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The Efficacy of Dual Enrollment Programs Influencing the Post-secondary Motivations and Commitments of Rural Secondary School Students

by

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Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Philosophy in

Educational Administration

College of Education

University of South Carolina

2014

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Dedication

In memory of my grandmother, Minnie Brown Chisolm, who was my first "teacher" on her porch in rural America.

In memory of my father, Edward L. Brown, who inspired my worldview with lots of love.

To my mother, Virginia C. Ferguson, who always encourages her children to "leave their unique fingerprint on the world."

Acknowledgements

I am grateful to the Lord GOD Almighty for the grace and knowledge HE bestowed upon me during this study. Thank you LORD for lending me portions of You in order to conduct this study.

I also appreciate the patience and thought-provoking suggestions provided by my committee members, Dr. C. Anderson, Dr. K. Chaddock, Dr. J. You and Dr. J. Hudgins - Your support expanded my "scholarly horizon."

Abstract

Rural secondary school students are often characterized as possessing fewer of the assets necessary for college enrollment, such as role models, moderate to high income, advanced high school coursework and exposure to high skill occupations (Gibbs, 2000). However, the students may participate in secondary and post-secondary initiatives, known as dual enrollment programs, which allow secondary school students to take college courses while enrolled in high school (Alliance for Excellent Education, 2010). Though the programs provide advanced coursework, current dual enrollment research presents conflicting information about the initiative's impact on the post-secondary success of its participants (Bailey, Hughes & Karp, 2002; Bragg & Kim, n.d.; Karp & Jeong, 2008). Thus, the study examines how dual enrollment programs contribute resources and opportunities to foster the post-secondary motivations and commitments of rural secondary school students. The investigation, in a case study format, explores the structures, policies and practices of dual enrollment programs with engagement theory and social identity theory as its theoretical basis. The qualitative study includes interviews, observations and artifact reviews of dual enrollment programs at three South Carolina community colleges and includes the perspective of students, parents and program administrators. Findings of the study reveal a college-going standard, cooperative partnerships, college-going networks, high school support, financial assistance, college instructors and courses as well as a college identity-building process

as significant elements of dual enrollment programs provided to rural secondary school students.

Keywords: dual enrollment, rural secondary school students, college-going network, cooperative partnerships, college identity

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Chapter 1

Introduction

Secondary school students view their final months of high school as an opportunity to participate in fewer activities and the experience is often disguised as low motivation, apathy and restlessness (Howell, Laws, Bryant & Williams, 2005; Kirst, 2001). Therefore, should public secondary schools outsource the classroom instruction of the final years of high school to institutions of higher education in order to continue the educational momentum? In the contractual partnership, higher education institutions would provide curriculum instruction to secondary school juniors and seniors. The agreement would provide an opportunity for high school students to enroll in college and gain exposure to the requirements of the institution as well as complete college level coursework (Bailey, Hughes & Karp, 2002). Thus, secondary students would receive an introduction to college processes and accumulate college credits while still enrolled in high school (American Association, 2002).

The secondary and post-secondary arrangement would orient students to the culture of post-secondary institutions and provide information about post-secondary options. Secondary students would be exposed to diverse groups of students, faculty and staff members as well as programs of study and events germane to higher education institutions (Bailey et al., 2002). In particular, rural students, who are identified as possessing fewer of the characteristics that encourage college attendance e.g., parents having college education, higher incomes, role models and high skill jobs could

participate in activities that introduce the rural students to post-secondary environments and assist the students in their decision to attend college (Gibbs, 2000).

Research findings indicated that dual enrollment programs foster college enrollment and persistence as well as college preparation for secondary school students (Burns & Lewis, 2000; Karp & Jeong, 2008; Bragg and Kim, n.d.; Peterson, Anjewierden & Corser, 2001). In addition, the limited studies that exist about rural populations found that several factors foster the post-secondary attendance plans of rural students (Chenoweth & Galliher, 2004; Schonert, Elliott & Bills, 1989; Yan, 2002). The factors included parent, peer and educator involvement, academic, career and college preparation, financial assistance, college choice and the rural culture (Chenoweth & Galliher, 2004; Schonert, Elliott & Bills, 1989; Yan, 2002). Thus, rural students could potentially benefit as dual enrollment program participants since dual enrollment programs promote post-secondary success and the programs may be suited to address the factors that lead to the post-secondary success of rural secondary school students (Chenoweth & Galliher, 2004).

Moreover, the early accumulation of college credits may significantly influence the low college-going rate of rural students who graduate from high school at rates comparable to students of other locales (Alliance for Excellent Education, 2010). As participants in the program, rural students would become college students earning college credits (Rojewski, 1999). Thus, the rural students' participation in the dual enrollment program could potentially increase the college-going rate of the students and create a paradigm shift that encourages the college attendance and success of rural students. Therefore, dual enrollment programs may provide the involvement, preparation and

assistance that rural students need to realize post-secondary success including college enrollment and persistence.

Although secondary educational institutions have not transferred the intellectual development of high school students to institutions of higher education, secondary schools are creating partnerships with higher education institutions that allow secondary school students to become college students before graduating from high school. These partnerships, known as dual enrollment or early college programs, allow high school students to complete college credits and high school credits simultaneously. Of particular interest are rural schools that offer few advanced college level programs such as, Advanced Placement or International Baccalaureate; yet, the high schools offer dual enrollment courses at a greater rate than those comparable advanced college level programs (Alliance for Excellent Education, 2010). However, limited studies have explored how the secondary and post-secondary partnerships foster the college-going motivations and commitments of rural secondary school students. Thus, this study focused on the elements of dual enrollment programs provided to rural secondary school students.

Purpose

The study explored how the elements of dual enrollment programs foster the college-going motivations and commitments of rural secondary school students. The study investigated the structures, policies and practices of dual enrollment programs provided to rural students. A case study research format including interviews, observations and artifact reviews was utilized to learn how dual enrollment programs involved, integrated and engaged rural high school students into post-secondary

environments. For the study, a dual enrollment program was defined as a secondary and post-secondary partnership that allowed high school students to enroll in college courses prior to high school graduation (Bailey, et al., 2002).

Problem Statement

Though rural schools had the second highest graduation rate (73 percent) in comparison to cities (59 percent), towns (70 percent) and suburban areas (74 percent), the schools' students possessed the lowest college-going rate (Alliance for Excellent Education, 2010). In 2000, 17 percent of rural students possessed a college degree compared to twice the percentage of students in urban areas (Whitener & McGranahan, 2003). In addition, rural populations lacked the characteristics that encourage college enrollment (Gibbs, 2000). However, secondary and post-secondary programs that allowed secondary school students to enroll in college and complete college courses while enrolled in high schools were offered in rural communities. Interestingly, the secondary/post-secondary phenomenon implemented as dual enrollment programs succeeded in enrolling rural students at nearby institutions of higher education. Such that, rural students participated in dual enrollment programs at a greater rate than the rural students participated in other advanced coursework programs such as, International Baccalaureate and Advanced Placement (Alliance for Excellent Education, 2010). Yet limited research identified how the elements of the dual enrollment programs fostered the students' college-going motivations and commitments (Hardre', Sullivan & Crowson, 2009).

Moreover, while participants in the dual enrollment program, rural secondary school students enrolled in college and were identified as college students. Thus, college

enrollment and student persistence, levels by which students remain enrolled in college, are potential results of college-going motivations and commitments. Therefore, the study focused on the program elements of dual enrollment programs that fostered college-going motivations and commitments leading to college success such as enrollment and/or persistence.

Specifically, the study used an adapted conceptual model (presented in a subsequent section of the chapter) to investigate the programs' strategies, opportunities and resources in order to understand how the programs' elements fostered the college going motivations and commitments of rural secondary school students in South Carolina (a pseudonym was used for the name of the state to maintain the privacy of the programs and participants in the study).

The following questions were addressed:

1. What are the structures, policies and practices of dual enrollment programs provided to rural secondary school students in South Carolina?
2. How do dual enrollment programs provide academic, social and institutional support to rural secondary school students in South Carolina? How do dual enrollment programs provide opportunities for rural secondary school students to interact with faculty, staff and students of post-secondary institutions?
3. How do dual enrollment programs foster active learning for rural secondary school students in South Carolina?

Though findings were consistent with the adapted model presented in the chapter, the findings also revealed a more nuanced and comprehensive model that is presented in the conclusions of chapter 5.

Background

A disconnect between high schools and colleges leaves some students unchallenged in high school and/or unprepared for college (Hess, 2009). Couple this fact with the finding that rural students lack the characteristics that encourage college attendance, and the post-secondary success of rural secondary school students appear in jeopardy (Gibbs, 2000). However, rural students participate in secondary and post-secondary partnerships known as dual enrollment programs that enroll secondary school students into college. Increasingly, educational stakeholders are challenging secondary and post-secondary officials to eliminate the barriers between high school and college by developing dual-enrollment and early college programs (Hess, 2009).

Dual Enrollment. Started during the later decades of the 20th century, dual enrollment programs were offered in all states and more than one million high school students have participated (Andrews, 2001; Hess, 2009; Planty, Provasnik & Daniel, 2007). Dual enrollment is defined as a secondary and post-secondary partnership hosted by higher education institutions that allows high school students to enroll in college courses prior to high school graduation giving the students first-hand exposure to the requirements of college-level work while gaining high school and college credits simultaneously (Bailey, et al., 2002).

Dual enrollment programs are identified as education-accelerated programs, which provide high school students access to college level courses. The programs are often distinguished as exam-based, career preparation-based and credit-based. Exam-based programs include programs such as Advanced Placement and International Baccalaureate initiatives where high school students must earn appropriate scores on end

of course exams in order to earn college credits for the courses (Boswell, 2001). Career preparation-based programs prepare high school students for local careers usually allowing the students to earn associate's degrees while earning their high school diplomas (Boswell, 2001). Credit-based programs allow high school students to enroll in college courses prior to high school graduation giving the students first-hand exposure to the requirements of college-level work while gaining high school and college credits simultaneously. (Bailey, et al., 2002; Boswell, 2001). For the study, dual enrollment programs were considered credit-based programs.

Credit-based dual enrollment programs had a few discriminating components. These components included college type, class format, course instructor, student, credit accumulation, policy and course location. Based on these program features, dual enrollment program partners used a variety of implementation methods (Karp, Bailey, Hughes & Fermin, 2005). For example, two-year colleges and four-year colleges may offer dual enrollment programs on college or high school campuses taught by college or high school instructors with high school and college students in the courses or only high school students enrolled. In addition, the program policies varied (Karp, et. al., 2005). For instance, credits earned in the programs may be awarded by the high school, the college or both. In addition, some dual enrollment programs may be legislated by the state with funding provided or several local entities may provide the funds for the credit-based programs (Karp, et al., 2005). Although various models of dual enrollment programs existed, the core elements included a partnership between a secondary and post-secondary institution, post-secondary matriculation of high school students, a college curriculum and higher education credit (Karp, et al., 2005).

Program supporters claimed that implementing dual enrollment programs yielded a few advantages (Bailey & Karp, 2003; He'bert, 2001; Smith, 2007). Secondary schools appeared to benefit from an enhanced curriculum, increased student performance and graduation rates and increased professional development for high school faculty (Bailey & Karp, 2003; He'bert, 2001; Smith, 2007). In addition, research indicated that dual enrollment programs fostered the college enrollment and graduation of high school students (Bailey, et al., 2002). Also, colleges and universities realized new recruitment and retention strategies, new sources of revenue, more visibility and unique marketing promotions to use in the communities they serve (American Association, 2002; Helfgot, 2001).

Despite the variety of benefits emphasized for the dual enrollment program, the initiative was not without controversy (Krueger, 2006). Critics of the program argued about the funding structure, transferability of credits, course quality and student selection (American Association, 2002; Bailey & Karp, 2003). The funding concerns for the programs included tuition and financial incentives. Concerns about the courses included the transferability of the earned college credits and the quality of the courses. Finally, the student selection concerns involved the characteristics of dual enrollment students and the benefits that underrepresented student populations may receive by participating in the programs.

Rural students. "In 2006–07, 9,063,790 public school students were enrolled in rural school districts—19% of the nation's total public school enrollment" (Johnson & Strange, 2009, p. 1). "More than half of all rural students in the United States attended schools in just 11 states, including some of the nation's most populous and urban states.

The states included (based on enrollment size) North Carolina, Texas, Georgia, Ohio, Virginia, Pennsylvania, New York, Tennessee, Michigan, California and Alabama" (Johnson & Strange, 2009, p. 6). Rural school enrollment increased by 15 percent, approximately 1.3 million students, in comparison to the overall public school's one percent increase.

Rural areas are often cited for their small, tight-knit communities, strong teacher-student relationships, personalized academic support, increased access to innovative technology, place-based learning opportunities and high levels of volunteer support from parents and other stakeholders (Alliance for Excellent Education, 2010;). However, several challenges existed in rural communities and schools including a consistent definition of "rural" (Hardre, et al., 2009). The diverse nature of rural communities and the variety of definitions used when studying rural populations required the immediate definition of the term (Hardre, et al., 2009). Educational researchers followed the lead of the National Center for Education Statistics (NCES) and used the rural designation of the US Census (Johnson & Strange, 2009). As such, the study used the designations assigned by the National Center for Education Statistics. "Rural," according to the new 12-item National Center for Education Statistics (NCES) locale code system released in 2006, was defined as locale codes 41 (rural fringe), 42 (rural distant) or 43 (rural remote) (Johnson & Strange, 2009) The codes represented the following:

- Fringe — Census-defined rural territory that is less than or equal to five miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster
- Distant — Census-defined rural territory that is more than five miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster

- Remote — Census-defined rural territory that is more than 25 miles from an urbanized area and also more than 10 miles from an urban cluster

In addition, rural communities realized challenges in securing the appropriate federal and state education funding to provide the appropriate academic services for rural secondary school students (Johnson & Strange, 2009). As an example, 69 percent and one percent of rural students attended schools that offered Advanced Placement and International Baccalaureate courses respectfully. These values were comparatively less than cities (93 percent and eight percent) and suburbs (96 percent and seven percent) (Alliance for Excellent Education, 2010). Child poverty rates also remained significantly higher (21 percent) than poverty rates for urban students (18 percent) (United States Department of Agriculture Rural Children, 2005). Other challenges included infrastructure, geographic isolation, recruitment and retention of highly effective teachers and leaders, limited rigorous high-level courses and minimal community and institutional resources to prepare students for post-secondary opportunities (Alliance for Excellent Education, 2010; United States Department of Agriculture Rural America, 2009).

Rural secondary school students possessed academic achievements comparable to their peers in other locales (Alliance for Excellent Education, 2010; Provasnik, KewalRamani, Coleman, Gilbertson, Herring & Xie, 2007). For instance, the 2005 rural high school graduates earned similar credits (27) when compared to urban students (26) and possessed a slightly higher GPA (3.03) compared to urban graduates (2.96) (Shettle, et al., 2007). Rural students also possessed the second highest high school graduation rate; yet, the students had the lowest college-going rate (Provasnik, et al., 2007; United States Department of Agriculture Rural Education, 2005). For example, the college enrollment rate in the rural areas (27 percent) was lower than the rate in cities (37

percent), suburban areas (37 percent) or towns (32 percent) (Provasnik, et al., 2007). A 2000 research report noted that 65 percent of urban high school graduates attended college compared to 56 percent of rural graduates (Gibbs, 2000). However, rural schools participated in secondary post-secondary partnerships, known as dual enrollment programs, where rural high school students enrolled in college-level courses. Seventy six percent of high school students in rural areas attended schools that offered dual enrollment courses, which is similar to the percent of dual enrollment programs offered in cities and suburbs (Alliance for Excellent Education, 2010). Yet, little was known about the programs' impact on rural students' college-going success.

Theoretical Framework

This qualitative case study that investigated the resources, opportunities and strategies of dual enrollment programs was framed by Engagement theory and the Conceptual Model of the Hypothesized Influence of Credit Based Transition Programs (CBTPs) on Student Access to and Success in Post-secondary Education postulated by Karp and Hughes (2008).

Engagement theory. Engagement theory considers the efforts of students as well as the resources and opportunities that organizations contribute to influence the students' participation in activities that lead to student success (Kuh, Kinzie, Schuh & Whitt, 2010). Increased student engagement is linked to a wide range of educational practices and conditions that support collegiate success (Wolf-Wendel, Ward & Kinzie, 2009). Thus, engagement theory was well suited as a framework for the study because the theory considered not only the contributions of students; but also considered the efforts that institutions provide in supporting student success (Kuh, et al., 2010).

Conceptual model of the hypothesized influence of credit-based transition programs on student access to and success in post-secondary education. Karp and Hughes' (2008) study focused on the mechanisms that credit-based transition programs used to encourage post-secondary student success. The researchers used a hypothesized conceptual model as the structure for the study. The initial model hypothesized that effective credit-based transition programs provided students a strong academic foundation for college-credit coursework (Karp & Hughes, 2008).

The study included in-depth case studies of five credit-based programs, which included a career technical education dual enrollment program, traditional dual enrollment program, middle college program, International Baccalaureate (IB) program and Tech Prep program.

Significant findings focused on student recruitment and selection, curriculum variety, course pathways and support services (Karp & Hughes, 2008). The researchers also realized that the initial model did not account for the structure of the programs. Therefore, the researchers refined the model to reflect the findings of the study. Thus, Karp and Hughes' (2008) final model hypothesized that student participation in college coursework along with support services, progressive academic and college skill development and motivation will lead students to enroll in college and likely persist due to the strong skills developed during participation the program. Karp and Hughes' (2008) model focused on a variety of credit-based transition programs and the findings may not be generalizable. Therefore, additional research regarding the model was necessary. Thus, this study presented a conceptual model of hypothesized elements of dual enrollment programs that foster the post-secondary motivations and commitments of

secondary school students. The model is displayed in Figure 1.1. The model hypothesized that dual enrollment programs provide active learning, support and involvement resources fostering the development of college success skills that lead to college success such as, college enrollment and persistence.

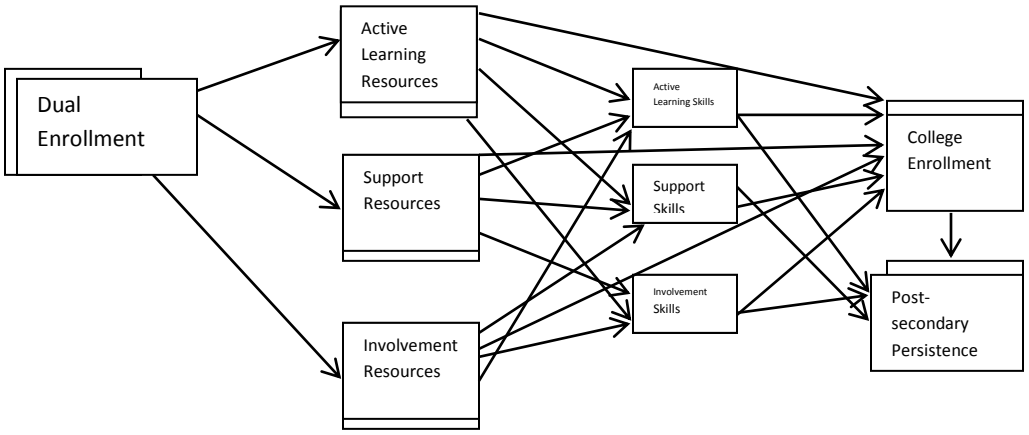


Figure 1.1

Conceptual Model of Hypothesized Dual Enrollment Influence on College-Going Motivations and Commitments

Significance

Research studies about rural environments and dual enrollment programs are limited and usually of a quantitative nature. Therefore, findings generated in this qualitative study expanded the knowledge about rural stakeholders and dual enrollment programs. The qualitative findings will assist policymakers, administrators and researchers in understanding academic strategies and college-based learning opportunities that influence the college-going success of rural students. In addition, the study's findings reviewed how current secondary and post-secondary partnerships met the needs of the rural secondary school students.

Many states have implemented dual enrollment and the findings of the study provided policymakers an in-depth view of the programs' execution in relation to current regulations (Andrews, 2001; Karp, et. al., 2005). For example, dual enrollment program guidelines such as, funding, student selection and quality of courses were provided. The information will assist policymakers in updating current program policies. In addition, policymakers may realize the role that dual enrollment programs may potentially have in assisting the United States in attaining educational significance in the global economy (Carnevale, Smith & Strohl, 2010). For example, dual enrollment programs may be a quick solution to increase the number of individuals with post-secondary credentials since the students could earn up to a full year of college credits prior to entering college. Thus, the program could allow students to both shorten the time it takes to earn their degrees and save significantly on the overall cost of their education (Bailey, et al., 2002). Finally, policymakers can use the findings of the study about secondary and post-secondary partnerships to review and create policies that provide seamless educational transitions and that align the standards, assessments and graduation requirements of both institutions.

The college-based learning opportunities presented in the study may assist educational administrators as they introduce rural secondary school students and parents to post-secondary requirements including college preparations, academic expectations and social supports. Findings of the study provided administrators with techniques to use to ease the rural students' transition to college as well as engage the students in post-secondary settings. The administrators can use the information to plan additional programs such as "early alert" or "pre-entry" initiatives that would support parents and

students as they engage the college-going process. In addition, administrators will realize enhanced recruitment practices to use in order to add a diverse student perspective to their student body. Finally, secondary and post-secondary administrators may identify strategies to use to develop significant partnerships in rural areas such that high schools expand their course offerings, secondary school educators increase their educational credentials and higher education institutions increase their adjunct faculty rosters.

Dual enrollment programs fostered the college preparation as well as the college enrollment and persistence of secondary school students (Karp & Jeong, 2008; Bragg & Kim, n.d.; Peterson, et al., 2001). In addition, research about rural populations identified several factors that influenced the post-secondary attendance plans of rural students. These factors included parent, peer and educator involvement, academic, career and college preparation, financial assistance, college choice, semester of enrollment and rural culture (Chenoweth & Galliher, 2004; Schonert, et al., 1989; Yan, 2002). Moreover, findings indicated that financial and social factors fostered the rural students' participation in dual enrollment programs (Johnson & Brophy, 2006). Thus, the study is significant for scholars because these unaddressed phenomena of investigations that are rich for scholarly research are presented. The in-depth study introduced the elements of dual enrollment programs and reintroduced rural America to the scholarly arena where 21st century research examinations may expand the study's findings about the topics. Therefore, the study presented potential areas of interest for research as well as findings about research settings that are often void in the mainstream.

The study is also significant for scholars as it utilized the qualitative research approach to understand an area of interest. The qualitative approach focused on

interviews, artifact reviews and observations. The qualitative inquiry provided an internal view of the dual enrollment programs based on the perspectives of the program participants. In addition, the study added additional interpretations to the meanings revealed by the numerical findings of the program's quantitative studies. For example, the study identified programmatic features such as, active learning and support resources that may contribute to the academic successes identified in the quantitative studies about dual enrollment programs. Moreover, the study emphasized how the inquiry methods might be used in tandem to address dual enrollment and rural America research agendas.

As more scholars consider rural environments as potential research topics, the findings of the study contributed to the body of knowledge with specific information about the experiences of rural students in higher education environments including their participation, inclusion and college-like behaviors. The investigation added the voice of rural stakeholders, a population that was often excluded from research, to current literature by examining the elements of dual enrollment programs that foster the college-going motivations and commitments of rural students. In addition, scholars are introduced to information about the rural southeastern sub-culture and its impact on the post-secondary attendance patterns of rural secondary school students participating in a dual enrollment program.

Students may realize better academic or emotional preparedness due to their participation in dual enrollment programs; therefore, the findings of the study indicated how the programs contributed to these types of preparedness (Bailey, et al., 2002). For example, scholars can identify how the programs provide college-based learning experiences to rural students to "bridge" or "extend" the students' academic journey into

college. In addition, dual enrollment programs alter the relationship between high schools and colleges; thus, the study's findings outlined the characteristics of the secondary and post-secondary partnerships (Bailey, et al., 2002).

Key Concepts and Definitions

Academic failure is the unsatisfactory performance in school including retention to same grade, dropping out of school or failing a course.

Academic success is the satisfactory completion of the coursework outlined in the dual enrollment programs including graduation, promotion, college entry, passing courses, staying enrolled, satisfactory test scores and advanced opportunities.

Achievement gap refers to the difference between the test scores of minority and/or low-income students and the test scores of their White and Asian peers.

Active Learning includes participating in the learning process.

Advanced Placement courses, created by the College Board in the 1950s, allow high school students to take college-level courses and require students to earn passing scores on national exams in order to earn the advanced credits once the students are accepted at colleges or universities.

Career preparation-based programs prepare high school students for local careers usually allowing the students to earn Associate's degrees while earning their high school diplomas.

College attainment/going/enrollment is a student's acceptance and/or enrollment into a post-secondary institution.

College-based active learning is acquired knowledge that occurs as a result of involvement, however slight, in a college-based learning opportunity.

College-based learning opportunities include academic, social/support and institutional experiences that are germane to a college environment; yet, available to secondary school students enrolled in college programs.

Credit-based programs allow high school students to enroll in college courses prior to high school graduation giving the students first-hand exposure to the requirements of college-level work while gaining high school and college credits simultaneously.

College identity building includes strategies, resources and opportunities that promote an individual's membership in college.

Dropout rate includes the percentage of students who terminate enrollment in school before receiving a high school diploma.

Dual enrollment programs allow high school students to enroll in college courses prior to high school graduation giving the students first-hand exposure to the requirements of college-level work while gaining high school and/or college credits.

Education accelerated programs provide high school students access to college level courses.

Exam-based programs include programs such as, Advanced Placement and International Baccalaureate programs that require high school students to earn appropriate scores on end of course exams in order to earn college credits for the courses.

Factors are elements that may contribute negatively or positively to the academic progress of students.

Global competitiveness is the ability of a business to market around the world with significant financial success beyond the business' competitors.

Graduation rate includes the percentage of students who graduate from high school relative to their high school enrollment.

International Baccalaureate courses, designed more than 20 years ago, consist of a rigorous high school curriculum including foreign language study, literature, science, math and social studies. With passing scores on national exams, students receive an International Baccalaureate diploma, as well as advanced standing when they are admitted to colleges.

Involvement includes participating in quality interactions with faculty, staff and students.

Partnership resources are items created as a result of a partnership between two or more organizations.

Participation is active involvement in dual enrollment or college-based activities.

Persistence is the rate by which students are continually enrolled in an educational institution.

Poverty is the extent to which an individual does without resources.

Rural refers to the residential location of students based on the following:

- Fringe — Census-defined rural territory that is less than or equal to five miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster
- Distant — Census-defined rural territory that is more than five miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster
- Remote — Census-defined rural territory that is more than 25 miles from an urbanized area and is more than 10 miles from an urban cluster

Support includes strategies used to assist students in the college-going process.

