courses.
16. What part of the dual enrollment program helped you the most and why?
17. How did dual enrollment courses prepare you for college?
18. Is there anything you regret not learning during your high school career that you believe would have helped you in college?
19. What were some challenges you faced while taking dual enrollment courses?
20. How did the school or program help you with these challenges?
21. How could the school or program have better helped you with these challenges?
22. What role did your parents play in helping prepare you for college?
23. What advice would you give a student whose parents did not attend college before they took dual enrollment courses and then go on to college?

Questions one and two deal with student motivation for taking dual enrollment courses because McCord and Roberts (2014) found that “students’ intrinsic motivation is essential to success” in dual enrollment programs (p. 402). Question three focuses on the experience of taking dual enrollment courses because Karp (2012) determined that understanding student dual enrollment experiences is key to implementing successful dual enrollment programs that will ensure the success of students once they attend college. Question four focuses on the benefits of dual enrollment because several studies have demonstrated the benefits of dual enrollment courses (An, 2015; An & Taylor, 2015; Crouse & Allen, 2014; Ganzert, 2014).

Question five focuses on the role of dual enrollment courses in college preparation because An (2013) found that dual enrollment courses positively impacts students when preparing them for college.

Questions six through nine address the challenges that are faced by students in dual enrollment courses because Kanny (2015) found that there were benefits and disadvantages that occur simultaneously while students took dual enrollment courses. Questions six through nine are also relevant because An (2103) and Mansell and Justice (2014) found that first-generation students also experience difficulties and special challenges while taking dual enrollment courses.

Question 10 deals with the role of parental support while taking dual enrollment courses because Wang (2014) found that parents influenced the college transition process even if they had not been to college themselves.

Question 11 promotes reflection on the experiences of the student, which relates to the importance of the experiences of students.

Open-Ended Interview Questions for Instructors

1. What do you view as the most important part of the dual enrollment program for students?
2. Have you ever had first-generation students in your classes?
3. What have you noticed that makes these students different from other students?
4. What are some challenges that these students faced while taking dual enrollment courses?
5. How does the current dual enrollment program assist these students with these challenges?
6. How could the program better help these students with these challenges?

7. What factors cause the students who graduate from this program to be likely to go to college and complete degree programs?
8. What advice would you or do you give to first-generation students as they take dual enrollment courses and prepare for college?

Question one focuses on the benefits of dual enrollment programs from the instructor perspective because Hanson et. al (2015) found that instructors have a unique perspective on dual enrollment courses.

Question two is simply a background question to establish that instructors have had first-generation students in their classes. \

Question three is about the differences in first-generation students and non first-generation students because An (2013) found that those students had different dual enrollment experiences.

Questions four through six deal with the challenges faced by first generation students in dual enrollment courses because Kanny (2015) found that there were drawbacks to dual enrollment courses and An (2013) and Mansell and Justice (2014) found that first-generation students experienced difficulties and special challenges while taking dual enrollment courses.

Question seven deals with college retention which relates to the Tinto's (1982) theory of college retention that guides the current study.

Question eight is a question to cause the instructor to reflect on student experiences in the program as a whole.

Open-Ended Interview Questions for Counselors and Principals

1. What role do you play in the dual enrollment program?
2. What interactions do you have with dual enrollment students?

3. What differences have you noticed between first-generation college students and other students?
4. What challenges do you observe that first-generation students face that other students do not face?
5. How do you equip your teachers to help students deal with these issues?
6. How is the program designed to assist first-generation students with the challenges they face?
7. What advice would/do you give to first-generation students as they take dual enrollment courses and prepare for college?

Program administrator questions

1. What role do you play in the dual enrollment program?
2. What interactions do you have with dual enrollment students?
3. What differences have you noticed between first-generation students and other students?
4. What challenges do you typically notice first-generation students having while taking dual enrollment courses?
5. How is the program designed to help the students as they face these challenges?
6. What advice would you give to teachers, counselors, and principals to help them deal with the problems first-generation students face?
7. What advice would/do you give to first-generation students as they take dual enrollment courses and prepare for college?

In the principal, counselor, and administrator interviews, questions one and two focus on the benefits of dual enrollment programs from the guidance counselor or principal perspective

because Hanson et. al (2015) found that guidance counselors and principals have a unique perspective on dual enrollment courses.

Questions three and four are about the differences in first-generation students and non first-generation students because An (2013) found that those students had different dual enrollment experiences.