Organization of Dissertation

The dissertation included a qualitative research focused on the elements of dual enrollment programs provided to rural secondary school students. The dissertation's introduction provided background information on rural populations and dual enrollment programs. The dissertation's purpose along with research questions was also included. The introduction concluded with the significance and key concepts of the study. The dissertation's second chapter included a literature review of the articles and books used to frame the research topic in relation to dual enrollment programs and rural students. The literature review was followed by a presentation of the methodology and research process used in the study. The third chapter also outlined the research design including data collection and analysis as well as the dissertation's limitations and assurances of trustworthiness. The dissertation's fourth chapter presented the findings of the study. The final chapter of the dissertation study contained a discussion of the findings.

Chapter 2

Literature Review

Typically, education in the United States is emphasized as the avenue to assist the country in becoming globally competitive, creating innovative business strategies, equipping individuals for life, addressing the challenges of the world of work and providing meaningful and relevant intellectual experiences. For example, The Supreme Court in *Brown v. Board of Education* (1954) declared,

> Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training and in helping him to adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right, which must be made available to all on equal terms (*Brown v. Board of Education*, 1954).

Yet, for students who reside in an area designated as "rural," these "equal terms" often appear negated. Historically, the focus of early school reform literature emphasized ways of coordinating and administering education in urban environments while rural schools and the education these schools provided were identified as rustic and outdated (DeYoung, 1987). Sociologists and historians have consistently studied rural schools in America; but educational researchers have only recently studied the topic. Less than six percent of research conducted in schools included rural schools (Hardre', et al., 2009);

yet, nearly two-thirds of the counties in the United States are rural (The Annie E. Casey, 2004) and "in 2006–07, 9,063,790 public school students were enrolled in rural school districts – 19 percent of the nation's total public school enrollment" (Johnson & Strange, 2009, p.1).

Students who attend these schools often realized a lack of resources due to insufficient school budgets, few subject-matter experts and limited advanced-level courses (Alliance for Excellent Education, 2010). For example, a 2007 report indicated that rural students took seven rigorous courses compared to 12 courses registered for urban students (Shettle, et al., 2007). In addition, rural students did not persist to higher education institutions after high school compared to students of other locales (Gibbs, 2000)

However, an educational initiative known as dual enrollment programs has surfaced in rural school systems. Dual enrollment programs allow students to enroll in college level coursework while completing their high school curriculum. Rural students participate in dual enrollment programs at greater rates than they do in other advanced-level programs and the rural secondary school students enroll in the dual enrollment programs at rates that are comparable to students in other locales (Alliance for Excellent Education, 2010). In addition, research findings indicate that these programs influence the college preparation and performance of its participants (Bailey, et al., 2002). Thus, these programs may prove helpful in facilitating the rural student's transition to college (Burns & Lewis, 2000). However, research findings that focus on the rural students' experiences in dual enrollment programs is limited (Hardre', et al., 2009).

This chapter reviewed the literature regarding the college-going success of rural secondary school students and the findings about dual enrollment programs. The chapter begins with college-going success of rural secondary school students followed by findings about dual enrollment programs. Following, the findings about post-secondary institutions' student success efforts are also provided. The chapter concludes with, Engagement Theory, the theoretical basis for the study.

College-Going of Rural Populations

Even though rural schools have been abandoned throughout the years by mainstream educational theory (DeYoung, 1987); its students are as likely to graduate from high school and college as their urban counterparts (Gibbs, 2000). Yet, recent data reveal that the college enrollment rate in rural areas (27 percent) was lower than the rate in cities (37 percent), suburban areas (37 percent) and towns (32 percent) (Provasnik, et al., 2007). In addition, only 17 percent of rural adults over the age of 25 possess a college degree compared to two times that amount in urban areas (Alliance for Excellent Education, 2010). Rural students are not enrolling in college. Furthermore, the students possess fewer of the characteristics that facilitate college attendance such as parents having college education, moderate to high income, role models and exposure to high skill occupations (Gibbs, 2000). Therefore, the significant gap in post-secondary degree attainment for rural students inevitably includes the students' low persistence from high school to college (United States Department of Agriculture Rural Education, 2005).

Empirical research about the college attendance and persistence plans of rural populations is limited with most of the studies focusing on rural populations in specific states (Hardre', et al., 2009). Of note is the rural student study conducted by Chenoweth

and Galliher (2004) which investigated the factors that influence rural West Virginia high school students' college attendance decisions. The authors considered individual adolescent characteristics, family, peer and school contexts and cultural influences. They identified 434 high school seniors in the most rural Appalachian counties of the state. The authors contacted school principals and invited the administrators to participate. Five of 13 principals agreed to participate and 242 students did. The research instrument was a survey that included items related to demographics, college plans, peer, family and financial factors, GPA, college preparation courses and school belonging. The authors e-mailed, faxed or mailed the questionnaires for the students to complete. A letter was sent to parents a week before the data collection began. The surveys were distributed a week before graduation in two schools and during the first month of the senior year for three of the schools. The surveys were administered in the classrooms by teachers or administrative assistants and collected by school staff and mailed to the authors.

Chenoweth and Galliher (2004) found that academic preparation, parental education level and family socio-economic status affected college plans. The authors also uncovered a few problems that rural students realize during the college decision process such as, a lack of financial resources, lack of information about college, lack of financial information and a dislike for school. Individual academic variables such as, a college preparatory curriculum, higher grade point averages, higher achievement/standardized test scores and advanced educational goals, were significant predictors of college aspirations for the rural students as for the general population.

The parents' educational levels were also strong predictors of the college decision, especially for young males. The authors attest that the findings align with the

hypothesis that college educated parents are better able to assist students with their college transitions. In addition, the father's occupational status is associated with college decisions. For example, students, whose fathers held professional occupations, planned for college.

Chenoweth and Galliher (2004) realized gender differences when studying how students arrived at their decision to attend college. For males, the influence of parents' education, peers' college plans and the family's socio-economic status influenced their decision to attend. Male students who did not attend college explained that they did not view college as important or they wanted to stay at home in the rural area. For females, the high school curriculum and perceived intelligence, which focused mainly on preparedness for college, influenced their decision to attend college. In addition, the reasons female students gave for not going to college included barriers to college enrollment such as not being able to afford the cost of a college education or a lack of competency.

Chenoweth and Galliher (2004) also included a reference to rural issues specific to the Appalachian rural sub-locale. The authors noted that students' aspirations might be reflective of cultural and economic conditions of the Appalachian area. The authors contend that this may be realized in the weight that fathers' occupations exhibit above the mothers' occupations. The authors postulate that the absence of a large number of mothers from the workforce rendered the father's occupation more influential thus impacting the students' college decisions alone. Thus, rural communities possess complex sub-cultures that may affect the educational decision of its students in unique ways (Hardre', et al., 2009). In addition, the complex sub-cultures emphasize a need to

conduct research studies in a variety of settings in order to capture the nuances of rural education (Arnold, Newman, Gaddy & Dean, 2005; Hardre', et al., 2009).

While the authors identified academics, parents, peers, financial aid, college choice and academic preparation as contributors to the post-secondary enrollment of rural youth in West Virginia and emphasized findings focused on the economic and cultural variables of the Appalachian culture as well as gender differences, their research method did not allow for either the triangulation of the data or an in-depth investigation into the post-secondary enrollment of rural students in the area. For example, additional interview questions would have assisted the researchers in understanding the lack of importance that rural males, who did not go to college, attributed to college enrollment.

In addition, the authors did not have control of the research environment, which could lead to bias in the data. School personnel administered the surveys. The surveys were also administered to the student groups at different times of the school year, which could potentially skew the findings. Therefore, a qualitative study that involves the researcher as the main research tool would provide direct accounts of the process.

The findings, which are based on a traditional research paradigm, did not allow the collection of rich descriptions in order to learn the meaning of the rural students' post-secondary enrollment. The findings also did not identify the role or the characteristics of the institutions in its examination of the factors that influence the post-secondary enrollment of rural students.

Therefore, to further interpret these quantitative findings and understand how the identified factors influence the rural students' college-going motivations and commitments, this study's investigation included a qualitative examination of the

contemporary world of rural secondary school students who are participants in dual enrollment programs. The study included an in-depth review of the programs' activities with interviews, artifact reviews and site observations. The qualitative method included a case study format and employed the researcher as the main research instrument in order to understand how the elements of dual enrollment programs influence the college-going motivations and commitments of rural students in South Carolina.

Another college-going study was conducted by Schonert, Elliott and Bills (1989). The researchers investigated the college attendance patterns of rural Iowa high school graduates of 1983. The study reviewed the first five years after the students' high school graduation. The authors randomly selected graduates from 11 of 98 rural Iowa school districts with an enrollment of fewer than 300 students. The initial sample included 236 rural high school graduates of 1983. One hundred and seventy four graduates participated in the study.

The study included a survey instrument that was designed using questions found on the National Center for Educational Statistics' High School and Beyond Study. The survey structure focused on family background, educational influence, student characteristics, high school and college backgrounds. The researchers initially contacted the participants before issuing the surveys and provided three follow-up phone calls to encourage participants to complete and return the instrument. The researchers also conducted school district site visits with school administrators to verify participant responses regarding student demographics and school backgrounds. Survey respondents were categorized as persisters or non-persisters of two-year or four-year colleges. Schonert, Elliott and Bills (1989) found that 65 percent of the college attendees were

two-year college students and 51 percent of the respondents attended four-year colleges with persistence rates ranging from 67 to 74 percent.

Additional findings of the study revealed similarities between persisters and non-persisters of two-year and four-year colleges. Mothers and fathers exhibited significant influences on the post-high school plans of the graduates. Students in both categories shared that the majority of their parents thought that the students should enroll in college. In addition, half of the graduates shared that teachers influenced their educational decisions to enroll in college. In particular, persisters of four-year colleges indicated that teachers greatly influenced them. The finding is consistent with the data for 2003 – 2004 school year rural students, which indicated that 84 percent of the students, who planned to continue their education after high school, went to a school counselor, teacher or coach for information on college entrance requirements (Chen, Wu, Tasoff and Weko, 2010b). The study also revealed that 66 to 87 percent of the rural high school graduates attended college the fall semester after high school graduation. Interestingly, 66 percent of two-year persisters versus 79 percent of non-persisters enrolled during the fall semester following high school graduation while 87 percent of four-year persisters did so versus 86 percent of four-year non-persisters. These findings imply that the first year enrollment is significant for the rural high school graduates of Iowa.

Students also had concerns about the high school services they received. Two-year persisters felt a need for more emphasis on academics by their high schools. Four-year persisters claimed that poor teaching hindered their educational goals. All of the students mentioned that poor study habits interfered with their educational goals; but, echoed that schools did provide the counseling they needed to continue their education.

Non-persisters advanced persisters in high school academics; yet, the persisters outperformed the non-persisters in college. Finally, non-persisters indicated that the top two reasons for withdrawing from college centered on the cost of college and career indecisions. The finding is consistent with current research that rural students have high educational aspirations if they perceive that a connection between their career goal and their coursework exists (Lapan, Tucker, Kim & Kosciulek, 2003; Quaglia & Perry, 1995).

Schonert, Elliott and Bills (1989) identified several items that contributed to the college attendance of rural students in Iowa. These include the effects of parent/teacher influences, career decisions/value, first fall college enrollment and academics. However, the authors were limited in their research method and were not able to understand the culture of the rural Iowa students' college attendance plans. For example, Schonert, Elliott and Bills (1989) mentioned that the students' college enrollment might have resulted from a commitment to their goals and the institutions' goals; yet, their study did not allow for an in-depth investigation into either the students' goals or the institutions' commitments. In addition, the first year after high school graduation emerged as a significant time for persistent and non-persistent students to enroll in college. However, without site visits, artifact reviews and/or interviews, it is difficult to understand how the students' or the institutions' commitments affected the enrollment of the students. Such information would add to the body of knowledge regarding how colleges assist rural secondary school students in navigating post-secondary environments to learn about college expectations, college awareness, financial aid and the acquisition of college resources.

Given the survey format, the researchers were not able to use questions or clarify data, which presented an incomplete view of the factors that influence college enrollment of rural secondary school students. For instance, half of the high school graduates indicated that teachers influenced their educational decisions. This is a noteworthy statement since rural educators are positioned to support and engage students and function as role models (Hardre', et al., 2009). However, the authors could not ask additional questions to learn how the teachers engaged, inspired or instilled values into the students. Interestingly, the authors also note a similar gap in the information as they emphasized a need to identify specific parent behaviors that affect the students' post-secondary enrollment.

The authors attempted to triangulate the data with the use of site visits with present day school officials; however, their findings presented a one-sided view absent the viewpoint of the students. As such, the timeframe for the study is also challenging for the researchers because some information may have been lost in historical translations. In addition, the researchers did not visit or collect information about either the students' college environments or the colleges' roles in the post-secondary success of the rural Iowa students.

Finally, the authors claimed that their findings did not coincide with current research regarding rural populations. Schonert, Elliott and Bills (1989) shared that the rural populations of Iowa may have certain traits that contribute to the success of its rural students. While the hypothesis may be valid, it is possible that the authors' narrow research focus on school districts with less than 300 students biased the findings to reflect the traits of only small school districts in Iowa. In addition, the findings cannot be

generalized to the state of Iowa. Thus, additional studies in Iowa and other rural locales are warranted to learn about the post-secondary enrollment of rural youth in different rural sub-regions of America.

A final research study focusing on rural students' post-secondary success included Yan's (2002) investigation of factors that influence the post-secondary enrollment and persistence of rural Pennsylvania students compared to students from urban and suburban areas. The researcher used the National Educational Longitudinal Survey (NELS 88/94) of the National Center for Educational Statistics. The study includes a collection of follow-up surveys focused on eighth graders of 1988. Two follow-up studies were conducted in 1994, which reviewed the students' transition from high school to the workforce and post-secondary education as well as the experiences of both settings. Six hundred and forty two Pennsylvania students were represented in the national sample of 24,000 students. Two hundred and sixteen students attended rural schools, 103 attended urban schools and 323 attended suburban schools.

The author considered demographic characteristics, high school experiences, social integration, education expectations and parental involvement, post-secondary education experiences and employment experiences. In an effort to compare the post-secondary success of rural, urban and suburban students, the author categorized students as No Post-secondary Education, Dropouts, Late Enrollees or Persistent. The study revealed that rural students were the least likely to attend college. Forty-eight percent did not attend compared to 28 percent of urban and 36 percent of suburban students. Rural students who did not go to college were twice as likely (27 percent) as urban (15 percent)

and suburban (13 percent) students to expect they would end their education with high school.

Yan also reported that rural students who enrolled in college participated in academic high school programs more than rural students who did not attend college. The finding is noteworthy given research that suggests rural students do not have access to advanced programs or coursework (Alliance for Excellent Education, 2010, Arnold, 2004). On average, students in rural areas and small towns attend schools that offer only four courses in advanced mathematics compared to seven in suburban and eight in urban areas (Graham, 2009). According to data for high school graduates of 2005, rural students took seven rigorous courses compared to 12 courses for urban students (Shettle, et al., 2007). However, the finding emphasizes the importance of academic program enrollment for the post-secondary success of rural students in Pennsylvania.

College enrolled rural students were also four times more likely to take the Scholastic Assessment Test (SAT) than those who did not enroll. Thus, this indicates that the post-secondary entrance exam is a significant contributor to the college enrollment and persistence of rural students. Yet, this is alarming since eight percent of rural students in the 2003-2004 academic senior class took or planned to take commercial SAT/ACT preparation courses and seven percent of rural students took or planned to take private one-to-one tutoring for SAT/ACT exams compared to 17 percent and 14 percent of urban students who prepare for the exams (Chen, et al., 2010b).

The peer and parent variables were consistent with current research since parents and peers in the study were considered as contributors to the post-secondary success of rural students. Eighty two percent of persistent rural students said they had few or no

friends that were *not* planning to go to college compared to 75 percent of urban persisters and 76 percent of suburban persisters. The information is distressing since the authors own findings indicate that slightly more than half of the rural students did enroll in college.

Rural parents were also less likely to expect their children to attend college. For example, fathers expected their students to participate in vocational schools and earn only a high school degree. In addition, 26 percent of rural students reported that their mothers wanted the students to earn only a high school degree compared to four percent of urban and 12 percent of suburban students. However, 95 percent of persistent rural students reported that their mothers expected them to attend college or graduate school, similar to urban and suburban students.

Further review of the attendance patterns of the rural students revealed that discussions with parents about college plans significantly contributed to the rural students' college enrollment and persistence. Rural students who did not attend college were more likely than their urban and suburban counterparts to report that they never discussed going to college with parents and were less likely to discuss college "often." In a comparable report, 66 percent of rural parents of the 2003 – 2004 academic year high school seniors compared to 70 percent of urban parents discussed going to college with their students (Chen, Wu, Tasoff and Weko, 2010a; Cooper, Chavira & Mena, 2009). Thus, parents have a significant role in the educational journey of the rural students of Pennsylvania.

Within the study, socio-economic status was also identified as a significant predictor of persistence among rural students. Rural students who did not go to college

were in the low and middle socio-economic status levels. Rural dropouts were in the low, middle and high socio-economic status levels. Rural persistent students were in the middle and high socio-economic status levels. When socio-economic status and the students' financial aid awards were viewed together, the report implied that low-income students did not persist and middle and high-income students with one or more forms of financial aid did. Thus, the combination of these financial factors indicated a significant relationship to the post-secondary success of rural students.

Finally, college choice surfaced as a variable in the post-secondary success of rural students. Similar to urban and suburban students, rural persistent students were more likely to apply to a four-year college as their first college choice. Rural students were also more likely to attend colleges that were in-state colleges. The finding is consistent with the research by Williams and Luo (2010) who studied the effects of geographic characteristics on of first-year students' college success. Yan found that 75 percent of rural persistent students, compared to 59 percent of urban persistent students and 62 percent of suburban persistent students, were somewhat more likely to attend their first choice post-secondary institution. In addition, rural dropouts and late enrollees were less likely to attend their first choice institution than persistent students were. Thus, the study implied that rural dropouts attended two-year colleges and persistent students enrolled at four-year colleges regardless of locale. Yet, without information about the characteristics of the colleges, it is difficult to determine how the institutions influenced the identified attendance patterns of the rural students.

Academic programs, entrance exams, discussions with parents, peer involvement, financial considerations and college choice are identified in the study as contributors to

the post-secondary success of rural Pennsylvania youth. However, the researcher's survey tool limited him to the information that was recorded on the forms. The author could not provide an in-depth look into the college going culture of the students in the study. For example, the study implies that low-income students who did not receive more than one type of financial aid did not persist. With interviews, artifact reviews and site visits, the elements that affect the students' financial aid awards could be reviewed. The in-depth look would identify types of aid, how colleges provided information about the aid and what award options were presented to the low-income students. The author was also not able to "hear the voices" of the students. For instance, 82 percent of the persistent rural students indicated that their friends were planning to attend college; however, a little more than half did attend. With interviews and focus groups, the students could share what factors contributed to the reduction in enrollment. In addition, the diversity of the students within the study is a limitation since 94 percent of the students was identified as white and were residents of the northern state of Pennsylvania. Finally, the study failed to include information about college characteristics that may have influenced the identified attendance patterns of the rural Pennsylvania students.

Dual Enrollment Programs

Dual Enrollment programs existed as early as the 1970s; however, the number of programs did not grow significantly until the 1980s (Kim, Kirby & Bragg, 2006). Currently the growth of the programs continues as 71 percent of public schools offered dual enrollment programs in the 2002 – 2003 academic school year and the programs were offered in all 50 states (Waits, Setzer & Lewis, 2005). During the 2002 – 2003 12-month academic year, 48 percent of all Title IV degree-granting institutions in the Fast

Response Survey System offered dual enrollment programs (Kleiner, Lewis & Greene, 2005). Eighty percent of higher education institutions offered courses taken by high school students on their college campus, 55 percent offered courses on a high school campus and 12 percent offered courses at other locations such as community centers, vocational/technical schools and hospitals (Kleiner, et al., 2005). In addition, during 2001 to 2005, the number of students served in the programs grew almost 47 percent (Kim, et al., 2006).

The goals of the initiative also remain consistent and include a combination of attributes (Andrews, 2001; Boswell, 2001). These goals include:

- Provide challenging educational opportunities for high school students
- Improve the college preparation of all students
- Increase the number of citizens who participate in some form of post-secondary education in order to ensure a trained, competitive workforce
- Accelerate the educational progress of students through post-secondary education, saving both students and taxpayers significant dollars
- Foster collaboration between high schools and colleges such that
    - secondary and post-secondary counselors provide the necessary dual credit information to students and parents
    - students and parents are well-informed about the program
    - an agreement formulates between secondary and post-secondary institutions
    - non-faculty members who meet the hiring requirements of the post-secondary institution instruct the courses

Criticism of Dual Enrollment Programs

Dual enrollment programs continue to grow rapidly around the nation; however, program stakeholders are reluctant about some of the program's features (Bailey, et al., 2002; Kleiner, et al., 2005; Waits, et al., 2005). These reservations focus on the programs' financing, quality of instruction, transferability of coursework and student selection. When colleges and high schools receive funds for the same student to participate in dual enrollment courses, it appears to some policymakers that the program is "double-dipping" (Bailey, et al., 2002). Some states such as Arizona and Illinois have considered reducing the reimbursement rate and the number of students allowed to enroll in the courses (Bailey, et al., 2002). The issue presents concern for students and parents because if the funding schedule is reduced or eliminated in some states, it could potentially require colleges to increase or charge tuition for the dual enrollment courses, which could issue a hardship on rural populations that are often characterized as low-income (Gibbs, 2000). In light of these situations, program stakeholders argue that state legislators have to address the funding issue and provide a way to fund the dual enrollment programs most equitably, especially given the programs' current growth (Bailey, et al., 2002).

Skeptics of dual enrollment programs also cite the quality of the programs as a concern (Krueger, 2006). Questions regarding the program's quality center on the dual enrollment courses taught at high schools by high school teachers or college adjunct instructors. Critics consider these instructional arrangements of the dual enrollment courses as traditional high school classes. In addition, critics are concerned that high

school students often experience difficulty when attempting to transfer the dual enrollment credits to other colleges.

Finally, student selection is another area of concern for skeptics of the dual enrollment programs. The traditional design of dual enrollment programs normally focused on academically proficient students in order to help the students transition seamlessly through the educational system. Scholars argue that the findings of student success in dual enrollment programs represent the success that academically astute students would normally realize. Other researchers caution that dual enrollment research does not focus on the successes that nontraditional students have realized in the programs (Bailey & Karp, 2003).

However, a current program strategy includes increasing the participation of non-traditional students such as, at-risk, career preparation, middle and lower performing students has surfaced (Kim, et al., 2006). Albeit, a seemingly innovative plan to help all students' transition to post-secondary institutions, the inclusion of middle and lower performing students has caused debate about the program's quality and effectiveness (Karp & Hughes, 2008). Critics of the plan question whether nontraditional students can succeed in college level courses if they are not successful in secondary courses (Bailey, et al., 2002). Supporters of the plan claim that the program can prepare the nontraditional students for the academic rigors of post-secondary institutions, expose the students to colleges, provide curricular options and improve the students' motivation (Bailey, et al., 2002).

Given these conflicting viewpoints about dual enrollment programs, a qualitative study that examines the programmatic features of the programs would provide an in-

depth view of factors that may contribute to the concerns about the program. Thus, this qualitative study, which included a case study format, investigated the elements of dual enrollment programs provided to rural secondary school students.

Findings and Outcomes of Dual Enrollment Programs

Research studies claim that dual enrollment participants were better prepared for college, demonstrated superior academic performance in college, earned more college credits and increased college placement and retention to the second-year of college (Bragg & Kim, n.d.). For example, Tallahassee Community College compared grade distributions at Florida State University for dual enrollment students and regular students. The study revealed that the grades earned by dual enrollment students were clearly higher than grades earned by regular students in the courses (Andrews, 2001). In addition, Eimers and Mullen (2003) studied 7913 students enrolled in the University of Missouri System. The study analyzed the academic characteristic of the students and categorized them based on the students' participation in Advanced Placement, Dual Credit, Advanced Placement and Dual Credit or high school only programs. The results revealed that the advanced placement, advanced placement and dual credit and dual credit only students returned to their second year at a higher rate than the students who were enrolled in the high school only program. Even after conducting a regression analysis to control for ability indicators, the researchers found that dual credit students had an increased likelihood of returning for their second year of college (Eimers & Mullen, 2003).

In addition, dual enrollment studies were conducted by the program's sponsor organization and the studies focused on student perceptions. For instance, a 1999 Salt Lake Community College survey that included a stratified random sample of 604 students

was designed to learn about the students' perceptions of the courses, their post-secondary high school plans and the program's effect on their decision to attend college (Peterson, et al., 2001). Based on the research findings, the majority of the students were satisfied with the courses. Nearly half of them planned to enroll in college six months after high school graduation and the program was a positive influence on their decision to attend college, especially Salt Lake Community College (Peterson, et al., 2001).

Although these research findings suggest positive student outcomes, other studies contradict the findings. For example, Nitzke (as cited in Bragg & Kim, n.d.) conducted a longitudinal study of the attendance patterns of 568 students of a community college in the Midwestern section of the United States. The comparison group included students who did not participate in dual enrollment programs. The students were selected using stratified random sampling. Findings indicated that program participants attempted and completed fewer course credits. After a regression analysis to control for student background characteristics, the data demonstrated that participation in the dual enrollment program had a negative impact on the students' total completed credits (Bragg & Kim, n.d.). Thus, participating in the dual enrollment program did not assist the students in performing better than those who did not participate in the dual enrollment program.

Another concern about dual enrollment studies includes the lack of research that controls for unmeasured characteristics. The lack of control limits the determination if the students' participation in dual enrollment programs affects their performance or if it is influenced by unmeasured characteristics (Karp, Calcagno, Hughes, Jeong & Bailey, 2007). Therefore, a research study conducted by Karp, Calcagno, Hughes, Jeong and

Bailey (2007), which could be considered the linchpin of dual enrollment investigations, did control for student characteristics. The authors examined the academic outcomes of dual enrollment students in Florida and New York. The authors used a longitudinal dataset consisting of high school and college student information and analyzed the information using least squares and logistic regressions. With the longitudinal data, the authors were able to control for some pre-existing characteristics of the students which is a strategy often missing from most research on the topic. The study included traditional dual enrollment students as well as dual enrollment students enrolled in career and technology programs at the high schools. The New York dataset focused only on dual enrollment students in the career and technology programs at the high schools; therefore, the New York information will not be considered for the study. However, the Florida dataset included information for all students in the public school system and analyzed the performance of traditional dual enrollment students and career and technology students separately. Thus, the Florida dataset will be referenced in the study.

The Florida dataset included public student records for 299,685 students of the 2000 – 2001 and 2001 – 2002 graduating class, respectively. The authors followed the students through four years of college enrollment. However, a concern of the study is its exclusion of students who enrolled in private colleges or colleges not located in Florida. The dataset included such variables as courses, grade point average and demographic information. The researchers initially found that the majority of dual enrollment programs occurred in two-year colleges, as is often the case with dual enrollment programs (Kleiner, et al., 2005).

Within the Florida dataset, the researchers found a positive relationship between the students' participation in dual enrollment programs and their academic outcomes. In particular, dual enrollment participation indicated that students would earn a regular high school diploma and enroll in college. Additionally, former program participants who enrolled in college were more likely to enroll full-time, earn a positive grade point average and enroll in their second term of college. The dual enrollment participants also realized positive long-term outcomes in such areas as final grade point average and credits earned in college.

Additionally, the Florida dataset was analyzed to examine the outcome of students typically underserved in post-secondary environments. The student sub-groups were identified by gender, high school achievement level and socio-economic status. Based on the findings, males and low-income students realized a significant advantage in participating in dual enrollment programs than their academic counterparts. The findings indicated that males and low-income students were significantly more likely to enroll in college and their grades had a significant relationship to their participation in the programs. The finding complements current research that indicates that historically underrepresented students benefit most in regards to initiatives that focus on post-secondary success (Kuh, Kinzie, Cruce, Shoup & Gonyea, 2007; McClanahan, 2004). The researchers conducted an additional analysis of the students' information to determine the program's impact on the students' long-term outcome, cumulative grade point average and all sub-groups benefited more than their counterparts did. Additional findings indicated that males benefited more than females regarding persistence to the

second year and low-income students had a slight advantage in the impact of dual enrollment participation on the number of credits the students earned.

Unlike most literature focused on dual enrollment, Karp, Calcagno, Hughes, Jeong and Bailey (2007) were able to control for some student characteristics to generate robust findings about the program's impact on the educational outcomes of dual enrollment students in Florida. The findings provide statistically significant information that identifies dual enrollment programs as a viable option for all categories of students in Florida. However, the research method limited the authors' ability to interview the students to learn about the unmeasured characteristics such as motivation that may have influenced the students' outcomes. The information did not contain data about the characteristics of the post-secondary institutions that may have influenced the students' success as well. In addition, the study was limited to the state of Florida and post-secondary institutions in Florida. Finally, the authors note that additional experimentation and assessment are warranted for the topic especially since they were not able to control for all pre-characteristics of the students.

Existing for nearly a half century, dual enrollment programs are delivered in many unique formats and have a goal of connecting students to the culture of post-secondary institutions. Program supporters have identified students' successes, innovative strategies, enhanced curriculum and financial savings as potential benefits of the programs (Krueger, 2006; Smith, 2007). As well, critics of the program voice concern for the funding, credits, quality and student selection policies. Given these considerations, the effectiveness of dual enrollment programs is still under debate and research about the topic is limited. Current research, which is often conducted by the

sponsoring organizations, tends to focus on students' perceptions and the look of the programs while neglecting the long-term outcomes of the initiative (Peterson, et al., 2001). The research is also hampered by the lack of control for student characteristics where such unmeasured results may indeed be the cause of the positive research findings noted in the literature. Additionally, some findings contradict the positive impact declared by most of the current research. Finally, the current research does not focus on the contributions that the programs may have provided to influence the success of the participants.

Therefore, the mixed research findings, limited studies and lack of control for student characteristics implore an internal investigation that explores the culture, meaning and multi-faceted nature of dual enrollment programs. These internal views would identify strategies of dual enrollment programs that influence student post-secondary success. Thus, this study focused on the characteristics of dual enrollment programs and how the programs' elements affect the post-secondary motivations and commitments of rural secondary school students.

Rural Populations in Dual Enrollment Programs

Given the sparse scholarly research focusing on rural populations and dual enrollment programs, it is no surprise that empirical studies regarding rural secondary school students' participation in dual enrollment programs are limited as well. The review of the literature about dual enrollment programs provided to rural secondary school students yielded few studies most of which focused on a specific state.

One study in particular conducted by Johnson and Brophy (2006) investigated factors that foster the rural secondary school students' participation in a dual enrollment

program, Running Start. The researchers surveyed 162 high school juniors and seniors from two rural county high schools in Washington State. The study included a survey instrument that was designed based on interviews with students enrolled in the program.

Findings of the study suggested that students felt the program positively influenced their academic experience. The study also revealed that financial and social factors including peer and parental influence were significant in fostering the students' participation in the dual enrollment program. Johnson and Brophy's (2006) findings support previous research, which shared that parents, peers and finances influence the educational goals of rural secondary school students (Chenoweth & Galliher, 2004; Yan, 2002).

In the rationale for their study, the researchers contend that little is known about the mediating factors that influence the students' participation in dual enrollment programs; yet, they were not able to investigate the findings in detail to understand how these factors were provided to influence the students' decision to participate in the program. For example, though the surveys were based on interviews with the students, the researchers could not delve deeper into the students' responses with questions or site observations in order to gain additional descriptions about the financial and social factors that contributed to the student's participation. In addition, the researchers did not consider the contributions of the program. For example, the researchers were not able to understand how the program contributed to the financial and social factors given that rural youth are more likely to experience a conflict when defining their educational goals (Grimard & Maddaus, 2004).

Finally, the researchers agreed, "there is a strong need to develop and use formal theoretical models beyond student characteristics to examine issues regarding rural students participating in dual enrollment program" (Johnson & Brophy, 2006, p. 30). Therefore, this qualitative study examined the programmatic features of dual enrollment programs to understand how the programs influence the post-secondary motivations and commitments of rural secondary school students as well as gain an internal perspective of the programs through the viewpoint of the program participants.

Other research focused on rural students in dual enrollment programs included a study prepared by Bailey, Hughes and Karp (2002) that examined dual enrollment models in New York City and Wisconsin. The study reviewed the programs' role in easing student transitions between high school and post-secondary education. The finding supported previous research about dual enrollment programs and rural populations. The researchers found that rural schools benefited from a wide variety of courses provided through the dual enrollment program. Dual enrollment programs provided academic as well as career and technical courses that rural high schools were not able to provide due to budget constraints (Alliance for Excellent Education, 2010; Karp, et al., 2007). In addition, the finding supported current research that shared that rural students have high educational aspirations if they perceive that a connection between their career goal and their coursework exists (Lapan, et al., 2003; Quaglia & Perry, 1995).

Finally, the literature review presents several findings about dual enrollment programs and rural secondary school students that are complementary. Rural secondary school students are characterized as low-income students and dual enrollment studies

have found that low-income and first-generation students receive greater success as participants of the program (Gibbs, 2000; Karp, et al., 2007). In addition, findings indicated that rural students who attended college completed advanced coursework while in high school and dual enrollment programs allow rural secondary school students to complete college-level coursework while enrolled in high school (Bailey, et al., 2002; Yan, 2002).

Though these studies provide support for rural secondary school students' participation in dual enrollment programs, quantitative findings do not reveal how the programs provide resources and opportunities to influence the post-secondary success of the rural secondary school students. Therefore, this qualitative study investigated the programmatic features of dual enrollment programs to understand how the programs influence the post-secondary success of the rural secondary school students.

Post-secondary Institutional Efforts Regarding Student Success

Habley, Valiga, McClanahan and Burkum (2010) conducted a recent study of two-year and four-year administrators and found that early warning systems, freshman seminars, advising systems, tutoring and summer orientations were strategies most often used by institutions to keep students enrolled. In addition, one of the first recognized retention programs designed to help college freshman, includes the University of South Carolina's University 101 course initiative (McClanahan, 2004). Program data report that at-risk students who complete the course remain enrolled in college at higher rates than academically proficient students do (McClanahan, 2004).

While both sets of findings represent strategies that may assist college students in realizing post-secondary success, the findings did not provide an in-depth investigation

that was based on or enhanced by the student's perspective. In addition, these findings presented limited data about how the programs were implemented or provided to the students. Finally, dual enrollment programs were not included in the research about the post-secondary success of students.

In addition, limited research investigated how institutions affect student success (Hossler, Ziskin, Moore & Wakhungu, 2008). A recent investigation that considered the efforts of community colleges included a mixed methods study conducted by the Center for Community College Student Engagement (2012). The study's findings emerged from four surveys, focus groups as well as interviews and identified practices that encourage student success. The practices included assessment and placement, orientation, academic goal setting and planning, pre-registration, accelerated developmental education, first-year experience, student success course, learning community, class attendance, alert and intervention, experiential learning, tutoring and supplemental instruction.

A College Board (2009) study presented findings from surveys of 90 four-year institutions in five states. The report presented six benchmark indicators that focused on the institutions' efforts to promote post-secondary student success. The benchmark items included program coordination, research and assessment, orientations, early warning systems, faculty-student interaction and advising (College Board, 2009).

Another study conducted by Hossler, et al. (2008) used logistic regression to examine the effects of institutional practices on retention. The study included data about three colleges in three states. The participants included fulltime, first-time students at four-year colleges. The study found that family encouragement, support and bias on

campus were important institutional practices that supported student success at the institutions (Hossler, et al., 2008).

Finally, a qualitative study examined 20 high performing colleges to understand what the institutions do to promote student success. George D. Kuh and a team of researchers (2010) conducted the study sponsored by the National Survey of Student Engagement Institute for Effective Educational Practice at the Indiana University Center for Post-secondary Research. The two-year project, Documenting Effective Educational Practice (DEEP), used a case study methodology. The researchers conducted interviews, site visits and artifact reviews. The five National Survey of Student Engagement clusters of effective educational practice guided the study. The clusters included academic challenge, active and collaborative learning, student and faculty interaction, enriching educational experience and supportive campus climate. The 20 high performing institutions shared six features that fostered student success. These features included a dynamic mission and educational philosophy, unwavering focus on student learning, environments staged for educational enrichment, evident pathways for student success, continuous improvement and shared responsibility for educational quality and student success (Kuh, et al., 2010). Given that these findings were preliminary, additional investigations were necessary to understand how these features are integrated into the meaning and culture of the institutions' programs such as dual enrollment.

Although these findings added to the body of knowledge regarding student success, no in-depth information was presented to understand how the institutions used the indictors, factors or features to foster the post-secondary success of the students. In addition, dual enrollment programs were not included in the investigations. The literature

review also found that limited research explored how institutions facilitate the students' interests in activities that foster post-secondary success. Therefore, this qualitative study examined how the contributions of dual enrollment programs fostered the post-secondary motivations and commitments of rural secondary school students.

Summary of Literature

The literature review found that dual enrollment programs prepared students for college, impacted students' college enrollment plans and their academic performance. Thus, dual enrollment programs may help students make the psychological transition by providing a demystifying experience for students and allowing them to acclimate to the college environment earlier (Bailey, et al., 2002). However, in-depth, rich descriptions about the "demystifying experience" were missing in the literature. Most of the studies not only did not control for student characteristics, they did not include information about the program's role in the students' success. The research findings, which are mostly quantitative, did not result from interviews with the research participants in order to learn the meaning of the dual enrollment settings. The findings did not provide artifact reviews or observations to gain an internal view of the programs' influence on the secondary students' post-secondary success. In addition, some of the findings were contradictory.

Based on the literature review, research that focuses on rural populations was limited and included single state studies (Hardre', et al., 2009). However, in the existing studies, several factors were realized that influence the post-secondary attendance plans of rural students. These included parent, peer and educator involvement, academic, career and college preparation, financial assistance, college choice, semester of enrollment and rural culture. However, in-depth investigations including artifact reviews,

interviews and observations were not used to learn the internal meaning of the rural student's college decisions. Detailed accounts of the rural students' experiences may provide the students' perspective regarding how these factors influence their decision to enroll. In addition, the institution's commitment was not noted in the research to determine how the provision of services or lack thereof affected the students' post-secondary goals. Finally, the students included in the studies resided in mid-western or northern states, which may not reflect the college attendance patterns of rural students in all segments of the United States.

The literature regarding the impact of dual enrollment programs on the post-secondary success of rural students was sparse. The lack of information was especially astonishing since rural students performed as well as students of other locales and participated in dual enrollment programs at rates comparable to their counterparts in other locales (Alliance for Excellent Education, 2010). The limited findings revealed that financial and social factors fostered the rural students' participation in dual enrollment programs (Johnson & Brophy, 2006). Thus, based on the literature review's findings about dual enrollment programs, rural students may potentially benefit from participation in the programs because of its college preparation nature, a contributing factor to the college enrollment of rural secondary school students (Chenoweth & Galliher, 2004).

Therefore, to further interpret the quantitative findings of the literature and learn the meaning of dual enrollment programs and its impact on the post-secondary success of rural students, this study included a qualitative research case study with interviews, artifact reviews and site observations. The format utilized the researcher as the main research instrument in order to understand how dual enrollment programs influence the

post-secondary success of rural secondary school students. Specifically, the study examined how the program involved rural students in the post-secondary climate and culture, how the program connected students to faculty and their peers and finally how the program fostered active learning for rural secondary school students.

Theoretical Framework

Dual enrollment programs afforded secondary school students college-going experiences that include college application, financial aid, admission orientation, registration, course enrollment and student services processes. With these processes, the partnerships between secondary schools and higher education institutions provided the students a first year college experience while still enrolled in high school.

Dual enrollment programs utilized post-secondary or college-based learning (CBL) opportunities that gave the high school students exposure to, exploration of and involvement in the college experience. The college-based learning opportunities, as defined for the study, included academic, social/support and institutional experiences that were germane to a college environment; yet, available to secondary high school students enrolled in college programs.

However, limited research explored how the dual enrollment programs facilitate students' post-secondary success through program offerings. Thus, to link the practice of dual enrollment programs to student success, including college enrollment and persistence, the study's theoretical basis includes Engagement Theory.

Engagement Theory

Focusing on efforts that lead to student success, student engagement theory was originally influenced by quality of effort measures, involvement theory and the indicators

of "good practice" in undergraduate education (Wolf-Wendel, et al., 2009). The concept consists of two components (Kuh, et al., 2010). The first component reflects on the time and effort that students contribute to their college experience. The time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development (Kuh, et al., 2010). Findings also suggest that students who are actively involved in learning are more likely to realize post-secondary success (Tinto, 2002).

The second component of student engagement considers the resources and opportunities that institutions contribute to encourage student participation in activities that lead to student success (Kuh et al., 2010; Wolf-Wendel, et al., 2009). Uniquely, student engagement considers the institution's role in directing students to participate in educationally purposeful activities. Thus, the second component of the theory is used to understand how dual enrollment programs facilitate the post-secondary success of rural secondary school students.

Model of Hypothesized Dual Enrollment Influence

The Conceptual Model of the Hypothesized Influence of Credit Based Transition Programs (CBTPs) on Student Access to and Success in Post-secondary Education as postulated by Karp and Hughes (2008) is also utilized to enhance the theoretical basis of the study.

Karp and Hughes' (2008) study focused on the mechanisms that credit-based transition programs use to encourage post-secondary student success. The researchers used a hypothesized conceptual model as the structure for the study. The initial model

hypothesized that effective credit-based transition programs give students a strong academic foundation for college-credit coursework (Karp & Hughes, 2008).

In-depth case studies were conducted at five diverse sites geographically located in the following states: California, Iowa, Minnesota, New York and Texas. The five credit-based programs studied included a career technical education dual enrollment program, traditional dual enrollment program, middle college program, International Baccalaureate (IB) program and Tech Prep program. The study included interviews, observations and document reviews with faculty, staff and students of credit-based transition programs that had longstanding programs serving middle and low achieving students.

A team of researchers conducted the research in two phases and visited each site for three days. The taped interviews focused on program structure, student recruitment and selection, curriculum, support services, collaborative relationships, staff development and student experience (Karp & Hughes, 2008). One hundred and eighteen interviews were conducted with faculty, staff and students and 61 observations of classes, support service activities and professional development activities were completed (Karp & Hughes, 2008).

During the analysis process, the researchers used the Nvivo software to assist with coding the collected data as well as to communicate and synthesize the data. Significant findings focused on student recruitment and selection, curriculum variety, course pathways and support services (Karp & Hughes, 2008). The researchers also realized that the initial model did not account for the structure of the programs. Therefore, the researchers refined the model to reflect the findings of the study. Thus, the final model

hypothesized that student participation in college coursework along with support services, progressive academic and college skill development and motivation will lead students to enroll in college and likely persist due to the strong skills developed during participation the program (Karp & Hughes, 2008).

In this study, engagement theory and the model integrated the literature regarding rural students and dual enrollment programs to learn how dual enrollment programs foster post-secondary success for secondary school students. The internal view of the structures, policies and practices of dual enrollment programs were presented through a case study research format, which is explained in the following chapter.

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Chapter 3

Methodology

Research methods used to investigate the elements of dual enrollment programs provided to rural secondary school students are discussed in chapter three. The chapter begins with a description of the research inquiry and the rationale for its use in examining the elements of dual enrollment programs. The methodology design is also presented with the criterion used to select the sites for the study. Finally, the chapter discusses the procedures used to collect and analyze the data, measures used to ensure trustworthiness and the role of the researcher.

Description of Research Inquiry

Dual enrollment programs included partnerships between secondary and post-secondary institutions. These partnerships included a variety of bureaucratic processes necessary to coordinate the activities of the initiatives. Understanding the programs' features and how the processes were implemented required an in-depth view of the programs' practices. Therefore, the qualitative research approach was used in the study.

Qualitative research explores a particular setting with the use of thick, rich descriptions and specific data collection and analysis steps (Creswell, 2003). The approach also supports the generation of ideas and conclusions from the data (Yin, 2003). In addition, qualitative research uses open-ended questions that emphasize the discovery and collection of new information (Hoepfl, 1997). The

questions generally seek to answer "how" or "who" statements that are only satisfied by an in-depth investigation of a setting or activity (Bloland, 1992).

Moreover, qualitative methods utilize the researcher as the main instrument of inquiry. As such, the researcher interacts and talks with participants about their perspectives (Patton, 2002).

Rationale for Research Method

Qualitative research was most appropriate for the study because the approach allowed the interpretation of the dual enrollment settings based on the views of its participants. The study included interviews of higher education and secondary school professionals, dual enrollment coordinators, secondary school counselors, instructors, students and parents. In addition, the research was conducted in the natural settings of the dual enrollment programs (Creswell, 2003). The researcher visited community colleges, dual enrollment offices and rural high schools to gather data during the day-to-day operations of the programs.

Moreover, the qualitative approach revealed the elements of dual enrollment programs that were not easily identified with quantitative measures (Hoepfl, 1997). Detailed notes gathered from interviews, artifact reviews and site observations presented the internal characteristics of dual enrollment programs. These detailed accounts allowed the researcher to learn about the programs through descriptions.

Finally, qualitative research provided a platform in which to describe and understand the culture of individuals who have been excluded or underserved in scholarly research (Spradley, 1980). In the study, the structure, policies and practices of dual

enrollment programs provided in rural America, a population often excluded in scholarly research, was presented (Hardre', et al., 2009).

Methodology Design

Interpreting the elements of dual enrollment programs based on the questions of the study was best explained through case study research. Case study research provides knowledge about individuals, organizations or topics (Yin, 2003). Case study research includes detailed reviews, is governed by time and the researcher collects the detailed field notes using a variety of data collection procedures (Creswell, 2003). The study's contextual conditions were the structures, policies and practices of dual enrollment programs that supported the programmatic elements of the programs. The study included interviews of program administrators, students and parents. Site observations of classes and offices as well as document reviews were conducted

Finally, case study research investigates a contemporary setting and uses "how" and "what" research questions (Yin, 2003). The study focused on current dual enrollment programs and "how" the programs foster the post-secondary motivations and commitments of rural secondary school students.

Case Study Design

A multiple case study design including three purposefully selected dual enrollment programs was used in the study. Multiple case studies include the investigation of more than one case and are often considered more convincing than a single case study (Yin, 2003). The study reviewed dual enrollment programs that served rural high school students at three community colleges in South Carolina. The study

consisted of embedded units such as staff members, high school partners, students and college instructors. Questions specific to the study included:

1. What are the structures, policies and practices of dual enrollment programs provided to rural secondary school students in South Carolina?
2. How do dual enrollment programs provide academic, social and institutional support to rural secondary school students in South Carolina? How do dual enrollment programs provide opportunities for rural secondary school students to interact with faculty, staff and students of post-secondary institutions?
3. How do dual enrollment programs foster active learning for rural secondary school students in South Carolina?

Purposeful selection. Creswell (2003) suggests, "The idea behind qualitative research is to purposefully select participants or sites (or documents or visual material) that will best help the researcher understand the problem and the research question" (p. 185). Thus, the study included dual enrollment programs provided by community colleges because a greater percentage of community colleges provided the programs to high school students (Kleiner, et al., 2005, South Carolina Commission on Higher Education, 2008).

Selection of state sites. To locate dual enrollment programs that served rural students, the following three criterion were utilized.

1. States that served a significant number of dual enrollment students were identified using the Institute for a Competitive Workforce's 2009 Leaders and Laggards State Bi-Annual Report.

The leading states included Iowa, New Mexico, Wisconsin, Ohio, Washington, Virginia, North Carolina, South Carolina, Colorado, Arkansas and Wyoming (Hess, 2009).

2. States that served the most rural students were identified using the Rural Trust 2009 Why Rural Matters Bi-Annual Report.

   The leading states identified included: North Carolina, Texas, Georgia, Ohio, Virginia, Pennsylvania, New York, Tennessee, Michigan, California and South Carolina (Johnson & Strange, 2009).

3. States with dual enrollment programs that served rural students were identified using the Education Commission of the States' 2008 High School Dual Enrollment Database.

Based on the listed criterion, South Carolina surfaced as the location hosting a significant number of dual enrollment programs provided to rural secondary school students.

Selection of program sites. The researcher reviewed South Carolina's dual enrollment website and identified the Director of Institutional Effectiveness in order to submit the research proposal for approval. The researcher also reviewed online reports about the system's dual enrollment programs. As such, the researcher noted the state's institutions that were affiliated with the National Alliance of Concurrent Enrollment Partnerships. During the process, two programs, Americus Community College and Kellogg Community College, surfaced.

After reviewing the state's community college system website, the researcher contacted the state's Community College System Director of Institutional Effectiveness

to gain approval to conduct the study within the system. The researcher discussed the project, shared a letter of intent and reviewed the selection criterion for the dual enrollment programs, which included programs that:

- had a history of offering dual enrollment courses
- enrolled rural secondary school students
- realized positive results in providing dual enrollment programs
- represented diverse rural locales

The Director of Institutional Effectiveness at the Community College System's office approved the study and recommended three rural community colleges with a history of serving rural secondary school students. The colleges, along with the positive dual enrollment program results, are listed in table 3.1. Pseudonyms are used for the names of the colleges in order to maintain privacy.

Table 3.1

Recommended Study Sites

Rural Community College	**Positive Dual Enrollment Result**
Gamble Community College	Record success in enrolling rural minority males in college
Stanford Community College	College enrollment rates comparable to and exceeding college enrollment rates of urban and suburban locales
Welsh Community College	Included in national reports regarding its rural program and noted for success in graduating rural secondary school students with high school diplomas and community college degrees

After receiving approval to conduct the study within the community college system, the researcher contacted the Director of Institutional Effectiveness at each community college recommended by the System Director and reviewed the study

proposal. Upon review of the research study proposal, all three institutions agreed to participate in the study pending an approved Institutional Review Board (IRB) process. The directors also identified an institutional contact for the study. However, Stanford Community College indicated that its on-campus research process was being reviewed and final approvals could be delayed.

The researcher also contacted the Director of Institutional Effectiveness at Kellogg Community College, one of the colleges identified by the researcher. Kellogg Community College compiled effectiveness data about its dual enrollment program, served a diverse locale and hosted a large percentage of rural high school participants on the college campus. Upon review of the research study proposal, the fourth institution agreed to participate in the study and the director identified an institutional contact for the study. The fifth institution, Americus Community College, was not contacted because the intended number of sites was exceeded with the approval of site four.

Following a successful Institutional Review Board process, the researcher re-submitted the letter of intent including the Institutional Review Board approval letter to the designated site contacts. Upon receipt of the Institutional Review Board approval letter, one of the sites recommended by the Community College System Director of Institutional Effectiveness, Stanford Community College, realized that the delayed update to the college's on-campus research process would not allow the institution to participate in the study. Therefore, the institution was excluded from the study. The study's institutions included Gamble Community College, Kellogg Community College and Welsh Community College.

The program sites are described in the following section.

Dual enrollment program host description. Dual enrollment programs in the study were provided to rural secondary school students through the following local community colleges, Kellogg Community College, Welsh Community College and Gamble Community College.

Kellogg Community College. Kellogg Community College served residents in the heart of the state and had three major campuses and five off-campus sites. Kellogg offered 24 two-year occupational/technical degree programs, nine occupational/technical certificate programs, five two-year college transfer programs and more than 40 career studies certificate programs.

Based on average 2008 – 2011 data, the college served over 19,000 credit-seeking students annually. The college's dual enrollment program allowed urban, suburban and rural secondary school students with special permission from the principal or school counselor to take college-level courses at their local high schools, technical centers or at one of the college's campuses. Enrollment in the college's dual enrollment program was offered to high school juniors and seniors enrolled in twenty-four schools and school systems. Within these schools and systems, the college served eight rural high schools. The program was located in the college's academic affairs division and was managed by a coordinator and two program specialists. Dual enrollment courses were offered in the career and technical pathway and the transfer pathway. Based on average 2008 – 2011 data, the program served more than 1,500 dual enrollment students annually. Fifty one percent of the rural dual enrollment students attended dual enrollment courses on the high school campus. In addition, 53 percent of the dual enrollment courses were taught by high school faculty members.

Welsh Community College. Welsh Community College served ten counties within the state and divided its service area between two central locations. Welsh offered 14 two-year occupational/technical degree programs, 20 occupational/technical certificate and diploma programs, eight two-year college transfer programs and more than 30 career studies certificate programs.

Based on average 2008 – 2011 data, the college served over 9,000 credit-seeking students annually. With special permission from high school principals, students enrolled in college-level courses at the students' local high schools, regional centers or at one of the college's eight campuses. Enrollment in the program was offered to high school students enrolled in one of 16 high schools or school systems served by the college. The college also hosted a local Governor's School program that provided dual enrollment courses to Governor School students. In addition, the college shared some high schools with Gamble Community College.

Welsh Community College received state and national recognition for its dual enrollment program as well as inclusion in research studies about dual enrollment programs. In particular, a significant number of students in the Welsh Community College dual enrollment program graduated with a high school diploma and a college degree simultaneously. For more than 20 years, the program served more than 15,000 dual enrollment students with more than 400 of them graduating from college and high school at the same time.

The program was located in the college's academic affairs division and was managed by a coordinator and a program specialist at each of its two central campuses. Dual enrollment courses were offered in the career and technical pathway and the transfer

pathway. Based on average 2008 – 2011 data, the program served more than 2,000 dual enrollment students annually. Eighty nine percent of the rural dual enrollment students attended dual enrollment courses on the high school campus. Moreover, 65 percent of the dual enrollment courses were taught by high school faculty members.

Gamble Community College. Gamble Community College served three counties within the state at one location. Gamble offered 19 two-year occupational/technical degree programs, 26 occupational/technical certificate and diploma programs, four two-year college transfer programs, as well as career studies certificate programs.

Based on average 2008 – 2011 data, the college served over 6,000 credit-seeking students annually. The college's dual enrollment program allowed local students to take college-level courses at their local high schools. The college shared some high schools with Welsh Community College. Enrollment in the program was offered to high school juniors and seniors enrolled in one of nine high schools or school districts served by the college. The college assisted rural minority male secondary school students in enrolling in college. In particular, one of the program's local high schools enrolled 80 percent of the high school's African American males in college courses.

The program was located in the college's department of student services and was managed by a program manager and a coordinator of dual enrollment. Dual enrollment courses were offered in the career and technical pathway and the transfer pathway. Based on average 2008 – 2011 data, the program served more than 1,500 dual enrollment students annually.

Selection of these institutions did not indicate that the community colleges were the most effective at engaging rural secondary students nor was there a claim that the

processes used at these institutions would prove effective at other institutions of higher education.

Based on community college information and system reports, the colleges and programs selected for the study realized post-secondary success for rural students comparable to the state's community colleges. Report findings indicated the following:

Table 3.2

Enrollment Population

Location	2008 – 2011 Enrollment for First College Students	2008 – 2011 Enrollment for Dual Enrolled Students
Community College System	18%	13%
Rural Colleges	18%	25%
Colleges of the Study	**17%**	**24%**

According to average 2008 – 2011 fall term enrollments, the colleges of the study enrolled a higher percentage of recent high school dual enrollment graduates (24 percent) than recent high school graduates/first-time college students (17 percent) as displayed in Table 3.2. In addition, the colleges (24 percent) of the study enrolled a higher percentage of dual enrollment students than the community college system (13 percent) (Community College, 2013). Therefore, the college enrollment for the programs included in the study included a greater percentage of dual enrollment students than first-time college students. The study's colleges enrolled a greater percentage of dual enrollment students than the state's community college system.

According to 2006 cohort data for dual enrollment high school graduates, dual enrollment students from rural areas earned college degrees at higher rates (79 percent) than dual enrollment students in urban (65 percent) and suburban locales (78 percent)

(Community College, 2012). The attendance and graduation data are displayed in Table 3.3.

Therefore, rural students who participated in dual enrollment programs at rural community colleges earned a college degree at a greater rate than dual enrollment students in urban and suburban locales. Interestingly for rural populations, who often possess low college going rates, the data reports revealed that the rural community colleges (47 percent) as well as the rural colleges of the study (45 percent) enrolled more dual enrollment students after high school graduation than programs in urban (40 percent) and suburban (39 percent) areas (Community College, 2012).

Table 3.3

Attendance and Graduation Data

	2006 Dual enrollment cohort who attended college	2006 Dual enrollment cohort who graduated with a college degree
Urban Colleges	82%	65%
Suburban Colleges	90%	78%
Rural Colleges	**84%**	**79%**
Community College System	86%	76%
Colleges of the Study	81%	69%

Moreover, the state's 2008 – 2012 cohort data (latest available cohorts) revealed that 69 percent of all recent high school graduates enrolled in college and 55 percent of the high school graduates identified as economically challenged (a characteristic often shared by rural populations) enrolled in college (U.S. Department of Education, 2008-2012). Thus, with college enrollment rates ranging from 81 to 90 percent for secondary

school students, colleges providing dual enrollment programs, in particular the rural colleges of the study, realized college-going success for its participants.

The colleges of the study were among those that recorded post-secondary success for its participants. Commonalities in programmatic features at the sites aided in the discovery of strategies, opportunities and resources used to assist rural secondary school students in the college-going process. Therefore, the colleges of the study were suitable locations in which to learn about the elements of dual enrollment programs that fostered the post-secondary motivations and commitments of rural secondary school students leading to college success such as college enrollment and persistence.

Data Collection

Guiding topics. Because the researcher sought a careful and diligent study about the strategies, opportunities and resources of dual enrollment programs and how the elements fostered the college-going motivations and commitments of rural secondary school students, the study required evaluative data (Hossler, et al., 2008). Participating in activities related to the clusters of the National Survey of Student Engagement (NSSE) is linked to collegiate success, thus, the survey's questions were referenced in the collection of the evaluative data (Kuh, et al., 2010). The guiding topics, based on the questions of the study and engagement theory as outlined by Kuh, et al. (2010), included the following:

Question 1: What are the structures, policies and practices of dual enrollment programs provided to rural secondary school students in South Carolina?

The study focused on the organizational structure of dual enrollment programs by reviewing:

- How program policies were implemented
- How the program was organized and managed
- How the secondary and post-secondary institutions collaborated to offer the program
- How the program encouraged rural students to become involved with the institution
- The types of activities that were promoted to rural secondary school students

Question 2: How do dual enrollment programs provide academic, social and institutional support to rural secondary school students in South Carolina? How do dual enrollment programs provide opportunities for rural secondary school students to interact with faculty, staff and students of post-secondary institutions?

The study focused on how dual enrollment programs integrated rural students into the academic, social and institutional requirements of post-secondary environments by reviewing how the programs:

- Established and maintained contact with the rural secondary school students
- Promoted the program's college expectations to rural secondary school students
- Prepared rural students for college-level work prior to high school junior and senior years
- Used resources to create a supportive climate for rural secondary school students
- Helped rural secondary school students navigate post-secondary environments

- Implemented policies/statements that connected rural secondary school students to academic, social and institutional requirements of post-secondary environments
- Provided opportunities for rural secondary school students to connect with peers and faculty
- Provided support services to rural secondary school students

Question 3: How do dual enrollment programs foster active learning for rural secondary school students in South Carolina?

The study focused on the active learning of dual enrollment programs by reviewing how the programs:

- Informed rural students about the academic challenge of college level work
- Involved course instructors in promoting active learning
- Assured active collaborative learning in the classroom

Procedures. The study included sources of data common to case study research including a pilot study, interviews, artifact reviews and direct observations (Yin, 2003). A field notebook and database were used to capture the thick, rich details of the interviews, artifact reviews and observations (Yin, 2003).

To prepare the data collection process, the researcher scheduled a meeting with the three site contacts to review the proposal, identify potential participants and create a research schedule. Study participants were required to be high school professionals, college professionals, parents or students who were employed through, enrolled in or a caregiver of someone enrolled in the programs or an individual who managed the dual enrollment program. Based on the criterion, site contacts secured interviews and created

an interview schedule for the researcher's site visit. The researcher and the site contacts maintained email and phone conversations to discuss and finalize the interview schedules. Once the research schedules were created, the site contacts confirmed all interviews and site observations and the researcher visited the sites for one to five days. However, some candidates were not able to maintain the interview schedule on site due to external schedule changes. Thus, the unavailable interview candidates were identified to assist the researcher in scheduling follow-up sessions. Alternate interview participants were sought on site based on the participant selection criterion; however, additional candidates were not available. In addition, the site contacts identified potential candidates that the researcher could contact to participate in the study. Three individuals agreed to a phone interview. Three phone interviews were included for Gamble Community College's interview plan. Thus, six phone interviews were conducted for the study.

Final interview participants included seven community college administrators and dual enrollment coordinators, nine secondary school administrators and dual enrollment counselors, seven dual enrollment instructors, ten dual enrollment students and five dual enrollment parents. Eight high schools and three community colleges including Campus I and Campus II of Welsh Community College participated in the study. Fifty five percent of the participants were females and forty five percent of the participants were males. Specifically, interview participants of Kellogg Community College included three administrators, an instructor and four students. Parents of the Kellogg Community College dual enrollment program were not interviewed. The community college and one

high school participated in the study. Fifty percent of the participants were females and fifty percent of the participants were males.

Interview participants of Welsh Community College included participants of the dual enrollment program hosted on both of the college's campuses. Campus I interview participants included four administrators, five parents, two instructors and six students. The community college and five high schools participated in the study. Fifty eight percent of the participants were females and forty two percent of the participants were males. Campus II participants included four administrators and one instructor. Parents and students of the Welsh Community College dual enrollment program at Campus II were not interviewed. The community college and one high school participated in the study. Forty percent of the participants were females and sixty percent of the participants were males.

Interview participants at Gamble Community College included five administrators and three instructors. Parents and students of the Gamble Community College dual enrollment program were not interviewed. The community college and one high school participated in the study. Sixty two percent of the participants were females and thirty eight percent of the participants were males.

Table 3.4 identifies the thirty-eight interview participants of the study (For privacy purposes, the names of the actual interview participants are not used.)

Table 3.4

Profile of Interview Participants

Interview Participant Number	Interview Participant Name	Interview Participant Title	Gender
1	Stephanie Brown	Kellogg Dual Enrollment Coordinator	Female

2	Johnson Elliott	Kellogg College Administrator	Male
3	Marvin Jones	Kellogg Biology Adjunct College Instructor	Male
4	Michelle Smith	Kellogg High School Counselor	Female
5	Russell Stevens	Kellogg dual enrollment student	Male
6	Mick Allen	Kellogg dual enrollment student	Male
7	Sharon Middleton	Kellogg dual enrollment student	Female
8	Sally Peters	Kellogg dual enrollment student	Female
9	Wendy Tyler	Welsh campus I dual enrollment program assistant	Female
10	Benita Flowers	Welsh campus I parent	Female
11	Todd Nichols	Welsh campus I parent	Male
12	Dedre McAdams	Welsh campus I parent	Female
13	Cynthia Paul	Welsh campus I parent	Female
14	Christina David	Welsh campus I parent	Female
15	Brandon Smoaks	Welsh campus I administrator	Male
16	William Hendrics	Welsh campus I high school counselor	Male
17	Carlos Sanchez	Welsh campus I assistant principal	Male
18	Amanda Martin	Welsh campus I dual enrollment student	Female
19	Amy Harrison	Welsh campus I dual enrollment student	Female
20	Jessie Wyatt	Welsh campus I dual enrollment student	Female
21	Micheal Littlejohn	Welsh campus I dual enrollment student	Male
22	Brice Holden	Welsh campus I dual enrollment student	Female
23	Gwen Upton	Welsh campus I dual enrollment student	Female
24	Lester Conley	Welsh campus I high school adjunct	Male

		marketing instructor	
25	Belton Franks	Welsh campus I high school adjunct culinary arts instructor	Male
26	Jessica Oden	Welsh campus II dual enrollment coordinator	Female
27	Timothy Williams	Welsh campus II administrator	Male
28	Nortan McDonald	Welsh campus II adjunct college history instructor	Male
29	Phyllis Richards	Welsh campus II high school principal	Female
30	Martin Young	Welsh campus II high school counselor	Male
31	Charlene Noland	Gamble high school administrator	Female
32	Fred Appleton	Gamble high school administrator	Male
33	Sheila Jackson	Gamble dual enrollment coordinator	Female
34	Zack Conway	Gamble high school adjunct automotive instructor	Male
35	Edwinna Long	Gamble high school adjunct math instructor	Female
36	Georgianna Frasier	Gamble high school adjunct math instructor	Female
37	Sean Goodwin	Gamble high school dual enrollment coordinator	Male
38	Henrietta Infinger	Gamble high school dual enrollment program assistant	Female

As final preparation for the data collection process, the researcher conducted a pilot case study with a local dual enrollment site in the fall 2011 semester. The researcher consulted with the program's coordinator for two days to review and simulate

the proposed research study. The researcher gained insight about the anticipated field questions as well as the logistics of the data collection plan. The pilot study protocol consisted of handwritten notes of the coordinator's comments and reflective notes of the researcher. Following the pilot study visit, the researcher outlined lessons learned as well as items necessary to create the agenda for the actual research study (Yin, 2003).

Interviews, an important data collection method for case study research, along with semi-structured topics were conducted in the study (Yin, 2003). Topics of the interviews included partnership agreements, comparison of dual enrollment and high school courses, college-like experiences, hiring procedures, services provided, reasons to participate, descriptions of instructor training and classroom experiences. As different themes emerged, the interview questions were expanded to capture the nuances of the topic. Interview protocols are included in Appendix A.

Interviews yield direct comments from people about their experiences, opinions, feelings and knowledge (Patton, 2002). To learn about dual enrollment programs through the perspective of its stakeholders, interviews were conducted with dual enrollment staff members, high school partners, administrators, college instructors, students and parents. The thirty-eight individuals who participated in the interview and focus group sessions received an introduction to the study along with open-ended questions. Interview participants were also asked for approval to audio tape the sessions, if appropriate (student sessions could not be recorded). The interview protocol consisted of hand written comments of the interviewee and the hand written comments and reflective notes of the researcher (Creswell, 2003).

Artifact reviews, which include studying excerpts from organizational records, correspondence; official publications, reports and surveys, were included in the study to gain insight not usually available through observations and interviews (Creswell, 2003; Patton, 2002). The historical and written accounts of dual enrollment programs were captured through forty-four artifact reviews that included the state dual enrollment plan, program guides, faculty handbooks, applications, program handbooks, publications, registration forms, orientation invitations, websites, syllabi, class assignments, program reports, information packets and a program video. The artifact reviews were categorized into five topics including advertisement, the state plan, application, enrollment and evaluation and yielded more than 1000 data points. The artifact review notes were used to substantiate findings presented by the study's interviews and observations (Yin, 2003). In addition, the artifact review notes were aligned with the questions of the study, which allowed the data to integrate with the interview and observation notes (Yin, 2003). Notes about the nature of the artifacts, key ideas generated through the artifacts and the researcher's reflective notes constituted the artifact review protocols (Creswell, 2003).

Seventeen formal and casual site observations, which consisted of detailed descriptions of activities, behaviors and actions of program participants, were conducted (Creswell, 2003; Patton, 2002). Daily dual enrollment operations including classes, program services and the programs' offices were studied to understand the programs' impact on the post-secondary motivations and commitments of rural high school students. Casual observations at dual enrollment sites also occurred throughout the study (Yin, 2003). These informal reviews included observations of office locations, classroom arrangements and dual enrollment conversations between secondary and post-secondary

professionals. The observation review protocols consisted of descriptive notes about the settings and participants, event logistics and reflective thoughts expressed by the researcher (Creswell, 2003).

Data Analysis

Data analysis involves consolidating, reducing or expanding the data to yield possible relationships and questions that lead to better understanding of the study's setting (Spradley, 1980). The process of data analysis involves synthesizing text and image data to determine how it answers the study's questions (Creswell, 2003). Creswell (2003) recommends six blended steps for data analysis, which include organization, reflection, coding, description, representation and interpretation. Throughout the iterative analysis process, the collected data was evaluated based on its relationship to the study's questions (Yin, 2003). In addition, the information was compared to existing data findings and reviewed to determine if additional data notes were needed (Yin, 2003).

During the fall 2012 semester, the researcher followed these guidelines to realize the meaning of the dual enrollment information. In organizing the collected data, the researcher transcribed the interviews, scanned relevant documents, cataloged the artifacts by topics, entered her field notes into a database, which included the raw data and increased the reliability of the study, and began sorting and arranging the information based on the study's questions (Creswell, 2003; Yin, 2003). After organizing the data, the researcher reviewed or reflected on the arranged information to note the initial tone (Creswell, 2003). The researcher then used codes to organize the data into categories based on the participants' phrases (Creswell, 2003). The codes were arranged into compact forms and then used to generate descriptions. For instance, word tables were

generated that displayed the data based on a particular idea, such as "coursework," which included such words as "rigorous," "specific," "real-world," hands-on," and "above high school" (Yin, 2003).

During the data reduction process, the collected information was also simplified and sorted using the NVivo data analysis software. NVivo, which uses text-based electronic formats, was used to organize the collected data. The software helped the researcher code the large amount of data collected and assisted the researcher in realizing themes and patterns (Creswell, 2003). The researcher placed the coded information into categories and maintained a connection to the data through the software's audit trail to the speaker and topic. The Nvivo categories are included in Appendix B.

The Nvivo process led to more selective coding where the researcher systemically organized the data sets with respect to a core concept (Yin, 2003). Using content analysis, the researcher noted patterns, recurring words and themes in the data (Patton, 2002). Patterns of the study referred to descriptive findings while the themes referred to topics (Patton, 2002). For example phrases such as, "I can take courses I want to take," and "I have to do my part," described the "independence" and "responsibility" topics which led to "autonomy" as a major theme that surfaced in the description of categories step described in the next section.

Following the coding process, the researcher created descriptions of the categories, which generated major themes for the study. The major themes were then supported by quotations and specific evidence provided by the study participants (Creswell, 2003). The major themes identified in the analysis step included college-going policy, college-going culture, cooperative partnerships, coordinated network,

college-based learning opportunities, acculturation, adjunct faculty development, participation factors and autonomy.

The study's analysis led to a representation of the data through a process model that presented how the study's findings including themes and descriptions would be displayed (Creswell, 2003). The process model also assisted in preparing the information for conclusion drawing and verification (Creswell, 2003). The process model for the study is noted in Figure 3.1.

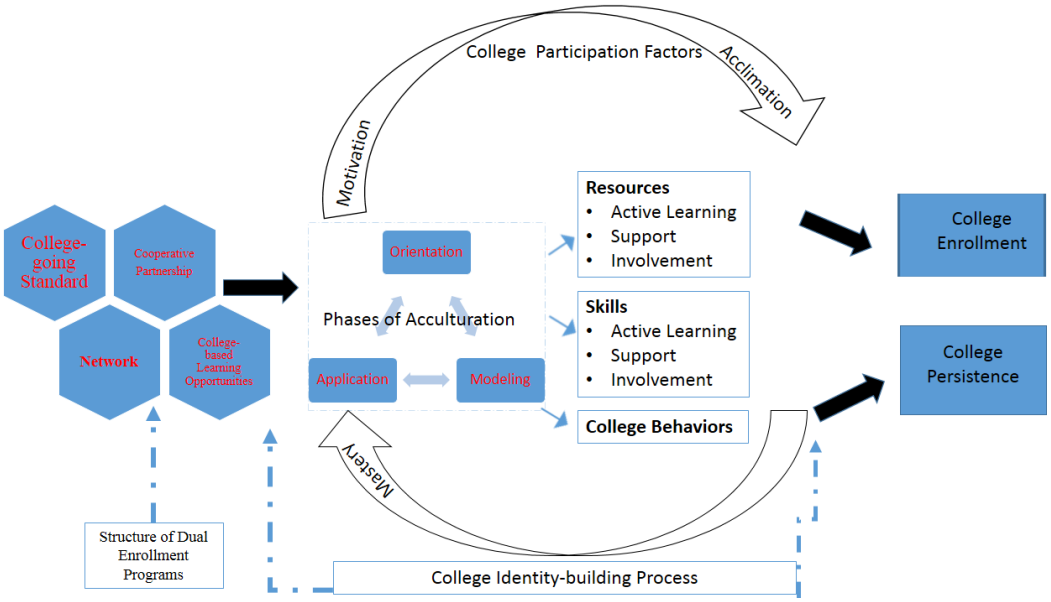


Figure 3.1

Data Analysis Process Model

Verification of the conclusions, the final step in the analysis process, includes checking the findings that have surfaced. During verification, the analyzed data was reviewed in relation to the questions and examined to confirm the study's conclusions. Although, the findings were continually compared to the research questions during the analysis process, the verification step included comparing the findings to rival

conclusions. The process was reiterative and required a review of the patterns and themes until data saturation or consistent conclusion drawing was realized and the researcher could advance to the final step. Creswell (2003) shares that the data analysis process concluded with the interpretation of the findings contained in a narrative passage. During the study, the researcher outlined the final passage based on the logic model and continued to verify the passage based on the findings and the conclusions. The final interpretation presented the programmatic features of dual enrollment programs provided to rural secondary school students as derived from the study (Creswell, 2003).

Assurances

Validity, a strength of qualitative research, was assured in the study through triangulation, rich, thick descriptions, member checking as well as the clarification of researcher bias (Creswell, 2003). Triangulation included the use of different data sources such as interviews, artifact reviews and observations that generated themes within the study (Yin, 2003). The use of rich, thick descriptions captured the true essence of the setting with exact phrases of participants, detailed descriptions of the research settings and program artifacts. Member-checking allowed the case study findings to be reviewed by the research participants in order to determine accuracy. The researcher's biases are described in the sub-section of the dissertation entitled, "Role of The Researcher."

To further assure that the study's interpretations accurately described the phenomena under investigation, trustworthiness was assured through credibility, transferability, dependability and confirmability. Credibility established that the elements of the case study were represented appropriately (Hoepfl, 1997; Lincoln & Guba, 1985). Transferability declared to what extent the findings of the study may be

applied in other settings or with other subjects (Hoepfl, 1997; Lincoln & Guba, 1985). Dependability determined if the findings of the study would be repeated if the study were replicated with the same or similar subjects in the same setting (Hoepfl, 1997; Lincoln & Guba, 1985). Confirmability indicated to what degree the findings of the study were determined by the research elements and not the researcher's bias (Hoepfl, 1997; Lincoln & Guba, 1985). The following table lists the measures that were employed to support credibility, transferability, dependability and confirmability in the study (Hoepfl, 1997).

Table 3.5

Trustworthiness Assurance Measures

Trustworthiness	Assurance Measure
Credibility	Triangulation; Member Checks
Transferability	Thick, Rich Descriptions
Dependability	Protocol Outline; Database
Confirmability	Audit Trail

Role of the Researcher

Given that qualitative research is an interpretive process, the role of the researcher must be explained to identify her biases, values and personal interests about the topic and process (Creswell, 2003). As a resident of and an administrator who served rural America, I was familiar with the intricacies of the culture. I have also served as a student services administrator of a two-year college in South Carolina. In the student services administrator role, I advised students about academic, career and educational requirements. The college also hosted a dual enrollment program and on a limited basis, I provided college instruction to secondary school students.

Finally, my affiliation with the National Alliance of Concurrent Enrollment Partnerships, the professional organization that fosters and supports rigorous concurrent enrollment programs, provided access to several resources pertaining to secondary and post-secondary partnerships.

Therefore, due to my previous experiences, I may have a few biases that shaped the way I interpreted my interviews, document reviews and observations of the dual enrollment programs. However, I sought objectively to understand how the features of dual enrollment programs influenced the post-secondary success of rural secondary school students.

Ethical Considerations

Qualitative researchers must respect the participants and the research site (Creswell, 2003). To ensure that the research did not infringe upon the rights of the research participants, an application to conduct the qualitative research methods employed in the study was submitted to The Institutional Review Board of the University of South Carolina. The researcher also contacted the appropriate site contacts or "gatekeepers" (Creswell, 2003, p. 184) at each site for approval to conduct the research study and prepared an amenable research schedule. The gatekeepers received a letter of intent that outlined the purpose and procedures of the study. Once the study was approved for the sites, the gatekeepers and the researcher agreed upon a specific interview, review and observation schedule. Finally, the researcher provided each participant with a description of the study.

In addition, the researcher implemented several strategies and procedures to assuage or eliminate concerns that the researcher would not conduct the research in a

professional manner. The researcher utilized a title that was sensitive to the privacy of potential participants. The title focused on how the elements of dual enrollment programs influence the post-secondary motivations and commitment of rural secondary school students. In addition, the participants and sites remained anonymous during the study and all data files including transcripts, observations, artifact reviews and audio files were secured on a password-protected computer. Other measures that were observed to ensure the appropriate professional conduct of the researcher included the use of language and words that did not marginalize or exploit the research participants; respect for the research participants and the research setting; and participant access to report findings.

Chapter 4

Findings

Based upon the engagement theory framework, the study's model hypothesized how the elements of dual enrollment programs foster the college-going success for rural secondary school students. However, offering an opportunity to participate in college alone is not likely to encourage post-secondary matriculation or persistence.

Therefore, the study's hypothesized model was based on the assumption that dual enrollment programs foster the successful transition to post-secondary education by providing active learning, support and involvement resources that help students understand the requirements of college enrollment and would help acquire the skills necessary for college success (Karp & Hughes, 2008).

The model was based on research findings that suggested students who participate in advanced coursework realize post-secondary success (Adelman, 1999; Horn, Kojaku & Carroll, 2001; Yan, 2002). In addition, the model was based on research that indicated that nonacademic factors may foster the post-secondary success of students (Kuh et al., 2010; Tinto, 1997).

The initial model hypothesized that dual enrollment programs provide active learning resources that foster college success. Active learning resources included program elements that involved students in the learning process while allowing the students to think about and apply new knowledge (Kuh, et al., 2010; Tinto, 2002). The active learning resources included the instructor and class instruction as well as the

course syllabus, noted as an active learning tool. These resources also supported the development of the students' active learning skills.

In addition, the model suggested that dual enrollment programs provide support resources that help secondary school students enroll in college and develop skills that will help the students secure the necessary college support services (Tinto, 2002). In the study, support resources included a college-going standard, tuition assistance, a college-going network and adjunct faculty development.

Furthermore, the initial model suggested that dual enrollment programs provide involvement resources that allow secondary school students to interact with college faculty, staff and students while increasing the high school students' college involvement skills (Tinto, 2002). Involvement resources focused on college faculty, staff and students as well as on-campus activities.

Thus, based on the initial model, dual enrollment programs provide academic and support resources that help students gain college skills that foster the students' college success. Figure 4.1 represents the initial model.

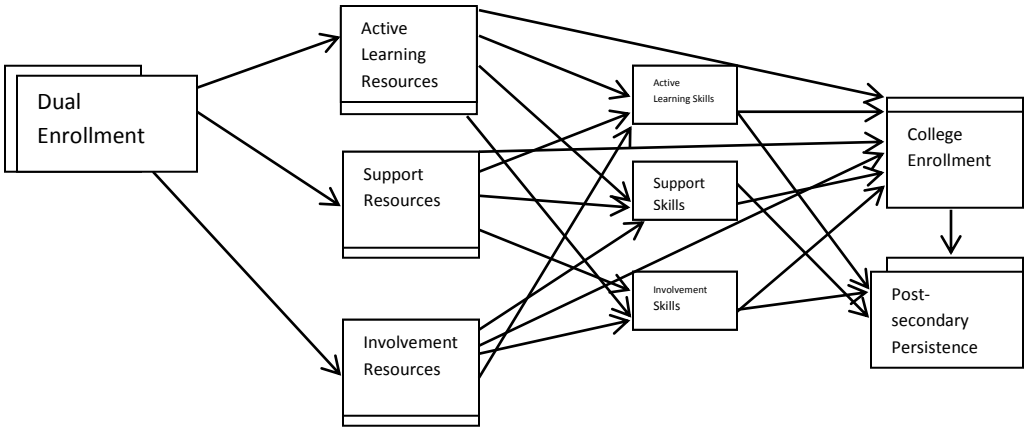


Figure 4.1

Conceptual Model of Hypothesized Dual Enrollment Influence on College-Going Motivations and Commitments

Although, dual enrollment programs foster college enrollment and persistence as well as college preparation for secondary school students and additional research regarding program outcomes is necessary, this qualitative study did not examine the impact of dual enrollment programs on outcome variables such as, college enrollment and persistence. (Burns & Lewis, 2000; Karp & Jeong, 2008; Bragg and Kim, n.d.; Peterson, Anjewierden & Corser, 2001).

The study investigated how dual enrollment programs encouraged and promoted the post-secondary success of rural secondary school students. The study focused on the resources of dual enrollment programs that foster the college-going motivations and commitments leading to college success such as, college enrollment or persistence.

The active learning, support and involvement resources as well as the college success skills realized in the study are explained in the subsequent section.

Active Learning Resources

Active learning resources included items provided by dual enrollment programs that fostered the secondary school students' participation in the college learning process (Tinto, 2002). The active learning resources found in the study included college instructor and college instruction.

College Instructor

Dual enrollment programs provided full-time faculty members or adjunct college instructors to teach the rural secondary school dual enrollment participants. Dual enrollment instructors were selected and employed by community colleges based on accrediting and state board policies. The hiring guidelines required,

> Faculty teaching associate degree courses designed for transfer to a baccalaureate degree must meet the following credential guidelines:

> possess a doctor's or master's degree in the teaching discipline or master's degree with a concentration in the teaching discipline (a minimum of 18 graduate semester hours in the teaching discipline).

Dual enrollment instructors were considered knowledgeable facilitators of the active learning process provided to rural secondary school students. A Gamble Community College dual enrollment high school coordinator shared,

> [Dual enrollment] instructors have "increased preparation, skills, knowledge base and work experience in the field. Teachers who prep further for college credit or Masters of Science degrees are more knowledgeable, are better teachers and they implement the knowledge in the classroom.

Welch Community College students shared, "college instructors teach the courses…not just talking to us. They involve us." A Kellogg Community College student shared, "[Dual enrollment instructors] are knowledgeable about the subject." A Gamble Community College instructor explained,

> To teach my course, I have to teach the students how to measure, how to use tools. I have to teach them how to weld. I have to teach them how to fabricate, teach them how to put an engine together… It's pretty much from a ground level up – from buying metal to getting a rolling car that you get in and drive.

Dual enrollment faculty members also received opportunities to enhance their classroom instruction. The faculty members had access to college-level resources such as, faculty mentors, educational aids, college email accounts, computer support and computer lab/classroom access, instructional guides and a faculty handbook that included information about the dual enrollment program.

In addition, adjunct instructors enrolled in complimentary courses offered at the community college. A dual enrollment faculty handbook shared,

> Each faculty member is expected to attend at least one orientation session each year. These meetings provide information on the college, updated expectations and procedures and a chance to meet with the Program Heads

> and other faculty members. In addition, attendees are given the opportunity to participate in one or more training opportunities. Throughout the year, the college offers technology training in the form of Professional Development Opportunities. Training classes may be offered on-site at one of the campuses or online. Faculty members are also encouraged to participate in regular departmental meetings.

A Welsh Community College adjunct high school instructor shared, "Obtaining the dual enrollment credential classes helps with the renewal certification process and it also brings you up to speed with emerging trends."

Furthermore, dual enrollment programs documented the active learning strategies facilitated by the dual enrollment instructors. For example, questions listed on the faculty observation form included, "Were students allowed/encouraged to ask questions during the class period?" and "What activities were provided: lecture, demonstration, video presentation, question/answer, student presentation, overhead transparencies, computer presentation, hands-on activities."

Finally, dual enrollment instructors were intentional in the delivery of the course instruction. When asked, "What are the differences between a traditional high school course and a dual enrollment course?" A Welsh Community College dual enrollment student shared, "Teachers are focused." A Kellogg Community College adjunct instructor stated, "We are as detailed as possible in college." A Welsh Community College adjunct high school instructor replied,

> In the regular high school class, we touch on the subject matter; but, in the dual enrollment class, we get a little more detailed... It goes the same way with the … lectures. You may be a little more detailed, maybe a little more jargon that they should be familiar with from previous chapters, … or terminology… You don't break it down quite as simple… more detailed criteria

Instructors were able to delve deep into the subject matter. A Gamble Community College dual enrollment adjunct high school instructor described the role as follows,

> I can delve into the technical and the design aspect of the skills I'm teaching. You get a better participation from the students because they know they are actually learning a skill at a higher level that they can use on their resume.

A Kellogg Community College dual enrollment student stated,

> In high school, you don't pay attention to the content because you are rushed to get the assignment done. You are focused to get ready for the big test. They forget to prepare you and you can't get through everything they are packed to do. In dual enrollment, we are engaged in the content with follow-up to know what we know.

While the dual enrollment instructors had access to several resources to enhance their credentials, training that focused on teaching the dual enrollment courses was limited or non-existent. In addition, adjunct faculty members were encouraged not required to complete the community college's adjunct faculty training. A Kellogg Community College administrator explained, "There is no training policy for the dual enrollment faculty. The college has elaborate online training for adjunct faculty." In addition, while adjunct faculty members participated in college faculty meetings that included topics such as syllabus comparisons, textbook reviews and access to the college's library and online content management system, some adjunct faculty members did not feel that all meetings were intended for them. A Gamble Community College adjunct high school faculty member shared,

> We're invited to attend at the college the adjunct faculty meetings... Most of the teachers have gotten to where they don't really like to go to them because we kinda feel like it's not aimed at us. You know like, they want to talk about, you know, if you have a student that comes to your class 'high.' You know and I wouldn't think that the college would be that concerned;

> but they really apparently have that kind of thing… I know that we have access to their library, their Blackboard program; but most of the teachers here don't use those resources. I…I really feel quite separate from the college… We meet with the professors, you know, when we go to that meeting and that's when they kinda compare our syllabus and tell us what they want and …talk about textbooks.

Consistent or on-going interactions between community college faculty members and adjunct high school instructors to acclimate high school dual enrollment instructors to community college instruction and community college instructors to the culture of rural high schools and its students were not provided. Fifty to 60 percent of the dual enrollment faculty members in the programs of the study were adjunct high school instructors. In addition, community colleges identified dual enrollment participants as college students while the students were enrolled in high school. Thus, a dual enrollment training could assist dual enrollment instructors in identifying additional secondary and post-secondary strategies useful to foster the active learning of rural secondary school students (He'bert, 2001; Peterson, et al., 2001; Robertson, Chapman & Gaskin, 2001).

Moreover, the statewide dual enrollment plan required a formal method to assess faculty effectiveness and student success. The statewide evaluation policy stipulated,

> Student and faculty evaluations are an integral component of the assessment process for a college course. The community college will conduct faculty evaluations for dual enrollment instructors using the college guidelines adopted for all adjunct faculty… Student evaluations on all dual enrollment adjunct instructors will be conducted each semester for each course offered through the dual enrollment program.

Through faculty evaluations, rural secondary school students were invited to share their thoughts about the dual enrollment courses. The evaluations were administered at the conclusion of the course each semester. During the activity, students noted the instructors' expertise in delivering college level courses. The documents considered the effectiveness of the instructor and were based on the students' perspectives as highlighted

on an evaluation form, which stated, “This survey is designed to obtain your opinions of this course.” Questions on the evaluation include “The instructor’s tests were representative of the assigned material.” “The instructor allowed sufficient time for student questions.” “The instructor’s lectures and explanations were clear and understandable.”

Although, dual enrollment students completed evaluations, the students did not evaluate the effectiveness of full-time faculty members. The evaluation policy only required evaluations of the effectiveness of adjunct dual enrollment instructors. In addition, faculty peer evaluations were not noted in the study. When asked about peer evaluations conducted by college faculty, adjunct instructors indicated that they were only consistently evaluated by students not the college or other faculty members. A Welsh Community College instructor shared, “Students complete course evaluations. I have received not one negative comment! Students state that they ‘look forward to my visit.’ No one [administrators or peers] has ever evaluated what I do.”

College Instruction

Instruction provided in the dual enrollment courses surfaced as a significant element of active learning. Various active learning opportunities were used to involve the rural secondary school students in the classroom experience. The active learning resources focused on the format of the instruction, which included discussion, real world relevance, student involvement and media.

Discussion questions were a staple of dual enrollment lectures. Discussions were hosted each week with or without grading requirements. When asked about the specific differences inside the dual enrollment courses versus the traditional high school courses,

a Kellogg Community College dual enrollment student shared, "We learn a lesson then ask questions." During a Welsh Community College classroom observation where the students attended their final course lecture and prepared for the final exam, the following discussion format was noted: The instructor advised students to remember the college format that was necessary to answer essay questions. In unison (almost without allowing the instructor to finish her statement), the students responded, "in a complete sentence repeating the main point of the question." The instructor then asked questions about the current lesson and the students provided accurate responses as well as references to prior course materials. Following, the instructor provided descriptions of two course subjects and the students responded by linking the items together and stating their conclusions for the correlations. Finally, the students participated in an identification activity. At the announcement of the activity, the students groaned and sighed, "Oh, no!" However, they became engaged in the assignment by appropriately identifying the photographs and providing additional details not required by the instructor.

Real world relevance was another characteristic of the dual enrollment instruction format. Real world relevance included information, discussions or assignments that related to a concept reflecting the world around us. Course instructors often shared their experiences in relation to the topic being discussed. The instructors also provided assignments that connected to a local or familiar issue as noted by a Kellogg Community College dual enrollment student, "The instructor in the dual enrollment course relates in a personal way. They share stories that relate to the lessons. When I am in a high school course, I think, 'How will I use this when I leave?'" A Gamble Community College adjunct high school instructor shared, "Our program allows us to show the students how

to apply their core learning to real world experiences. For example, we use so much geometry in our career and technology education course when deciding how to make our final product."

Student involvement was another characteristic of the dual enrollment instruction format. Student involvement included hands-on activities, class projects or teamwork. When asked about the specific differences inside the dual enrollment courses versus the traditional high school courses, A Welsh Community College student shared, "[The dual enrollment classes were] more hands-on." A Welsh Community College adjunct high school instructor shared the following experience about his course,

> They [dual enrollment students] enjoy it [dual enrollment course] a lot more. It's hands on…It's practical…They're out of the classroom. A lot of them do not like to sit all day….They do full meals….Every Friday, we'll sell meals.

Media also surfaced as a characteristic of the dual enrollment instruction format. Media included items used to present or demonstrate the course lessons. Electronic equipment and presentations were often used to deliver class instruction. In addition, an online content management system was used to host course information and assignments. The online option presented a new learning opportunity for the rural students and high school dual enrollment faculty since an online opportunity was not provided in the rural high schools included in the study. When asked about the specific differences inside the dual enrollment courses versus the traditional high school courses, a Kellogg Community College student replied, "We can type for a review using a laptop at college and we can go online and find answers with the laptop." A Welch Community College student explained the difference as "going online for assignments." These findings have

significance for rural populations that lack a large variety of educational resources in the classroom (Alliance for Excellent Education, 2010).

Active Learning Tool: Course Syllabus. The college course syllabus surfaced as a tool that supported the active learning process in the classroom. The course syllabus surfaced as an active learning tool that outlined the detailed work schedule for the students. The syllabus cataloged the active learning opportunities that the students would experience in the course. A Kellogg Community College program manual included the following guidelines regarding some of the required components of the syllabus,

> The course syllabus must reflect the course content and objectives as stated in the most current official course outline. The course syllabus must include the following elements: learning activities (projects, papers presentations, reading, oral participation, tests, etc), applicable learning resources (published materials—books, periodicals, informational packages, etc.; films, tapes, slides, specimen models, charts etc.), schedule of class events—topics, tests, other learning activities."

For example, an American literature syllabus included the following active learning assignments such as, lectures, group and class discussions, group activities, class participation, oral presentations, PowerPoint presentations, literary responses, critical thinking exercises, self/peer evaluations, written compositions as well as mid-term and final exams. The detailed plan also included the topics, course assignments, textbook (the college version or one approved by the college) and test schedules. Unique to secondary school settings, the college syllabus also outlined the "terms of a college course," and provided information about college policies such as the honor code, drop and add rules and attendance.

Support Resources

Rural residents do not have access to resources that provide information about college and the residents are not familiar with college enrollment requirements (Guiffrida, 2008). A Welsh Community College dual enrollment assistant explained, "The [rural] students don't realize you need to test. [The students] don't realize there is a process." Dual enrollment programs of the study provided academic and support structures that assisted rural secondary school students in engaging the college-going process (Tinto, 2002). The significant support resources included a college-going standard, tuition assistance, a college-going network and adjunct faculty development.

College Going Standard

Dual enrollment programs in the study were guided by the state's dual enrollment plan that articulated the college-going arrangement between secondary schools and community colleges. The college-going arrangement included standards that the secondary and post-secondary institutions adhered to when assisting secondary school students with college access (McDonough, n.d.). The college-going standards that surfaced as support structures for the rural secondary school students included the enrollment policy and college-going implementation principles.

College going policy. The enrollment policy legislated how secondary and post-secondary institutions would enroll secondary school students into a community college while the students were still enrolled in high school. The statewide arrangement required "high schools and colleges to act together to provide a wide range of college course options for high school students." For example, a Welsh Community College high school principal shared, "I sat down with representatives from the community college so

that we could work out what courses would be offered that would lead a student to the Associate's degree." The Kellogg Community College dual enrollment coordinator shared, "The letter of agreement includes the service provided, billing followed, a list of the classes and the reimbursement process and could all read something different [for each high school]. Any course that the college offers, the high school does not."

In addition, the state plan outlined how students qualified for enrollment in the "wide range of college course options" offered at the state's community colleges. Course enrollment was restricted to high school juniors and seniors; however, the policy included a provision for freshmen and sophomore high school students to enroll in the college-level courses. The policy stated,

> Dual enrollment coursework is restricted to high school juniors and seniors. Exceptions may be considered for freshman and sophomore students who are able to demonstrate readiness for college level coursework… It is required that all freshmen and sophomore students meet established institutional placement criteria prior to enrolling in dual enrollment coursework. Appropriate public school and community college officials should take the necessary steps to assure that every student who is registered under the dual enrollment arrangement is amply prepared for the demands of a college-level course…

Registration for the courses offered through the dual enrollment programs, required high school students to complete the community "college's established institutional policies" in order to demonstrate college readiness. Though, a complete listing of institutional guidelines was not included in the state plan, community colleges required placement scores, an approved college application, approved pre-requisites, an identification number and a signed roster. A Kellogg Community College dual enrollment program brochure advised students to,

> Receive a recommendation for the high school, Apply online, Take your placement test or find out PSAT/SAT waiver scores from your counselor;

> Submit the community college dual enrollment course request form and the application for in-state tuition to your high school.

A Welsh Community College student explained the process as, "[I was] asked to take a test then qualified."

The college placement test was a key element of the dual enrollment process. The placement test was used by all dual enrollment program of the study to determine the students' readiness for college level work. The test helped students, parents and educators understand how prepared the rural students' were for college level coursework. For example, without the proper scores, students were not allowed to enroll in the college level courses; and the students were provided access to specific interventions before attempting to take the test later in the school year.

A Welsh Community College dual enrollment assistant explained,

> The on-campus regular student, their intervention is they're put in development courses. So, in the school system, it's kinda like going into developmental courses which is high school courses. So, you have to have a semester of it [high school courses] before you can retest them. And the reason for that is, it would be senseless just to keep testing and testing and testing because they've had no intervention. They've had nothing to help them hone their skills. So, we will retest within the same semester using a different test.

In addition, the test is significant for rural populations that perceive that they are not intelligent enough for college level instruction as it documents that student readiness for college-level coursework (Chenoweth & Galliher, 2004). A Gamble Community College high school dual enrollment coordinator explained,

> The placement test will help some of our students who do not believe they can do something… But they sign up for psychology or they sign up for public speaking or they sign up for accounting or they sign up for something where I have to give them the placement test and then they come to me saying, 'I'm not gonna do well on it'. Then they come out of

> it and I'm like, look, you made the scores. So, I believe that … in some instances, it helps the student to realize, 'I can… I can do this.'

The policy also identified the role of each institution in the enrollment process. Excerpts from the state policy read,

> First, the public school principal must approve the cross-registration of high school students to the community college. Second, the community college must accept the high school students for admission to the college-level course. The community college will assume responsibility for administering the placement test to students recommended for dual enrollment courses and for registering students in the course.

For example, the Kellogg Community College program manual explained,

> The Academic Dean or Program Head must certify that the instructor meets the qualifications necessary to teach college courses. Personnel files should be updated annually as returning adjunct faculty complete additional course work. New official transcripts should be forwarded to the appropriate Program Head.

Finally, the policy required colleges to identify a dual enrollment coordinator to serve as a college liaison to the high schools. The policy read,

> The community college will identify a coordinator of dual enrollment to serve as a liaison to the high school, whose responsibilities shall include offering informational sessions to high school students and their parents and facilitating meetings between college and high school stakeholders to discuss logistics.

A Kellogg Community College dual enrollment coordinator shared, "The program is continuous…yet, it is seasonal. Some high schools operate like a well-oiled machine because they have had the program for years; while, others you have to touch more consistently."

A Welsh Community College program assistant further explained,

> Our job is to give the best opportunity, period. And that's why we work well with guidance offices 'cause they want the same thing. So does the administration. It's not hard working with the various offices. You just know that you work with each one differently because they do everything

> differently. But, we coordinate this because we all have the same goal… the students.

College going implementation principles. The college-going implementation principles of the state plan presented the guided the operation of the dual enrollment program as it assisted the rural secondary school students in the college matriculation process. For example, the state plan identified the dual enrollment initiative as an "enrichment opportunity" and stipulated, "In addition, neither the public school nor the community college shall be penalized in state appropriations it receives for developing and implementing the dual enrollment arrangement." The state's governor also expressed support for the plan. Comments from the governor's office during a community event indicated,

> Dual enrollment is of interest to the state as it has a challenge for 100,000 additional college degree graduates in the next 15 years and it can only be attained with programs like dual enrollment. The state is also interested in the program because of the cost savings and quicker entry into the workforce.

Moreover, the state plan identified three distinct ways for secondary school students to enroll in college courses through the dual enrollment programs. Students enrolled in a traditional college course with college students taught at a community college, students enrolled in college courses exclusively offered to high school students at the high school or local educational center or the students enrolled in college courses exclusively offered to high school students at the community college. For example, in this study, 50 – 60 percent of the dual enrollment courses were taught at the local high schools.

Tuition Assistance

Another support structure included tuition assistance. Through the state plan, dual enrollment partners were encouraged to provide dual enrollment courses to high school students at "no cost to the students or their families." Yet, the state plan did not require a "no tuition" policy and several funding options existed in the dual enrollment programs. For example, a Kellogg Community College high school reimbursed 50 percent of the cost of the college course if students received a "C" or better in the course. In addition, high school students identified as "free or reduced lunch" recipients were offered an opportunity to enroll in the college courses at no cost. A Gamble Community College high school dual enrollment coordinator advised, "Our students do not pay. What does happen for us, which reduces the tuition cost is that we provide our instructors. We hire instructors. The community college provides the credit. We provide the instruction."

The tuition cost realized by most of the students and parents of the study was often paid by the high school system. For example, A Welsh Community College postcard read,

> FREE COLLEGE CREDIT - IN ONE YEAR SAVE UP TO $26,000 - IN TWO YEARS SAVE UP TO $52,000 … Tuition is paid by the local school system in most cases in a partnership with the schools and Welsh Community College. Start College Free

The funding scheme for the dual enrollment programs realized inconsistencies as noted; however, parents, students, high school professionals and college professionals cited the programs' cost benefit as a significant motive for students to enroll in dual enrollment programs.

A Welsh Community College parent shared, “She is getting college credit and I didn’t have to pay for them, big plus!!”

A Gamble Community College dual enrollment instructor explained,

> It’s [dual enrollment] giving them a jumpstart on their credits and when they go all the way with the associate degree that’s cutting down their college education time… in half which really is opening the opportunity for some that never thought they would be able financially to go.

A Welsh Community College student simply stated, “[dual enrollment] saves money!”

College Going Network

Another support resource of dual enrollment programs included a college-going network. A Kellogg Community College program manual listed the following objective, “[dual enrollment programs] facilitate a seamless transition from the high school to the college classroom.” In doing so, dual enrollment programs of the study realized a college-going network. The network, consisting of secondary and post-secondary professionals, students, parents and community members in each program fostered the students’ fit or exposure to college by facilitating authentic college activities. The activities or college-based learning opportunities were academic, social and institutional activities germane to the college-going process and conducive to a college education.

Table 4.1 outlines the college-based learning opportunities referenced in the study. Based on study participants, these items represented the college-like experiences that rural secondary school students could access or participate in while enrolled in the program.

Table 4.1

Most Frequent College-based Learning Opportunities

Frequency Rank	Category	College-based Learning Opportunities
1	On-campus Resources	Interacting with other students, college staff; access to college services such as library, tutoring center and the college campus
2	College Instructor	Interacting with an instructor who is an employee of the local community college
3	College Technology	Utilizing college technology such as Blackboard, college email/user name and password system, college information system and college student identification number
4	College Application/Registration Process	Completing a college application and participating in a college registration process; receiving a college schedule
5	College Placement Assessment	Completing a college placement assessment
6	College Requirements	Experiencing the attendance policy, college deadlines, drop/add process, FERPA and a college semester schedule
7	College Information Network	Participating in college information sessions, college orientations and having the support of college and high school staff who advise about college concerns
8	College Degree	Creating a college transcript; earning college grades, credits and degrees; participating in the college course transfer process
9	College Course	Experiencing a college curriculum, college course syllabus, college textbook, college level assignments
10	College Tuition	Receiving an introduction to the college tuition process

Using these authentic college-based learning opportunities, the network supported and facilitated the students' application, registration and enrollment processes. , The network coordinated the students' college-going experience and facilitated a lateral post-secondary transition for the students. For example, Welsh Community College included

the following items in the dual enrollment application packet: Welsh Community College application and instructions, admissions process checklist, transcript request form and domicile determination form. Gamble Community College included "Four Steps to Becoming a Dual Enrollment Student" in the college's online dual enrollment application slideshow. The steps included,

> Step One: Discuss Dual Enrollment opportunities with your high school guidance counselor and be approved to take Dual Enrollment classes.
> Step Two: Apply to Gamble Community College online.
> Step Three: Complete the Placement Test through your high school.
> Step Four: Register for Dual Enrollment classes through your high school, during your high school registration period.

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The following process is utilized by a Kellogg Community College high school:

> To begin the registration process, students complete a course request form and I give them two dual enrollment registration forms for the high school. After completing the course request and dual enrollment forms, I call the students in large groups and complete the online application and allow the students to get a community college ID number. After completing the online application and receiving the ID number, I sort through the students' placement test scores or PSAT/SAT scores to see who needs to test. Once the students who need to test are identified, I schedule a trip to Kellogg Community College so that the students can take the placement test. Students may also schedule a test on their own. After the testing session, I review all students' placement scores and PSAT/SAT scores to determine their eligibility for the dual enrollment course. Once students are identified as eligible, I send the registration forms to the dual enrollment office at the college and we have lots of communication until a final roster is complete for the courses

Parents were also involved in the dual enrollment programs. Parents participated in the program by attending orientation sessions, approving their students' applications and signing parent tuition agreements. A Kellogg Community College program manual read, "Potential students are selected for this program based upon the recommendations of the parents and their high school counselor." For example, a Welsh Community

College parent explained, “Forms sent home asking me to give permission for my daughter to take courses. The forms stated that parents would pay if the student did not earn a "C" or better”.

Gamble Community College provided the following information for parents on its website,

> FOR PARENTS
> - These courses are offered at NO COST to you.
> - To receive college credit for these courses, the Admissions Application MUST be completed and returned in a timely manner.
> - A parent or guardian must complete and sign Part B of the Admissions Application for it to be complete.
> - Students must also sign the Class Sign Up Sheet to receive credit for the course
> - Please follow-up with your son/daughter to be sure he/ she (1) returned the completed Admissions Application to the teacher of the course and (2) signed the Class Sign Up Sheet.
> - Remember—this opportunity is offered free of charge to the student/ parent.”

Furthermore, the network acted as the college-going intermediary for the rural secondary school students. The dual enrollment partners of the network leveraged their resources to assist the rural secondary school students with the college-going process. For example, the liaisons of the programs, usually the dual enrollment coordinator, high school counselor or principal, served as the central program contacts. Liaisons executed the program as a “college within a college.” The process was observed on the planning chart displayed on the wall of the Welsh Community College dual enrollment coordinator’s office. The diagram displayed the following duties: reviewing files for accuracy, initiating billing documents, managing registration processes, verifying rosters and placement scores, distributing grade alerts along with deadline data and acting as a collection location for college reports, forms and documents.

In addition, the dual enrollment office at the college often served as an arbitrator between the college and the high school when academic or administrative matters arose. A Kellogg Community College high school counselor explained,

> There are issues with high school that the dual enrollment office understands but it is kind of hard sometimes to get the community college to understand….So, the dual enrollment office is an important piece of communication between the college and us.

Although the networks coordinated the rural secondary school students' college enrollment process, high school and college professionals in the study expressed concerns about the college transcript. By enrolling in college courses early, rural secondary school students accumulated college credits and began an official college transcript. Dual enrollment students earned up to 26 credits with the possibility of additional credits. The transcript revealed the student's success in completing a college course and earning college credits. A Gamble Community College high school dual enrollment coordinator explained,

> [Rural students] leave high school with a diploma and an Associate's degree. They leave with a college transcript. Otherwise, they think, 'college is not for me.' But, they have a transcript and have shown that they can take a college course because they have done it.

However, high school and college professionals shared that students did not understand the role of the transcript. Although transcripts documented the college courses that the rural secondary school students completed, the document's use was often illusive to some students. A Welsh Community College counselor stated, "Students don't realize the impact the college class has on their GPA and transcript. They don't realize at the start." The professionals indicated that though they shared the importance of the transcript, dual enrollment students did not understand the permanent nature of or the

impact their transcript would have on their future career goals. A Kellogg Community College administrator explained,

> We communicate to the student that this is a college class with college credit and the credit is not reversed. This is communicated in the classroom. The rigor of the course is quite different than in high school.

High school professionals also suggested a few strategies to use to address their concerns about the college transcript. A Welsh Community College adjunct high school instructor shared, "I would like to see the students pay something for the course… I think it creates some value to the course to them. They'd have something invested in the course itself." A Gamble Community College high school dual enrollment coordinator explained,

> A few dollars can help… in some cases make a little greater ownership. They're still in high school setting. So, their mindset is, 'I'm still in high school.' … It could also be a failure on our part as far as not making sure people understand. You know, it's a piece that maybe we just have to really make sure we be more specific that there's going to be these two different transcripts.

While high school and college professionals shared that high school students did not readily understand the significance of the official college transcript, students in the study did not indicate any concerns regarding the transcript. The students focused on the content of the course included on the transcript with statements such as "work harder", "rigor" and "challenging." Students did not reference the transcript during the descriptions of their dual enrollment experiences.

Another interesting finding concerning the network's role as an intermediary for the rural secondary school students included the process to transfer college credits earned in the dual enrollment program. For example, the state system office's website shared an announcement regarding "sixteen high school students graduated from a local community

college and transferred to a four-year college at virtually the same time they received their high school diploma."

A Welsh Community College student began her major courses without repeating any of the dual enrollment courses." and she was able to transfer 42 credits to a state four year college and she was able to earn two degrees in a four year term." A former dual enrollment student shared,

> The biggest advantage [of the dual enrollment program] has been that because I don't have to take all of those general education courses, I'm able to really focus in on my core courses. I don't have to take as many. I can really take that time to meet with my advisor… to meet with my faculty and I have more time to study.'

Some students realized success in transferring dual enrollment course credits, dual enrollment programs advertised the accumulation and transfer of college credits as a benefit of enrollment in the program and the dual enrollment courses were "weighted" in the student's high school grade point average just as other early enrollment advanced courses. However, the dual enrollment courses were not accepted equally at other colleges. A Kellogg dual enrollment high school counselor advised,

> If your goal is admission to a Tier I school, those schools will see AP as a higher level than dual enrollment. Those Tier I schools see AP, dual enrollment, regular high school course. This is the way I explain it to families all the time: AP is a national standard. In order to call that class AP, College Board reviewed that syllabus and said, 'Yes, this is worthy.' Where a dual enrollment, which is usually taught by adjunct professors, you can have a very different experience depending on who the professor is. There's no kind of national body looking over what they're doing.

For example, a former Welsh Community College student had a partial list of his dual enrollment courses transferred to a private state college after several meetings to resolve the issue.

In addition, printed program literature offered tentative language such as, "if" and "generally, when referring to the transfer of the dual enrollment credits. For example, program brochures stated, "Transfer your credits, if eligible, to four-year colleges and universities", "Credit for Dual Enrollment courses is generally accepted at all state private and public colleges" and "Many community college general education classes transfer easily to most four-year schools."

A dual enrollment contract stated,

> "While some of these courses may be accepted for transfer, no unified policy on the transfer of the state community college system's courses exists. The School should advise students to consult with transfer institutions in order to determine if their courses will be accepted for transfer."

Moreover, a Kellogg Community College handbook shared that two-year and four-year colleges and universities across the state approved four dual enrollment courses for college transfer based on a historic joint initiative; yet, two of the state's institutions will not transfer the dual enrollment courses. Finally, the state plan, which included an agreement between public education and community colleges, did not address the topic of transferred credits. The state plan did not indicate that articulation agreements between community colleges and transfer institutions should be created.

While there was an emphasis on transferring dual enrollment credits to local colleges, no well-defined statewide guarantees were afforded the students regarding transferring dual enrollment credits to local colleges. Thus, the transfer of dual enrollment credits should be addressed in order to assist rural secondary school students with college-going success since rural populations generally lack information about the college enrollment process (Guiffrida, 2008).

Community Support. Dual enrollment communities supported the dual enrollment students and the initiative. A Welsh Community College administrator explained, "The college embraces them [rural students] as college students." For example, a Kellogg Community College dual enrollment student handbook read, "When you enroll in the dual enrollment program, you are a Kellogg student" Also, the college's dual enrollment brochure read, "Access the College resources you need to accomplish your goals – including tutoring, libraries, computer labs and employment and transfer guidance." A Welsh Community College student replied, "Dual enrollment prepares you for college while in high school so you have a chance to understand it when you go there and you won't feel left out."

In addition, the dual enrollment partners promoted the national and local successes of the dual enrollment initiative. For example, the state plan stated, "high school students who accrue college credit are more likely to continue with their education beyond high school than those who did not." National findings about the dual enrollment programs were publicized in the programs. The college system's dual enrollment website stated,

> Dual Enrollment programs provide high school students a unique opportunity to jump-start their college career. According to the U.S. Department of Education, college credits earned prior to high school graduation reduce the average time-to-degree and increase the likelihood of graduation. For parents, it's an opportunity to reduce future college expenses by shortening the time to college graduation.

In addition, parents, state leaders and even students emphasized the work of the program. Parents and community members supported the initiative through "word of mouth" advertising. A Welsh Community College adjunct high school instructor shared that his course "had a big enrollment because the word is out by students, faculty and

parents. The students enjoy it more… hands-on and practical." A Gamble Community College high school dual enrollment coordinator shared

> Over the years, just like anything else, word of mouth. I will have 8th grade parents calling me. I'll have 8th grade parents coming by because they want to make sure that we start and see what they can do and get things mapped out right away so they can take the most advantage.

A Welsh Community College parent shared, "The program is awesome! I wish I had dual enrollment when I was in school!" In addition, A Kellogg Community College dual enrollment student shared, "I would recommend anyone who has not taken dual enrollment courses to load up – get a breather."

In addition, program successes were often celebrated. For example, Welsh Community College hosted a dual enrollment dinner to recognize the annual accomplishments of the program in the service area. The event agenda included comments from the college president, provost and a representative from the Office of the Secretary of Education. The college's faculty and staff members, dual enrollment students and their families as well as high school partners attended the event.

High School Support

The support of local high schools surfaced as a significant program element that helped rural secondary school students manage the college enrollment processes of the community colleges. A Welsh Community College counselor explained, "Two different guidelines exist, high school rules and college rules. Students may not understand at first." A Kellogg Community College high school counselor shared, "[dual enrollment includes] a college experience with the extra support of high school." Though the state plan only required high schools to approve the college registration of secondary school

students, high schools also shared information and managed the college enrollment process for the rural secondary school students.

Local schools provided information about dual enrollment programs and the college-going process. High schools provided dual enrollment and college information in orientation and parent teacher sessions. For example, a Kellogg Community College high school counselor shared,

> We come into the classes in the spring prior to course registration…With the rising juniors and seniors we definitely hit the dual enrollment harder because it's the first time it's available to them. Here are what your options are…So, the first time they hear it is from us…in the classrooms. We go through English in 10th grade…In the junior year, …we go through …US History. So, we pick classes that everybody's in to make sure we hit every kid.

A Welsh Community College high school counselor shared, "I provide orientation sessions with students and share the requirements and tell them 'Here's my expectations for behavior.'" Parents may attend these sessions or separate sessions are given to parents." Media used to share the information included letters, course selection guides and programs of study. For example, A Welsh Community College high school program of studies catalog listed the requirements for the dual enrollment program, described the available dual enrollment courses and included a parent and student dual enrollment agreement form. For example, a Gamble Community College high school sends a dual enrollment letter to students who expressed an interest in the dual enrollment program during a conversation with the guidance department staff or the dual enrollment high school coordinator. The letter explained the dual enrollment process and included a dual enrollment application that students and parents completed and returned to the school.

A Kellogg Community College high school dual enrollment announcement shared,

> Attention Parent/Guardian(s) and Students: This course will offer college credit upon the successful completion with a passing college grade *NOTE: Students will have a college transcript history…Students must apply to the college and pass the COMPASS PLACEMENT Test

A Welsh Community College student replied, "I was informed about the [dual enrollment] program during [high school] registration."

In addition, high schools acted as central locations and initiated the college enrollment activities such as the application, registration and placement testing sessions.

The Gamble Community College dual enrollment application read,

> All prospective DE students must receive qualifying South Carolina Placement Test scores or earn qualifying SAT or PSAT scores in order to enroll in a DE course. If you have questions about the process, your first point of contact is your high school guidance counselor.

A Kellogg Community College brochure stated, "Students must work through the dual enrollment liaison at their high school… Meet with your high school counselor to determine which courses are right for you." A Welsh Community College counselor shared, "I do schedule one big placement test in the spring with the students. If they miss it, the students go the college to test. We test 100 per year and gather data for improvement." A Kellogg Community College course request form stated, "Students complete this form with your Parent(s) or Legal Guardian(s) and submit it to your High School Counselor."

Finally, high schools managed the college enrollment forms or files for the rural secondary school students. For example, a Kellogg Community College brochure shared "The high school dual enrollment liaison submits all paperwork to the Kellogg Office of

Dual Enrollment. Kellogg staff will enroll all students." The Gamble Community College high school dual enrollment coordinator explained,

> We do all of the placement testing here. We do all of the registering here. The students will fill out a one-page application that will be brought into here. The assistant will then process the rest of that application so that the student is enrolled. And then, we will create the rosters here. We will go around and get all the signatures by the students.

A Welsh Community College dual enrollment assistant explained, "If they [students] turn their applications into the career coach or to guidance, they will mail them to me. And then, I will go over each application to make certain it has everything on it that we need."

In some cases, high school provided other forms of support such as purchasing the textbook and paying placement testing fees-find a school. For example, high schools of Welsh and Kellogg Community Colleges provided transportation for students who enrolled in dual enrollment programs at the community colleges. Some institutions included dual enrollment as an institutional goal. The goal is often exclusive of the requirements of the state or the governing body of the institution. A Welsh Community College high school principal explained, "We established a goal to double the number of dual enrollment students who graduated with an Associate's degree and a high school diploma.

Network Perceptions

An interesting finding regarding the college-going network was the high school and college professionals' perception of the dual enrollment programs (Helfgot, 2001). The professionals often cited the program as a "confidence builder." The professionals shared that the program provided opportunities for the rural secondary school students to gain the knowledge, skills and direction necessary to transition to college. A Welsh

Community College administrator explained, "…First generation students don't know it's [college is] a reality. If they are in the pipeline earlier, it could build their confidence."

The educators felt that once the students participated in the dual enrollment programs, the overall experience increased the confidence of the rural secondary school students and increased the students' intentions of enrolling in college. A Kellogg Community College adjunct instructor explained, "The students are not sure if they want to go then they are turned around to go to college; they overcame the challenge –too tough or not- and decided to go." A Welsh Community College high school principal also explained,

> When they [students] found success there [dual enrollment courses] they knew that when they moved on to the college level that they would be able to handle it." "The associate's program and certificate type programs, such as nursing or CNA, gives students hope and encouragement to go on and a lot of students end up in college.

In addition, the professionals felt that the dual enrollment programs allowed the rural secondary school students to realize their potential as eligible college members. For example, a Gamble Community College high school dual enrollment coordinator explained

> They [dual enrollment students] realize, 'okay, I can get through this curriculum…. I earned these couple of credits.' …We have some career studies certificates established. So, that shows that completion of something…So, they earn that career studies certificate…They say ok, 'I've already taken these credits and got this certificate. If I go take this next batch of credits, I'll have a diploma or a degree.'

A Kellogg Community College administrator commented, "If successful in dual enrollment, it will bolster their [rural high school students'] confidence for college level work." A Gamble Community College high school dual enrollment program assistant shared,

> It [dual enrollment] allows you to get that Associate's degree. You can be on to bigger things. It gives the students a bigger opportunity. They could possibly go on out and get good jobs, better internships... I think it's a great opportunity.

The finding was significant since rural educators, especially high school educators, are considered key contributors to a rural secondary school students' decision to enroll in college (Yan, 2002). In addition, when ability or previous successes are denied, students may become discouraged and abort their educational aspirations (Smith & Blacknall, 2010). Therefore, the finding suggested that the college-going climate exercised by the members of the dual enrollment partnerships fostered the post-secondary success of rural secondary school students. Given that this was an unintended finding of the study, additional research is required.

Role Models/Adjunct College Faculty Development

The program's role in assisting high school teachers in becoming adjunct community college instructors emerged as an unintended support. The state plan allowed a variety of instructors to be credentialed to teach in the dual enrollment program, particularly high school teachers. The state plan read,

> If a part-time faculty member of the community college is employed simultaneously full-time by the public school, the college may reimburse the public school board for the services of its faculty member in lieu of direct compensation to the faculty member.

High school educators had their credentials evaluated by the host community college in order to teach a dual enrollment course. The instructors had to meet the same hiring requirements as traditional college faculty. By following the process, the high school teachers became adjunct faculty members of the college and eligible to teach dual enrollment courses at the high school as well as traditional college courses on the college

campus. A Kellogg Community College program manual read, "All persons teaching dual enrollment courses in the high schools are considered shared faculty. Thus, in some situations, they dually report to Kellogg Community College as well as the local school system." High school instructors who taught dual enrollment courses at the high school provided an avenue for rural secondary school students to attend college courses in their local communities. For example, 50 – 60 percent of the dual enrollment courses offered by the programs of the study were provided at the highs schools.

As adjunct college instructors dually employed by local high schools, the instructors learned of college services and requirements of the community college (Helfgot, 2001). A Gamble Community College adjunct instructor explains a meeting hosted by the college at the beginning of the semester,

> [Gamble Community College hosts] dinner and a meeting to tell us all of the services because our students are dual enrollment--part of their student body as well. All the services they offer their own student body, ours have access to…. They tell us they are absolutely welcome to come up. These are the services that are available to your students as well…. They can go to the library. They can go to the computer lab. They can have the tutoring services.

In addition, instructors were expected to teach the courses according to the college's policies; therefore, the instructors provided rural secondary students with an introduction to college policies while enrolled at the high school. A Gamble Community College adjunct dual enrollment faculty explains, "We spend time explaining the honor code and what happens to you on a college campus if you violate the honor code. My kids are very fascinated by that."

Dual enrollment instructors were advised of relevant college information to share with the rural secondary school students. However, other than comments on syllabi and

mentions of college conversations in dual enrollment courses, findings of the study did not support the adjunct faculty's role or a process for the adjunct faculty members to provide information about the community college to the rural secondary school students in the college classroom. Students in the study did not indicate that college information was included in the course when the student provided descriptions of their dual enrollment experience. In addition, site observations did not reveal the discussion of college information in the dual enrollment classrooms.

Involvement Resources

Involvement resources included items provided by dual enrollment programs that fostered the secondary school students' participation in college, particularly interactions with faculty, staff and students (Tinto, 2002). Findings about involvement resources in the study included college faculty, staff and students and on-campus activities.

College Faculty, Staff, and Students Dual enrollment programs provided full time college faculty or adjunct college instructors to teach the rural secondary school dual enrollment students and the rural secondary school students gained an opportunity to interact with subject-matter experts. A Kellogg Community College instructor explained the experience as follows:

> They [the students] enjoy the challenge. The students come in early and review questions with me. They are stimulated by the lab. The students also compete to see who gets the highest grade on exams. The students get excited!

Faculty members also participated in high school orientation sessions where the instructors provided information about the expectations of the dual enrollment program.

A Kellogg Community College counselor explained, “

> We have the Kellogg faculty come in and speak to the students. We bring in all the rising juniors and seniors prior to course registration so that they can kind of talk about their programs, and what their expectations are and what you would be doing on their campus. And then there’s an orientation once you’ve made it into the course on Back to School day more or less we call it business day. Kellogg comes over and they do an orientation for students and their families about here are the expectations.

Students also interacted with the dual enrollment staff as well as other college employees during orientations, application and testing sessions. A Welsh Community College dual enrollment program assistant explained,

> If paper applications are not received, I may have to go out to the school and get teams of ten in a computer room to do the online application. If only a small number of students need an application, the career coach (an employee of the college at the high school) will assist the office in receiving the missing applications.

Dual enrollment programs served a variety of high schools and communities and enrolled students from diverse locations and high schools. A Kellogg Community College administrator shared, “Students are bused in from different rural counties and a lot of dual enrollment courses are offered.” In addition, current dual enrollment students consulted former dual enrollment participants about the program. For example, A Welsh Community College student talked with older students and learned that the dual enrollment program “was a positive experience and thought it would be good to try it and keep at it.”

While the dual enrollment programs enrolled students from different high schools, interactions between dual enrollment students and traditional college students or other dual enrollment students were not supported in the findings. A Kellogg Community

College instructor shared, “My dual enrollment course starts [on the college campus] at 8a to 10a and typically not many students are around.”

On-campus activities. On-campus activities were the least significant element for involvement resources. Community colleges considered the rural secondary school students who enrolled in dual enrollment programs as their students and stipulated that the students had the same rights and access to services as traditional college student. Yet, the rural students rarely engaged the on-campus activities. A Kellogg Community College administrator explained although the college considers the students as their students and provides services that “engage or integrate the students into the community college environment, it is extremely rare that the students take advantage” of the opportunities.

In particular, it was not obvious in the study how students enrolled in dual enrollment courses in high school settings accessed the college’s on-campus services and activities. Thus, the impact of on-campus services and activities on the high school-based dual enrollment students’ transition to college in the study was negligible. On-campus services were slightly significant for students who attended dual enrollment courses on the college campus. On-campus services that surfaced included invitations from the honor society, visiting the computer lab, library and tutoring services. There were no significant elements of involvement in on-campus college activities for the rural secondary school students in the study.

Secondary and post-secondary professionals in the study emphasized on-campus student activities and services as a college experience that students would realize as a participant in the dual enrollment programs. On-campus resources also surfaced as the

most significant college-based learning opportunity. In addition, program advertisements listed on-campus services as a benefit of the secondary and post-secondary initiative. For example, brochures and websites stated that the program was an "opportunity to access college-level student support services including career counseling, mentoring, tutoring, libraries, computer labs and employment and transfer guidance."

These findings suggested that the programs in the study viewed the on-campus provisions as a significant element of the programs; yet, neither study participants, artifacts nor observations indicated that rural students participated in on-campus activities. Additionally, dual enrollment programs in the study did not coordinate or facilitate campus-based activities or services for the rural students as they did the application, testing, registration and enrollment processes. In addition, two of the three dual enrollment programs are hosted in the academic affairs division of the community college suggesting that the program's delivery may have focused on the goals of the academic affairs division. In addition, there were no provisions for the delivery of the on-campus activities in the state's plan. Couple these findings with the limited information that rural students receive about college and it may provide details about the students' lack of use of the on-campus services (Guiffrida, 2008).

Rural students may not have realized the availability of these services since they were not directed to avenues to participate as they were with the application and registration services. Perhaps, the students were aware of how to access the services. Thus, without the dual enrollment network producing access to on-campus services, rural students may not experience all the facets of a community college.

The research bearing on the finding suggests that the more academically and socially involved students are the more likely they are to realize post-secondary success (Astin, 1984; Stage, 1989). While the current findings are not exclusively supported by the research, it does illuminate the lack of social involvement of rural secondary school students participating in dual enrollment programs at community colleges.

A possible explanation includes the notion that academic and social involvements having different effects in different educational settings (Tinto, 1998). Dual enrollment programs in the study were offered at community colleges where there is generally no significant emphasis on campus services for traditional students (Tinto, 1998). Because of the amount of time that students spend on campus at two-year institutions, social integration may be limited. Students tend to spend more time in class; thus, academic integration is more important on two-year campuses than in residential settings (Tinto, 1998).

An alternative explanation includes academic integration. Given that dual enrollment programs are academic initiatives and rural students are noted for their academic success, the academic integration of dual enrollment programs may encourage the students to pursue higher education (Provasnik, et al., 2007). For example, in the study course instruction was a significant active learning resource. Perhaps, the classroom held significance over on-campus activities for rural students or maybe the classroom was used to connect the social and academic integrations of the rural secondary school students.

Another possible explanation is community support. Rural communities are often a central component of rural schools (Alliance for Excellent Education, 2010; Cooper, et.

al., 2009; Hardre', et al., 2009). In addition, high schools surfaced as a significant element of the secondary post-secondary partnerships. Thus, rural students may prefer to participate in their high school activities with their community peers. In this case, social integration may occur through the high schools in the dual enrollment network. For example, a Gamble Community College dual enrollment handbook listed the student services provided by the college and included the following statement, "While most of the students enrolled in Dual Enrollment classes will utilize similar services at the high school, these are available to them as GCC students should the need arise."

Therefore, the services coordinated through the network may adequately contribute to the social integration and post-secondary success of the rural high school students. Rural secondary school students may require different social support activities or structures while a participant in the first year college experience known as dual enrollment. This is especially noteworthy since involvement matters most during the first year of college (Tinto, 1998).

Given the current finding, additional research is warranted to understand the academic and social interaction of rural secondary school students who participate in dual enrollment programs. However, the finding emphasized the program's role in encouraging the rural secondary school students' college success; yet, additional research is necessary.

College Success Skills

Secondary schools and higher education institutions must work together to align their academic programs so that the skills the students gain in secondary schools easily lead to academic success in post-secondary environments (Tinto, 2002). In the study,

dual enrollment partnerships between secondary and post-secondary institutions, provided opportunities for rural secondary school students to become familiar with the demands of college as well as develop active learning, support and involvement skills necessary to be successful in college (Karp & Hughes, 2008). For example, The Kellogg Community College president included the following message in dual enrollment manual,

> The Dual Enrollment Program is designed to give high school students an opportunity to get personal experience at college-level work before graduating from high school. Your role as an administrator, counselor, or faculty member is most important in helping students attain college-level skills and also in developing the confidence that will result in their success whether they go directly to a four-year college or university or attend Kellogg Community College enrolling in transfer or occupational career courses.

A Welsh Community College counselor stated, "We partnered in the program with a long range goal of the development of some kind of skill [for the students.]" The programs allowed the students to build their college-going skills through activities that included increased writing, earning career credentials, observing new notations, completing registration processes and interacting with college faculty. A Kellogg Community College students explained, "[In the dual enrollment course, I am working on a car, getting ahead and learning more." These opportunities are significant for rural populations given that rural locales lack college level opportunities and information in their communities (Alliance for Excellent Education, 2010; Gibbs, 2000; Guiffrida, 2008).

Skills addressed with the active learning resources included personal management and coursework skills. Rural parents focused on the time management skills their

students realized as participants in the program. A Welsh Community College parent indicated, "Time management skills needed to be learned because she could have several tests on the same day in college." Students, high school professionals and college professionals focused on the increased writing and research, discussion and presentation skills realized by the students. Students and professionals also emphasized the students' need to access assignments that were posted online, which was a unique learning activity for the rural secondary school students who attended schools that lacked resources for advanced academic programs and services (Alliance for Excellent Education, 2010; Arnold, 2004).

Dual enrollment programs introduced students to the expectations of college level assignments that involved the students in the learning process and helped the students realize the academic skills necessary to complete the college course assignments. A Welsh Community College student shared, "With dual enrollment, I improved my study skills and got prepared for the rigor of college courses I would see." A Kellogg Community College dual enrollment student shared, "Dual enrollment made the move to college a lot smoother."

Exposure to the variety of active learning measures of a college level course assisted the students in becoming familiar with the requirements of college coursework. A Gamble Community College dual enrollment instructor explained,

> My students may be able to move on to an engineering program and make better engineers because they have the practical knowledge and are now able to combine it with theory.

When considering support resources and skills, students referenced registering or completing college forms, completing college placement examinations and selecting college courses. Students, high school professionals and college professionals focused on

learning how to access the appropriate offices or resources. Students specifically mentioned email, Blackboard and the library, while high school and college professionals focused on accessing the appropriate resources. For example, A Kellogg Community College high school counselor shared, "college professors can be very different from high school teachers and students must know the importance of seeking out assistance because college professors will not give it to you."

A Welsh Community College dual enrollment coordinator shared, "[Students say,] 'Yes, I am in this challenging class. I know how to go to this office or that office… I was a community college student…I can move forward." A Kellogg Community College dual enrollment student shared, "It [Dual enrollment] helps you learn what you will do when you get there."

Parents identified with receiving the appropriate college information presented by the high schools and the colleges. The parents' role in acquiring college information complemented findings of the study, which indicated that parents shared dual enrollment information in the rural communities. For example, a Welsh Community College parent explained, "I share it [information about dual enrollment programs] with my friends." The finding was significant because parents of rural communities are key contributors to the rural students' decision to attend college and rural schools and communities are a significant structure in the community (Alliance for Excellent Education, 2010; Cooper, et al., 2009; Yan, 2002). Therefore, providing the appropriate information to parents in rural communities, which often lack college resources, may help build awareness about college in rural communities and assist in increasing the college enrollment of rural students (Gibbs, 2000).

Dual enrollment programs provided information about college in rural communities, provided a process necessary to engage the college system and served as a guide to help students navigate the college environment and remain enrolled (Bailey, et al., 2002). The programs introduced the mechanisms necessary to engage the college-going process such as the application, registration, testing and enrollment processes. Thus, the programs supported the rural secondary school students' confidence and knowledge about how to access the necessary offices, professionals and information in college (Padilla & Perez, 2003).

Finally, involvement skills focused on interactions with faculty, staff and students. Students in the study emphasized opportunities to exchange information with the course instructors. High school and college professionals indicated that the program allowed the dual enrollment participants to interact with college faculty, college staff members and other college students.

An interesting finding in involvement resources and skills included on-campus services. Although study participants considered on-campus services as a significant college-based learning opportunity provided by the dual enrollment programs, findings in the study did not recognize involvement skills that resulted from participation in on-campus activities. College professionals indicated that the services were available to the students and the students received announcements about the events; but the students did not participate. In addition, students in the study did not reference on-campus activities during the description of their college experiences in the dual enrollment program. The finding is significant given current research that finds that students must be academically and socially integrated into college in order to realize post-secondary success (Astin,

1984; Stage, 1989). Thus, additional research is required regarding the on-campus activities finding.

Dual enrollment programs provided interactions with subject matter experts who possessed advanced knowledge and shared specific information about the subject with rural secondary school students. The finding was significant for rural students since rural secondary school students do not have access to college information or advanced coursework in their high schools (Alliance for Excellent Education, 2010; Arnold, 2004; Gibbs, 2000; Graham, 2009). The programs also provided interactions between the rural secondary school students and college staff members. Dual enrollment students interacted with former dual enrollment students. However, the programs did not provide interactions between dual enrollment students on the high school campus and traditional students on the college campus.

Summary of Findings

Although this study did not examine program outcome variables such as, college enrollment and persistence, the study's findings identified program elements that lead to post-secondary success such as, college enrollment and persistence.

Based on the initial conceptual model regarding the elements of dual enrollment programs that foster the post-secondary success of rural secondary school students, the study found that dual enrollment programs provided active learning, support and involvement resources that prepared rural secondary school students for the transition to a community college setting.

Programs of the study provided active learning resources through college instructors and instruction. The resources connected the students to the learning process

and introduced the students to skills that fostered academic success in college. The college syllabus surfaced a tool that supported the active learning process. Skills identified by the study participants included time management skills, increased writing and research, discussion and presentation skills along with accessing online assignments, which was identified as a unique learning opportunity for rural secondary school students and high school adjunct community college instructors.

Support resources noted in the study focused on college going standards, which stemmed from the state dual enrollment plan and included college-going policy and implementation principles. Policy included the statewide requirements created to administer the secondary and post-secondary joint venture. Implementation principles guided the delivery of the dual enrollment programs. Other support resources included financial assistance, network, college-based learning opportunities and adjunct faculty development. An interesting finding in support resources included the college enrollment support that high schools provided to rural dual enrollment students. The schools provided advising, financial assistance and application, registration and testing support. Students identified support skills that focused on the registration, testing and enrollment process as well as the use of specific support services such as email, Blackboard and the library. High school and college professionals focused on accessing the services. Parents focused on receiving the necessary information about college from the high school and college partners.

Finally, the involvement resources noted in the study focused on faculty staff and student involvement. Dual enrollment programs provided opportunities for rural students to interact with college faculty at the college and the high schools. College staff

members also assisted the rural students with the college-going process. In addition, the rural students interacted with former dual enrollment students. Students focused on their interactions with faculty members while high school and college professionals emphasized the interactions between faculty members, staff members and students. Although the study's findings did not support the rural secondary school students' interactions with traditional college students or dual enrollment students from other locales, the rural secondary school students did consult former dual enrollment participants about the dual enrollment program.

A noteworthy finding in the involvement resources includes on-campus activities. Though the on-campus resources emerged as a significant college-based learning opportunity, rural students did not participate in the on-campus events. The finding was significant since research found that students are successful when they experience academic and social supports in college; therefore, additional research is warranted for the finding.

Several challenges appeared in the dual enrollment programs of the study. Concern about the program's faculty training, faculty evaluation, the rural secondary school students' awareness of the college transcript and the course transfer process surfaced.

An inconsistent faculty training plan hinted at the effectiveness of the dual enrollment programs of the study. Faculty members received several resources in order to enhance their classroom presence. However, the use of the resources was optional and training to teach dual enrollment courses was not provided in the program. In addition, only adjunct faculty members were evaluated by students. Full-time dual enrollment

faculty members were not evaluated and no instructors were evaluated by peers or administrators.

Finally, several issues surfaced in the study regarding the course credits earned in the dual enrollment programs. Program professionals expressed concern regarding the college transcript. The professionals shared that rural students were not aware of the significance of the college transcript and its impact on their future career goals. In addition, study participants shared mixed results regarding the success of transferring dual enrollment college credits to other colleges.

Chapter 5

Discussion

The initial model proposed by the study was based on the engagement conceptual framework and considered active learning, support and involvement resources and skills as elements that foster student success. While the study's findings complemented the initial model, the case study data revealed that the initial model did not consider the structure of the programs and a more nuanced and comprehensive model was required. The initial model was redesigned to include these elements. The final model hypothesized that dual enrollment programs provide academic and support resources that foster student success. The model also hypothesized that the programs consist of cooperative partnerships and a structure that fosters a college identity building process for the rural secondary school students.

Although the study emphasized how the programs lead to post-secondary success such as, college enrollment and persistence, the study was not an examination of the programs' outcome variables. The study examined the program elements of dual enrollment programs that facilitate the college-going process of rural secondary school students. The findings of the study resulted in a conceptual model that displayed how dual enrollment programs influence the rural students' post-secondary motivations and commitments, which lead to post-secondary success such as, college enrollment and persistence.

The findings emphasized the importance of cooperative partnerships between secondary and post-secondary institutions, college identity building factors of dual enrollment programs and the college behaviors realized by dual enrollment participants. Figure 5.1 presents the final model.

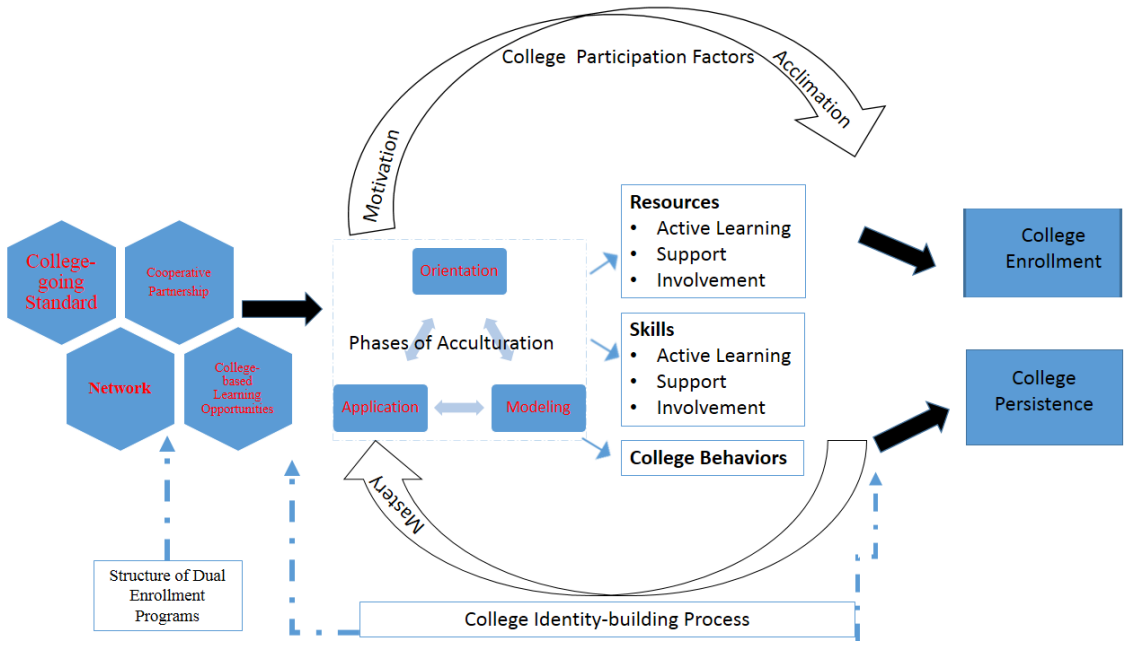


Figure 5.1

Model for Elements of Dual Enrollment Programs that Foster Student Success

Finally, the revised model suggested:

1. Dual enrollment programs are functions of cooperative secondary and post-secondary partnerships
2. Dual enrollment programs coordinate and facilitate authentic college experiences for rural secondary school students
3. Dual enrollment programs accommodate a college-going identity process for rural secondary school students

The following elements of the model are discussed in the subsequent section.

- Cooperative Dual Enrollment Partnerships
- College Identity Building: acculturation phases of orientation, modeling and involvement; college participation factors including motivation, acclimation and mastery
- College Behaviors

Cooperative Dual Enrollment Partnerships

Dual enrollment programs were implemented through institutional partnerships between secondary and tertiary educational agencies. These dual enrollment partnerships observed the dual enrollment state plan, which outlined the required arrangements necessary for secondary schools and community colleges to provide college level courses to secondary school students. By following the state plan, partnerships exhibited organizational properties in which the institutions agreed to meet the requirements of the state policy (Spekman, Kamauff, Jr. & Myhr, 1998). For example, the state plan stated its purpose as, "providing a wider range of course options for high school students in academic, career/occupational technical subject areas where appropriate."

However, partnerships of the study exhibited cooperative properties by elevating their partnerships beyond the formal agreement listed in the state plan. Cooperative properties included working as one organization to produce resources to assist the rural secondary school students in the college enrollment process (Eddy, 2010). For example, high school professionals referred to the role of the high school as an extension of the community college or "the high school acting as another college campus." The partnerships aligned each institutions' processes and contributed resources such as

personnel, space and technology. In the study, when cooperative properties were realized, the programmatic elements were expanded. These findings are consistent with current research that shared that program properties indicated the extent of the programmatic elements that are provided to foster student success (Terenzini, Cabrera, Deil-Amen & Lambert, 2005).

Given that the state plan in the study exemplified organizational properties, the subsequent section will discuss how the partnerships exhibited cooperative properties and expanded their programmatic features beyond those identified by the state plan. Cooperative properties of the programs were displayed in the liaison's role, collaboration and awareness.

While the state plan required that only the community colleges identify a dual enrollment coordinator, high schools also identified a liaison, usually a counselor or principal, to coordinate the programs' activities along with the dual enrollment coordinator. In these schools, the liaisons assisted with the application, testing and registration processes. The counselor also provided additional services such as course advising and arranging transportation when students enrolled in dual enrollment classes at the community college. For example, a Gamble Community College high school hired a high school dual enrollment coordinator who advised students and parents about the dual enrollment program and academic pathways provided at the community college. The coordinator also assisted students with the course selection process and utilized the community college resources such as the college catalog to help the students create a college enrollment plan.

The liaison role complemented findings, which reported, 84 percent of rural students consult a counselor, teacher or coach when planning to attend college (Chen, et al., 2010b; Center for Community College, 2012). In addition, when principals or assistant principals served as liaisons, students were provided enrollment assistance; yet, the principal hosted conversations with the community college regarding the development of additional pathways for the rural secondary school students. Principals advocated for programs that allowed their students to enroll in additional courses, earn associates degrees or industry certifications. The high school professionals consistently sought ways to expand their program offerings through the dual enrollment partnership with the college. This is significant since rural schools are characterized as lacking appropriate resources to host a variety of courses (Alliance for Excellence, 2010). For example, because the school has a restrictive design, a Kellogg Community College high school uses the college's facilities to offer courses such as, auto mechanics, welding and horticulture. Students also benefited by receiving information about courses, careers or trainings that might assist them in identifying educational goals. A Kellogg Community College student replied, "[The program] is helping me learn what I want to do as a career." This is significant since the lack of an educational goal is identified as a reason rural students do not pursue education beyond a high school diploma (Chenoweth & Galliher, 2004).

The state plan required collaboration between the community colleges and high schools. Yet, the partnerships with cooperative properties sought a relationship beyond the formal agreement. The partnerships emphasized close working relationships and constant communication, which are key attributes of successful partnerships (Leach &

Pelkey, 2001; Helfgot, 2001). The institutions constantly exchanged information and some of the members met once a year to participate in professional development and planning sessions. In addition, the members collaborated to outline course offerings and review updates and needs of current and scheduled courses. In the study, the educational institutions maintained their work and the partnership with the belief that the purposeful collaborations were "a must," "required," and "necessary." Thus, dual enrollment partnerships form close working relationships between secondary and post-secondary institutions.

The state plan assigned the information-sharing responsibility to the dual enrollment coordinator identified by the community college. The partnerships with cooperative properties delivered the college information to local service areas with the assistance of several members of the partnership. Former students, faculty members, parents, dual enrollment coordinators, principals and counselors delivered information about the dual enrollment program and college to parents, students and the community. The strategy is significant as it suggests an avenue to provide college information to underrepresented communities such as rural communities that do not have access to information about college (Chenoweth & Galliher, 2004; Gibbs, 2000; Guiffrida, 2008).

Partnerships with cooperative properties in the study collaborated to provide additional assistance or services to rural populations beyond the requirements of the state plan. The more the institutions of the partnership invested in the program, the more the programmatic features were expanded for the students to experience college and realize college success (Terenzini, et al., 2005).

College Identity Building

College identity building included strategies, resources and opportunities utilized to foster the rural secondary school students' membership in college. Dual enrollment programs fostered the students' college identity through phases of acculturation that provided exposure to, exploration of and application of college practices. The programs also fostered the students' college identity through college participation factors that encouraged the students to participate in college as members.

Acculturation. Research found that students who become integrated into college are more likely to realize post-secondary success than those who do not become engaged (Karp, Hughes & O'Gara, 2008). In addition, current studies find that informal and formal systems can be created at the institutional level to increase the inclusion of students and minimize barriers to student success (Nora, Crisp & Matthews, 2011). Dual enrollment programs acted to minimize barriers to college success for rural secondary school students through phases of acculturation, which included orientation, modeling and application. The program strategies introduced the rural secondary school students to college, simulated college for the students as well as allowed the application of college practices.

The programs informed the community about college through several outlets such as information sessions, presentations, former students, websites and printed documents. The information contained in the sessions included the college registration process, college, college forms, college costs and the expectations of college.

The programs also provided "samples" of college for the students including a course request process and college course advisement sessions. A Gamble Community College high school dual enrollment coordinator explained,

> When I meet with students, we will pull that catalog [college catalog] offline and we will look at what is out there for them to consider going into… at the community college as well as at some universities. And we'll pull that and I will show them what they have already taken, how it fits into the program they're gonna go to or what they need to do to finish at the community college. …When they come to me, the majority of the time I'm focused on the catalog numbers. I'm not looking at high school numbers. The lingo I'm gonna talk to them is catalog numbers not high school course names.

The acculturation process also included opportunities for the rural students to practice or apply college-like activities. Such activities included receiving a college identification number, completing a college placement examination and signing a class roster to be officially registered as a community college student.

These strategies and practices are significant because underrepresented college students do not usually seek help and are less confident in their abilities (Jenkins, Miyazaki & Janosik, 2009). Moreover, these phases included the rural culture. Rural students and rural communities need opportunities to be engaged in the college-going process and dual enrollment activities promoted and encouraged the student's college integration by including the rural communities (Jenkins, et al., 2009; Tinto, 1998).

While in the dual enrollment programs, students were connected to their local high schools, rural parents promoted the program in the community and rural secondary school educators instructed college courses for the rural students in the rural high schools. The state plan allowed high school teachers to teach dual enrollment courses and the community college assisted the high school faculty members in securing the necessary

certification. With the certification, the high school faculty members were eligible to teach a college course at the high school and the community college. The educators also used the certification to assist with the state required recertification process for public school educators.

The process of creating and certifying high school dual enrollment adjunct faculty is a significant staff development strategy since administrators of rural schools have difficulties hiring and retaining effective educators and students lack information about college and the college environment (Alliance of Excellent Education, 2010). The strategy also supported findings that community is a significant focus in rural areas and the programs position the classroom instructors to provide information about the local community college to rural populations (Hardre', al., 2009).

The rural community also participated in the implementation of the dual enrollment program. For example, during an observation at Welsh Community College learning center, local industry leaders joined the class and served as evaluators of the students' automobile designs. The community leaders also participated in the students' team presentations that were hosted as multimedia presentations during a business board meeting.

In addition, former dual enrollment students of the community advised high school students about the dual enrollment program and their college experiences. Therefore, dual enrollment programs involved the rural communities. The practice is significant for rural communities that are considered major partners of rural school systems (Hardre', et al., 2009). However, the finding contradicts current research that

indicates that student backgrounds are excluded when students are integrated into a new culture (Kraemer, 1997).

College participation factor. In the study, college participation factors included strategies, resources and opportunities that encouraged rural secondary school students to participate in college as a member. Research found that under-represented students note a feeling of inclusion when they are considered a significant participant of an organization and are able to identify with environments that foster the student's inclusion (Smith & Blacknall, 2010). Dual enrollment programs facilitated an environment of inclusion for the rural secondary school students by urging advancement, making college familiar and providing avenues for college-level performance.

Dual enrollment programs encouraged students to take advantage of the opportunity to become a member of a community college. The encouragement was related to a need in the rural community. For example, cost benefits of attending college early addressed the low-income status that residents of rural communities possess (Yan, 2002). It also complemented findings that suggested rural students do not enroll in college because of the cost (Chenoweth & Galliher, 2004). The strategy is significant as it showed how becoming a member of the local community college addressed rural conditions that prevented the college enrollment of rural secondary school students.

Thus, the encouragement to enroll in college early through the dual enrollment program was a significant program element for rural secondary school students.

Dual enrollment programs also informed the community about the opportunities that would be available as a recipient of college credentials. Opportunities included earning a degree, transferring credits or becoming employed.

This is significant as it allows plans for rural students who are identified with low education goals (Chenoweth & Galliher, 2004). A Kellogg Community College dual enrollment student shared, "Nothing at [high] school is helping me with my career choice. Classes at high school are nothing like those at the community college." In addition, a Welsh Community College High School program experienced "social modeling" where older high school students exhibited behaviors that younger students noticed and considered repeating (McLeod, 2011). For example, at the high school, several younger high school students became increasingly interested in dual enrollment programs after realizing a graduation ceremony where rural upperclassmen received their associate's degrees along with their high school diplomas and were allowed to wear the college's ceremonial attire.

The finding suggested that dual enrollment programs provided several avenues for students to utilize their college credentials. The finding also suggested that the rural secondary school participants were introduced to the benefits of enrolling in college courses provided by the dual enrollment programs.

However, the transfer process used by the rural students had no well-defined statewide guarantees regarding transferring dual enrollment credits to local colleges. Some students realized success in transferring the credits while others students were only allowed to transfer a few of their dual enrollment credits. In addition, the state plan did not include a policy for the transfer process. Therefore, the benefit of transferring dual enrollment credits needs to be addressed in order to assist rural secondary school students with college-going success since rural populations generally lack information about the college-going process (Guiffrida, 2008).

Students were also urged to participate in the programs' diverse career courses and training programs such as nursing, automotive, business, information technology, justice, as well as core subjects such as English, biology, history and chemistry. A Welsh Community College Campus high school administrator notes,

> There are other programs that people might not think of that are not the traditional academic courses; but we're very proud of our EMS program, which is dual enrollment. And we're gonna start next year, Fire Science. And those are areas too where I think will be an encouragement to some students that might not think 'I want to go to college.'… So, I can see, if those students take that, then they say, 'Well, you know I did do a college course.' If they offer these kinds of things at the community college that will be a hook to get them to go on to higher education.

These opportunities are significant as the needs of rural secondary school students should be addressed and the students often live in communities that lack resources for advanced programs in the high schools (Alliance for Excellent Education, 2010; Arnold, 2004; Graham, 2009; Jenkins, et al., 2009). In addition, these opportunities may assist rural students, who do not prepare educational goals or those who do not readily consider college enrollment as an option after high school, in creating post-secondary plans (Chenoweth & Galliher, 2004).

Rural communities lack college graduates (Provasnik, et al., 2007) as noted by a Welsh Community College school principal, "We don't have a large population in the county of college graduates… Probably, the people who work in the school system… that's the largest population of college educated parents" (Alliance for Excellent Education, 2010). Therefore, rural students lack college role models and information pertaining to college. However, dual enrollment programs provided strategies, opportunities and resources to make the college-going process familiar in rural areas and to foster the college identity of rural secondary school students. The Kellogg Community

College dual enrollment coordinator explains, “Once [high school] students have taken the course, they should be introduced to the requirements of college.”

In addition, students in the study shared that they often had a limited view of college. For example, Kellogg Community College students shared, “[Before taking the dual enrollment courses], thought the courses would be hard because our parents and teachers told us how hard college was.” However, the students shared that once they had completed their first dual enrollment course, they realized that their parents and teachers “had over-prepared them for college.” A Welsh Community College dual enrollment program assistant shared, “My son …did not take dual enrollment. When he went away to college, …it was a rude awakening. …He hadn’t a clue that college was gonna be different.” The finding is consistent with research indicating that rural students have access to limited information about college (Guiffrida, 2008).

Moreover, the program acquainted the students with the academic challenge of the community college. The characteristic of the college level courses surfaced as an element that provided the rural secondary school students with a firsthand experience of a community college. College courses were described as “advanced,” “more,” “different,” and “specific and detailed” when compared to high school courses. Students indicated that that they worked harder and all study participants found the work “challenging”, “demanding” and “rigorous” even causing students to “think more”. The finding is significant since advanced coursework prepares students for college and rural students who attended college participated in advanced coursework more than rural students who did not go to college (Alliance for Excellent Education, 2010; Arnold, 2004; Graham, 2009).

Dual enrollment programs also consisted of partnerships that facilitated the application, testing and registration processes for the rural students. Programs also provided college courses and offered the dual enrollment courses at high schools, community colleges and local education centers. The findings of the study focused on the academic elements of the programs, particularly the instructor and the course.

Thus, the findings did not identify social integration as a significant element of the dual enrollment programs. The finding contradicts current research that states students must have social and academic structures in college in order to realize post-secondary success (Smith & Blacknall, 2010). The finding also complements findings of the study that indicate that on-campus activities are not a significant element of the dual enrollment programs provided to rural secondary school students. Students did not participate in the activities even though they were provided access and information as traditional college students. For example, a Welsh Community College handbook read,

> Welcome to the Welsh Community College Library – You have access to the online library resources just like other WCC students... When you visit either campuses, you are eligible for a Welsh library card... You will be allowed to check out any item in the library just like full-time students on campus. You are important part of the WCC community and we encourage you to use all of the library resources both online and on the WCC campuses.

In addition, neither the dual enrollment programs nor the dual enrollment state plan addressed on-campus activities. These findings emphasize a need for additional research regarding the college-going experience of rural secondary school students enrolled in a dual enrollment program at a community college especially given that the programs in the study realized post-secondary success, such as post-secondary persistence and graduation for its rural students.

College-based transition programs are considered college-accelerated programs that provide rigorous curriculum and exposure to the expectations of college (Karp & Hughes, 2008). Moreover, dual enrollment programs in the study verified the rigor and college level requirements of its courses by utilizing the host institution's hiring practices, textbooks, syllabi, courses as well as conduct classroom visits. A Gamble Community College dual enrollment coordinator advised, "The dual enrollment course is a direct match, exact course as on campus." A Welsh Community College dual enrollment assistant explains, "The dual enrollment coordinator goes out and observes teachers, their course outlines to make certain its college level." Adjunct faculty members may also establish partnerships with full-time college faculty that include sharing exams, course outlines, classroom visits, as well as mentoring relationships or co-teaching measures. Community colleges hire dual enrollment instructors as they do traditional faculty members and require the use of the same course materials including the textbook in all dual enrollment courses and community college adjunct instructors teach the equivalent courses on the college campus. However, the quality of the dual enrollment course is questioned. For example, a Gamble Community College adjunct high school instructor shares that an Advanced Placement hybrid dual enrollment course at the high school would build the credibility of the dual enrollment program by providing emphasis on course content as well as mastery.

The dual enrollment programs did not include consistent practices that demonstrated a measure of the courses' rigor. No shared objectives existed that identified how the programs ensured a college level experience in dual enrollment courses or maintained control of the delivery of the curriculum. For example, a Welsh

Community College dual enrollment brochure states, "Admissions requirements reflect current admissions standards at the college" and "All courses are taught by full or part-time faculty who meet SACS accreditation requirements." Yet, how did the secondary post-secondary partnership verify that high school adjunct dual enrollment instructors used the college's syllabus rather than a separate high school syllabus including study guides (normally used in high schools) to instruct the dual enrollment course at the high school? Simply, stating that the instructors were qualified based on standards does not verify that the coursework is a direct match to college level instruction. Although, the dual enrollment course surfaced as a significant element of dual enrollment programs that introduced rural students to the expectations of college, the quality of the course could jeopardize the students' success in college. Thus, dual enrollment programs should verify the academic equivalency of its courses and note shared objectives that indicate how the delivery of the curriculum will be controlled due to program's diverse delivery structure (Hoffman, 2005; Krueger, 2006;). Additional research is required based on the finding.

Finally, dual enrollment programs allowed rural secondary school students to experience college level performance. Dual enrollment programs served as a platform for students to recognize their success in completing an authentic college activity as a member of college. The programs provided an opportunity for the students to "master" or successfully complete an authentic college activity. The opportunity surfaced as indicators of mastery. Based on the study's data, indicators of mastery revealed to what extent students had accomplished some aspect of college as a member of college.

Table 5.1 represents the college-going activity that emerged in the study and the indicator of mastery that correlated to the activity.

Table 5.1

College-going Activity and Indicator of Mastery

College Going Activity	Indicator of Mastery in College
College Application Process	College student identification number, Permanent college record
College Placement Testing Process	Satisfactory placement score
College Course Registration Process	Registered college course; Signed college class roster; Paid tuition
College Course Enrollment Process	College syllabus; Grade on course assignments, College course grade, college credit, college transcript

Therefore, rural secondary school students in dual enrollment programs are afforded an opportunity to participate in a variety of college activities and realize success in completing the activities. This is significant for rural populations who perceive that they are not competent enough or prepared to enroll in college (Chenoweth & Galliher, 2004)

College Behaviors. Dual enrollment participants must manage two different entities – high school and college. Most often, the college culture is foreign to rural students and it requires certain behavior adjustments (Gibbs, 2000). Dual enrollment students of the study realized new behaviors and the programs afforded the students an opportunity to exercise the new behaviors.

Autonomy, an increase in the sense of person, showed significance for the rural secondary school students. The program allowed the students a level of freedom not found in their high school classes. A Kellogg Community College dual enrollment

student shared, "You are in charge of getting through it on time." Key phrases provided by the students of the study included, "Fits your schedule," "Freedom," "Dual enrollment is different – no pressure; comfortable. I can focus more at the community college." Classroom observation forms used by the program also referenced the students' autonomy in the course as it evaluates if the students are "treated as adults." A Kellogg Community College dual enrollment instructor explained the freedom as, "the casualness of the class inspires the students – the college atmosphere… When labs are finished, they leave."

Study participants noted that students exercised more independence while enrolled in the dual enrollment program. Specifically, students mentioned, "We were treated differently." When asked, "How,?" Students replied, "Coming in late and not being penalized…" "We were not treated like babies…" "We were treated as adults." High school administrators expressed the new found autonomy as, "We leave stuff to students such as two and five page papers, lab exercises… A higher level of thinking is required of the student to complete these assignments." A Kellogg Community College high school counselor further emphasized the difference,

> The college operates under different rules of communication in regards to FERPA and sharing educational information with parents or even with us to a great extent. …Professors will not talk to parents and don't usually talk to us [high school]… It's college and these are college faculty members who are used to the adult students.

The finding was consistent with dual enrollment studies that revealed that program participants realize an increased sense of self as a participant in dual enrollment programs (Burns & Lewis, 2000).

In addition, the stress characteristic surfaced most often with students than with any other study participants. Students indicated that they realized less stress in dual

enrollment programs. Student comments included, "less stress - no tests all the time; just a midterm and final; no deadline - laid back, more time" A Gamble Community College adjunct high school instructor shared,

> We slowed down. The students I had in a high school class and then I had them in the dual enrollment class … were like, 'Man, we got time! What do you mean it's fifteen minutes left?' I realized, I'm not talking to the bell. Y'all [students] don't look stressed…." "So I had a very unique experience with it because it's [dual enrollment course] less stressful and less intensive than my high school course.

"Responsibility" also surfaced as a new behavior as a member of the community college. Students were admonished to take the initiative and "own their education." Examples of the encouragement noted in the study included, "manage their own class assignments," "college will not use the "pulling tooth and nail," strategies used in high school and that there would be "no baby-sitting…ownership encourages active learning." For example, a Kellogg Community College instructor shared on his syllabus, "The instructor will provide all students with a mid-term progress report prior to the official withdrawal date so that the student can make an informed decision about a plan of action for the remaining semester." A Welsh Community College student shared, "I have to study not just wait for information. I have to do my part." A Kellogg Community College dual enrollment student shares, "if you never get to take a dual enrollment course, your expectation of college is so high, you don't know what to do with the freedom, your responsibility."

The professionals of both institutions allowed the students to complete some college requirements on their own. Such activities included registering for their own placement testing session, signing a college course roster as well as managing deadlines and absences. Students in the study indicated that they enjoyed the "new found freedom"

and responsibility. A Kellogg Community College student shared, ""I would recommend," "I enjoyed it so far and don't want to wait one more year before enrolling in college!"

These new behaviors reflected the students' engagement and involvement in the college environment (Padilla & Perez, 2003). Therefore, the study suggested that dual enrollment programs helped students gain and utilize the behaviors necessary for a community college. It also suggested that the programs helped the students to recognize the college activities they can participate in successfully. Through these activities and opportunities, the dual enrollment programs encouraged a sense of inclusion and helped to build the students' new college identification. The programs transformed the secondary school students into "community college students."

Relevance To Research

Dual enrollment programs, which consisted of partnerships between secondary schools and higher education institutions, provided secondary school students a first year community college experience while the students were still enrolled in high school. Quantitative findings suggested that dual enrollment programs may or may not influence the post-secondary success of its participants (Bailey, et al., 2002; Bragg & Kim, n.d.). In addition, underrepresented student populations such as rural students were often excluded from the scholarly findings. Finally, limited qualitative research explored how educational institutions might facilitate students' post-secondary success.

Therefore, the study explored how the features of dual enrollment programs contributed to the academic impact or lack thereof realized in quantitative studies. The study added to the body of knowledge regarding post-secondary motivations and

commitments, rural populations and dual enrollment programs by socially and experientially exploring the internal structures and programmatic features of dual enrollment programs offered to rural secondary school students. As such, the study expanded the discussion regarding the students' participation in dual enrollment programs or unmeasured characteristics influencing the students' post-secondary success (Karp, et at., 2007).

The programs' college-going resources, community influences and academic programs were consistent with research findings.

College-going Resources

Dual enrollment programs introduced college, provided information about participating in college and assisted rural secondary school students with college enrollment.

The programs utilized faculty members, former students as well as high school counselors and administrators to share college information, expectations and requirements of the local community college. For example, Faculty members from Kellogg Community College visited the high schools to meet with students and parents to share the instructors' expectations for the dual enrollment courses.

The finding was significant given that rural communities lacked the characteristics that fostered college enrollment and the characteristics typically presented difficulties for rural parents when the parents discussed college information with their children (Yan, 2002).

In addition, college advisement sessions hosted by counselors at the high schools were offered to help students understand the college-going process. The practice was

noteworthy since 84 percent of students who planned to go to college visited a counselor, teacher or coach and advisement sessions are considered a benchmark of persistence (Chen, et al., 2010b; College Board, 2009; Center for Community College, 2012). The finding was also significant because rural students do not consider college enrollment as an educational option (Chenoweth & Galliher, 2004; Yan, 2002).

Dual enrollment programs shared the benefits of college with the students and parents. Benefits emphasized included an "early start", "low or no costs" as well as college credits and a variety of college courses. The system's office website read, For parents, it is a chance to reduce future college expenses…"

A variety of courses included core subjects and career and technology subjects such as nursing, automotive, business, information technology, justice, as well as core subjects such as English, biology, history and chemistry. The courses allowed the rural secondary school students to earn college credits, transfer courses or earn credentials that helped the students align their interests to a career option. For example, Gamble Community College awarded 313 industry certification to 400 of its dual enrollment students in the 2011 school year. The feature was consistent with findings that rural students have higher educational aspirations if they perceive that a connection between career goals and coursework exists (Lapan, at al., 2003; Quaglia & Perry, 1995). The feature was also consistent with research also found that dual enrollment programs have a positive relationship to the college preparation, enrollment plans and academic performance of its participants (Andrews, 2001; Bailey, et al., 2002; Boswell, 2001; Bragg & Kim, n.d.; Karp, et al., 2007; Peterson, et al., 2001).

Dual enrollment programs provided opportunities for rural secondary school students to align their career interests with career options. Therefore, the dual enrollment programs provided information and resources about college that introduced rural students to a community college and the benefits of attending the college.

In addition, financial assistance provided through the dual enrollment programs was considered a key element of the programs. Dual enrollment programs provided tuition assistance for the rural students and their parents. Due to funding structures of the dual enrollment program partners, the programs had a variety of tuition assistance methods. A Welsh Community College high school's dual enrollment agreement read,

> The school division encourages students to enroll in college level dual enrollment courses sponsored by the school division. The school division pays the full cost of the tuition for successful completion of these courses…Students dropping a class after the add/drop date will receive an "F" in the class and must reimburse the school division the full cost of the tuition for the class. Likewise, students with a final grade of a "D" or lower for a dual enrollment class paid for by the school division will be required to reimburse the School Board for the full amount of the tuition.

Tuition for the programs' courses were often offered "free of charge" or at a discounted rate. For example, Kellogg Community College provided program scholarships for the "free and reduced lunch" students. Therefore, students enrolled in the dual enrollment program and earned up to half of their college career courses with little or no cost. The tuition assistance provided by dual enrollment programs was significant for rural families because they were characterized as low income and lacked information about college finances (Gibbs, 2000). The finding complemented research that found that rural students identified financial obligations as a barrier to college enrollment (Chenoweth & Galliher, 2004). Therefore, dual enrollment programs

promoted college awareness and provided financial resources that assisted rural secondary school students in the college-going process.

Although information resources were a key element of the dual enrollment programs, the programs' role in integrating students into the social experience of college was not found in the study. The finding was not consistent with research that suggested that students must be socially and academically integrated into college to realize post-secondary success (Astin, 1984; Stage, 1989). Students did not participate in on-campus activities and the students used a limited number of on-campus services such as the library and computer labs. In addition, the program partners did not coordinate and facilitate the students' social integration process similar to the coordination of the academic integration processes such as the application and registration processes.

The findings emphasized the programs' focus on academically integrating the rural secondary school students into a community college. However, the finding also suggested the role that dual enrollment programs may have in coordinating and facilitating the college experience of rural secondary school students. For example, if the programs outlined a process to coordinate the rural students' participation in on-campus services, perhaps the students would have participated. In addition, the programs were hosted by community colleges, where on-campus activities are not emphasized at the same level as they are emphasized on four-year college campuses. Perhaps, the students participated in the services just as the traditional community college students did. However, additional research is required based on these findings.

Institutional and Community Influence

Dual enrollment programs involved significant community members that facilitated the college-going process for rural secondary school students. In addition to high school counselors who provided college information and assistance to rural students and parents, the programs involved parents, college instructors and students in the college-going process. The finding complemented research that indicated rural schools have strong community and school connections (Hardre', et al., 2009).

Parents were an active member of the dual enrollment programs. Orientation and awareness session were provided for parents. Parents were included in the college enrollment process by approving their students' participation in the programs. In addition, programs hosted information for parents on the program's web pages. The Welsh Community College website read,

Role of Students and Parents:

- Complete college application, including parent portion with signatures, and schedule to take the placement test at your high school
- Select course(s) with high school guidance counselor
- Sign the registration form for each class and rent/purchase necessary textbooks if not provided by the high school
- Visit the local community college to see what campus support services or activities are available
- Participate in class; do assignments on time

An interesting finding about parents in the study included program promotion. Parents were instrumental in supporting or providing information about dual enrollment programs by "word of mouth" in the community.

The finding is significant since research indicated that rural students who enrolled in college indicated that their parents expected them to attend college and discussions

with their parents about college was a significant contributor to college enrollment and persistence (Yan, 2002). Therefore, it is imperative that rural parents are included in the college-going process and that parents are provided the appropriate information to share with their students (Yan, 2002). The study suggested that dual enrollment programs fostered the college-going motivations and commitments of rural secondary school students by involving parents in the college-going process.

Dual enrollment programs also provided opportunities for students to interact with college instructors. Dual enrollment faculty members participated in orientation sessions to inform the rural secondary school students about the academic expectations of the instructors' courses. In addition, high school teachers had their credentials evaluated in order to teach dual enrollment courses at the high school. In the role, the instructors gained additional college information that may be shared in the dual enrollment classrooms at the high schools. The finding suggested that rural educators who taught dual enrollment courses could provide information about college and college requirements in the classrooms (Hardre', et al., 2009). Educators received information from local community colleges; however, a process for the instructors to share the information with the students in the classrooms was not found in the study. The finding suggested that dual enrollment programs have the potential to provide college information in the classrooms with the assistance of classroom instructors. The finding is significant since rural educators are considered as key personnel that could inspire students to establish advanced academic goals (Hardre', et al., 2009).

Rural students also participated in dual enrollment programs with their high school peers. For example, students often completed the college application or placement

test in groups or the students enrolled in the same college courses at the high school or the community college. Students had an opportunity to interact with former dual enrollment participants to learn about the program, which is a benchmark for persistence (College Board, 2009). For example, high school students who were considering enrolling in the dual enrollment program consulted older dual enrollment students about the initiative to help in their decision.

In addition, former students returned as guest speakers and shared information about their college experience including transferring college credits The finding was significant since research indicated that the college plans of rural peers was an indicator of college (Chenoweth & Galliher, 2004). Thus, these finding suggested that dual enrollment programs provided interactions between rural students and significant community members who influenced the students' college-going motivations and commitments (Chenoweth & Galliher, 2004; Schonert, et al., 1989; Yan, 2002). The programs of the study provided dual enrollment courses to students of different locations and high schools including the community college campus. However, the programs did not provide interaction between dual enrollment students and traditional community college students to provide additional avenues to integrate the students into the social structure of college (Kuh, et al, 2010).

Authentic Academic College Activities

Dual enrollment programs coordinated and facilitated authentic academic college-going activities for rural secondary school students and enhanced the students' college-going skills. The programs coordinated and facilitated the college-going application, testing, registration and course enrollment processes for the rural secondary school

students. For example, students completed the community colleges' applications to enroll in the dual enrollment program and enrolled in the college courses through the college's enrollment system.

In addition, students completed the community college's placement examination that determined the students' readiness for college level work. The placement test allowed the students to learn about their ability to benefit in a college level course. With the appropriate scores, students were allowed to register for their intended college courses. If the students did not receive the appropriate scores for the courses, the students participated in remediation interventions before retesting. The process suggested that dual enrollment programs assisted rural secondary school students with college readiness. The feature was significant since research indicated that rural students perceived that they were not prepared for the rigors of college level work (Chenoweth & Galliher, 2004).

Thus, the finding suggested that dual enrollment programs allowed rural secondary school students to learn about the requirements necessary to enroll in college level work. The practice also suggested that dual enrollment programs fostered the college-going motivations and commitments of rural secondary school students by requiring a college placement examination since research indicated that students who took a standardized academic achievement test were more likely to attend college (Yan, 2004). Therefore, the college placement test utilized in the dual enrollment programs assisted rural secondary school students in the college-going process.

Moreover, findings in the study suggested that dual enrollment programs provided qualified subject matter experts to facilitate active learning opportunities in the

classrooms. In addition, the instructors along with the active learning opportunities helped the rural secondary school students acquire the knowledge and skills necessary to complete the coursework. The instructors were considered key members of the dual enrollment program as students identified interacting with the faculty and being taught by the faculty members as significant features of the program. For example, students considered the faculty members as subject-matter experts who taught the course and used assignments that connected the students to the "real world."

The finding was consistent with research that suggested interactions with college faculty influences student success (He'bert, 2001; Peterson, et al., 2001). The finding also suggested that dual enrollment programs provided interactions with community college instructors who provided college level active learning experiences for rural secondary school students. Therefore, dual enrollment program instructors are key factors that influence the motivations and commitment of rural secondary school students

Another key feature of the dual enrollment program included the advanced college coursework. Dual enrollment courses were reported as "demanding", "challenging" and "detailed." Students participated in classroom discussions, received real world class assignments including written reports, received instruction using advanced classroom media.

The courses fostered the creation of academic skills necessary for the rural secondary school students to prepare for college level work. Skill gains reported in the study included "increased reading, writing and math skills." These skills were identified as "above high school skills" and indicated that dual enrollment programs increased the academic skills of rural secondary school students; thus, preparing the students for

college-level coursework. The finding was consistent with research that indicated students who participated in rigorous high school curriculum possessed a greater change of college success (Adelman, 1999; Andrews, 2001; Chenoweth & Galliher, 2004; Horn & Kojaku, 2001; Yan, 2002). The finding was also significant since rural schools are typically noted for offering fewer advanced/college preparatory courses (Alliance for Excellent Education, 2010). Thus, the finding suggested that dual enrollment programs provided the advanced coursework that prepared rural secondary school students for college-level work. Moreover, based on the findings of the study, the instructor and the course were key elements of dual enrollment programs that could be used to provide college information to rural secondary school students.

Dual Enrollment Goals

With historical significance dating back to the 1950s, dual enrollment programs were understood as education-accelerated programs, which provided high school students access to college level coursework. Even though, a common state plan guided the work of the initiative, the dual enrollment programs in the study aligned with current research that finds an array of eligibility, funding and organizational standards, as well as on-going concerns about funding, courses offered at high schools and taught by adjunct community college faculty and transfer guidelines. However, the goals of the initiative remain consistent and include a combination of attributes (Andrews, 2001; Boswell, 2001). Findings of the study supported the goals of dual enrollment programs and are noted in Table 5.2.

Table 5.2

Goals of Dual Enrollment Programs and Findings of Current Study

Goals of Dual Enrollment Programs	Findings of Current Study
Provide challenging educational opportunities for high school students	The state plan requires a variety of college level courses in the program.
Improve the college preparation of all students	The program introduces the students to the application, testing, registration and course enrollment processes of college.
Increase the number of citizens who participate in some form of post-secondary education in order to ensure a trained, competitive workforce	The program enrolls rural secondary school students in the host college and the students are considered community college students.
Accelerate the educational progress of students through post-secondary education, saving both students and taxpayers significant dollars	Students participate in the program in their junior and senior year of high school and realize a college tuition cost savings while enrolled in the program.
Foster collaboration between high schools and colleges such that	Cooperative partnerships between secondary and post-secondary institutions are created.
• secondary and post-secondary counselors provide the necessary dual credit information to students and parents	Dual enrollment coordinators and high school professionals coordinate and facilitate a variety of orientation sessions for students and parents.
• students and parents are well-informed about the program • an agreement formulates between secondary and post-secondary institutions • non-faculty members who meet the hiring requirements of the post-secondary institution instruct the courses	Students and parents are active participants of the program and receive written, virtual and verbal information about the program. Parents also advertise the program to the local rural community.
	The dual enrollment program is based on a state plan. The secondary and post-secondary institutions also formulate an agreement regarding the services provided by each in the program.
	High school teachers become adjunct community college faculty members and teach the dual enrollment courses at their high school.

Based on the findings, dual enrollment programs provided active learning, support and involvement resources that integrated rural secondary school students into the community college culture. In addition, these resources contributed to the skill building process that helped the students prepare for a community college. However, the instructor and the course surfaced as the most significant elements recognized in the program to help the students learn about the expectations of college. The instructors provided an authentic classroom experience and the courses required the students to complete coursework that was "advanced" or "above high school." Thus, the study suggested that the instructor and the college course may be vital elements to foster the rural secondary school students' college-going motivations and commitments.

In addition, the network, a partnership resource of the secondary and post-secondary partnerships integrated the students and parents into college by coordinating and facilitating the students' college enrollment process. The network introduced the students to authentic college enrollment activities and included college and high school support. However, the provision of on-campus activities was not a significant element of the study. Though high school and college professionals identified on-campus activities as a key element that could introduce students to college, students did not mention the activities and the dual enrollment partners did not coordinate the students' participation in the activities as the partners coordinated the students' enrollment activities. In addition, the instructor and the course were often identified as the elements that provided information or awareness about the expectations of college. Therefore, the social integration may not be significant for these programs since dual enrollment programs are academic initiatives. Perhaps, the social integration occurs in the classroom with the

instructor or at the rural students' high schools. The finding is significant and compels additional studies as current research posits that college students are most successful when they realize academic and social integration in college (Astin, 1984; Stage, 1989).

An interesting finding about the network included the climate that was observed in executing the work of the programs. The high school and community college professionals viewed the program as a rare opportunity for the rural students and often called the program a "confidence builder" suggesting that the attitudes and behaviors of the program administrators may foster the college-going expectations of rural secondary school students. However, additional research is required regarding the topic.

Finally, dual enrollment programs fostered the college identity of the rural secondary school students by encouraging the students' participation as a member of a community college. The programs motivated, acclimated and provided the students an arena to engage in activities germane to a community college environment. Through these processes, the students realized college-like behaviors.

Therefore, dual enrollment programs included cooperative partnerships that determined the extent of the opportunities, resources and strategies used to coordinate and facilitate the rural secondary school students' college enrollment. The opportunities, resources and strategies, some of which were authentic college experiences, yielded resources for active learning, support and involvement in college. In addition, the opportunities, resources and strategies assisted the rural secondary school students in learning about and building the rudimentary skills necessary for college enrollment.

Finally, the programs fostered the creation of the rural students' college identity by integrating the students into the college-going process and encouraging the students'

inclusion as members of a community college. As such, students responded by exhibiting behaviors that identified with the new college environment signifying the students' expanded identify as a member of the community college. Thus, dual enrollment programs shifted the college identify of the rural secondary school students.

Theoretical Basis

Dual enrollment programs were partnerships between secondary and post-secondary institutions that coordinated the college enrollment of secondary school students. Through in-depth inquires hosted within the dual enrollment communities, the study provided an informed understanding of the functions of dual enrollment programs and how the programs influenced the post-secondary success of the rural students.

In addition to the interpretive approach, the theoretical premise for the study included a hypothesized model based on Engagement theory. The framework was used to understand how dual enrollment programs contributed resources to foster the post-secondary success of rural secondary school students. Because the findings of the study required a more comprehensive model, Social identity theory was used as a theoretical premise to contextualize how dual enrollment programs influenced the post-secondary motivations and commitments of rural secondary school students.

Engagement Theory

Student engagement theory is influenced by quality of effort measures, involvement theory and the indicators of "good practice" in undergraduate education (Wolf-Wendel, et al., 2009). The concept consists of two components (Kuh, et al., 2010). The first component reflects the time and effort that students contribute to their college experience (Kuh, et al., 2010). The second component of student engagement theory

considers the resources and opportunities that institutions contribute to encourage student participation in activities that lead to student success (Kuh et al., 2010; Wolf-Wendel, et al., 2009). Thus, the latter component of the theory is used to examine the elements of dual enrollment programs.

The findings of the study aligned with student engagement theory in particular, the clusters of effective educational practice recognized by the National Survey of Student Engagement (NSSE) (Kuh, et al, 2010). The clusters, which are linked to student success, include supportive environments, academic challenge, active learning, student interaction with faculty members and enriching educational experiences (Kuh, et al., 2010). The programs' supportive environments, academic learning strategies, interaction with faculty and enriching education experiences are presented.

Dual enrollment programs cultivated supportive environments through positive working relationships and support resources (Kuh, et al., 2010). Programs of the study functioned based on a state plan, which articulated the college-going arrangement between the state's high schools and community colleges. The rural student's access to community colleges through the state plan was an opportunity not usually realized in rural communities (Alliance for Excellent Education, 2010). A Welsh Community College high school administrator shares,

> They [rural students] are capable as large suburban schools… same capabilities. The students [rural students] deserve the equal chance because the state refuses to fund the programs adequately; these students should have the opportunity… the students should have that right despite the stereotypes. Give them access! Rural kids deserve more – a way, exposure.

Through the programs, rural secondary school students received an opportunity to enroll in college courses before they graduated from high school and potentially

completed the course requirements for the first two years of college. Moreover, the state plan outlined a process for secondary school students to participate in the college program. Students accessed the college courses during high school hours and may enroll in dual enrollment courses at the high school, community college, or education sites in the service area.

In addition, the plan required, "…the community college and public school division will collaborate to identify need and select dual enrollment course offerings available to students." However, findings indicated that the secondary and post-secondary partnerships were more than formal agreements; the collaborations resulted in "relationships" or cooperative partnerships (Eddy, 2010). For example, A Welsh Community College principal shared, "We have open communication and the dual enrollment coordinator keeps us organized." The cooperative dual enrollment partnerships focused on working relationships and constant communication, which allowed the members to coordinate partnership resources beyond the requirements of the state policy (Eddy, 2010).

A significant partnership resource included the coordinated network created by each dual enrollment program. The programs' coordinated networks included secondary and post-secondary professionals as well as parents and community members who facilitated the rural secondary school students' college-going process. The networks coordinated the students' application, testing and registration processes. For example, the dual enrollment coordinator of the community college often "spearheaded" the network. In the role, the coordinator assured that every step of the students' college enrollment

process was complete and she often served as an arbitrator between the community college and the high school.

In addition, the networks identified or provided college based learning opportunities that involved rural students in authentic college activities. The themes of the activities focused on campus resources, college instructor, college technology, college application/registration process, college placement assessment, college requirements, college information network, college degree, college course and college tuition. Thus, cooperative dual enrollment partnerships included close working relationships between secondary and post-secondary institutions that created and provided resources to foster the college-going success of rural secondary school students (Kuh, et al., 2010; Pascarella and Terenzini, 2005; Terenzini, et al., 2005).

Another support resource included the high schools. Though the state plan only required high schools to approve the college registration of secondary school students, high schools provided information, application, registration and testing support as well as financial assistance to the rural secondary school students. In addition, high schools identified a coordinator or liaison, usually a counselor or principal to manage the dual enrollment process.

High schools provided information about dual enrollment programs and community college requirements through orientation and awareness sessions, parent teacher sessions, parent letters, course selection guides and programs of study. The information included the benefits, expectations, enrollment processes, courses and cost of the local community college.

Moreover, high schools acted as central locations for the students' portion of the college enrollment activities such as the application, registration and placement testing processes. For example, the high school liaison initiated the students' college application process, arranged the students' college testing and registration sessions and verified the college enrollment documents provided to the community colleges through the liaisons' offices.

Another support feature of the high schools included tuition assistance. Parents, students, high school professionals and college professionals cited the program's financial benefit as a significant motive for students to enroll in dual enrollment programs. Financial assistance included full or partial payment of the students' tuition. Some students applied for tuition scholarships or completed "C" or better agreements. When students and parents were responsible for the tuition, discounts were provided; therefore, students and parents realized reduced costs for the courses. The tuition costs realized by most of the students and parents of the study were often paid by the high school system including in some instances, the payment for textbooks and placement testing fees. High school support is significant for rural populations where the community and the schools have robust partnerships (Hardre, et al., 2009). Therefore, dual enrollment programs facilitated cooperative secondary and post-secondary partnerships and provided college-going information, opportunities and assistance that increased the rural students' college-going resources, enhanced the students' college network and connected the rural secondary school students to college-going processes (Lin, 2001; Smith & Blacknall, 2010).

The academic learning strategies of the dual enrollment program were consistent with the academic challenge and active learning cluster of the National Survey of Student Engagement (Kuh, et al., 2010). The college-level courses of the dual enrollment programs introduced rural secondary school students to the academic challenge of college. Students indicated that they worked harder and all study participants found the work "challenging", "demanding" and "rigorous" even causing "students to think more." The courses of the program were characterized as "advanced", "more," "different," "specific and detailed" and "above high school."

The active learning elements of the programs were promoted through the program instructors and the course instruction. Dual enrollment instructors were noted for their knowledge and facilitation of active learning strategies. The significant active learning elements of the course instruction included discussion questions, hands-on activities, real world assignments and classroom media. The course syllabus, which outlined the active learning strategies of the course, was noted as a significant active learning tool. Thus, dual enrollment programs provided rural secondary school students with advanced coursework and active learning strategies, which introduced the students to the academic challenge of community college courses.

Dual enrollment programs provided opportunities for rural secondary school students to interact with faculty members at community colleges and rural high schools. The programs provided adjunct or full-time community college instructors to teach the dual enrollment courses. Faculty members also participated in orientation sessions at the high schools where the instructors shared the expectations for the dual enrollment courses.

In addition, high school teachers became certified through the community college to teach dual enrollment courses at the high school, which provided an opportunity for the rural instructors to receive college information to share with students and parents. In the study, 50 – 60 percent of the dual enrollment instructors were high school dual enrollment instructors. The finding is significant because students' interaction with faculty fosters student success (Kuh, et al., 2010)

Though dual enrollment faculty members received college information about such services as, counseling, career planning and tutoring, findings did not support the delivery of the information in the dual enrollment classrooms. However, the findings suggested that dual enrollment programs provide community college instructors who receive college information to share in the dual enrollment classrooms. Yet, additional research is required.

Enriching educational experiences included opportunities that complemented the academic objectives of the programs including exposure to diversity, senior capstone courses and internships (Kuh et al., 2010). While dual enrollment programs offered courses on the community college campus and enrolled students from diverse locations in the college's service area, significant interactions with students of other locales or traditional community college students were not realized. In addition, technology, which is considered a tool useful to enhance the enriching educational experience, was provided in the program (Kuh, et al., 2010). However, its use was not noted to promote discussions with other students, residents or citizens. Finally, on-campus activities were the least significant element realized for the programs of the study. Though the on-campus resources emerged as a significant college-based learning opportunity, rural

students did not participate in the on-campus events. However, findings suggested that dual enrollment programs contributed resources and opportunities that may be available to assist rural secondary school students in participating in enriching educational experiences. For example, since dual enrollment programs in the study utilized the online content management system, the programs could incorporate an online discussion assignment or project in the courses. The online project would allow students to respond to discussion questions along with other students enrolled in the course. Using the online tool to complete a group assignment could be incorporated as a course assignment.

While these findings may support the provision of enriching educational experiences in dual enrollment programs, additional research is required.

Social Identity Theory

Social Identity Theory contextualizes the programs' role of transforming the rural secondary school students' identities. Social Identity Theory concentrates on the causes and consequences of identifying with a social group (Padilla & Perez, 2003). In the study, the theory emphasized the students' identities as members of a college community. The theory also considered how dual enrollment programs contributed resources and opportunities to encourage a college identity for rural secondary school students. The central process of the theory is depersonalization or recognizing one's self as a member of a group rather than as a unique individual (Harper & Quaye, 2009; Padilla & Perez, 2003). The self-reflection process leads to an enhanced identity (Harper & Quaye, 2009). The enhanced or new identity becomes activated as a function of the interaction between the individual and their environment (Harper & Quaye, 2009).

In the study, the college-going process of the dual enrollment programs aided rural secondary school students in building an identity for college. Dual enrollment programs promoted interaction between rural secondary school students and community colleges through acculturation processes, college participation factors and the development of college-like behaviors and skills.

The stages of acculturation oriented the students to college, modeled college for the students and allowed the students to 'practice" authentic college activities such as, receiving a college syllabus, creating a college transcript and interacting with college faculty members. For example a Gamble Community College high school administrator explained,

> We are in blocks, which are ninety minutes. So, our students are getting that experience of having to sit in a classroom for ninety minutes just like going to a college campus. You are going to sit there an hour or you are sitting there ninety minutes on those Tuesdays or Thursdays. So, they are getting that experience versus if you were in a traditional high school where there are seven blocks, you might be in class for forty-five minutes. Our students are having to deal with the length of time. So, they are learning that as well.

Participation factors were used in the program to encourage or maintain the students' participation in community college activities. The program acted to motivate, acclimate and provide an ethos of mastery for the rural secondary school students. Programs of the study defined and urged the rural students to take advantage of the post-secondary opportunity provided by the local community college and encouraged the students to enroll in the advanced courses or training programs provided by the college. Programs also shared the benefits of college as well as the national successes of the dual enrollment programs. The programs also made college familiar to the rural secondary school students and their parents through information sessions and exposure to the

academic expectations of college. Finally, the programs provided an avenue for the rural secondary school students to accomplish or successfully participate in college level activities. These activities included completing a college placement exam, completing a college application, obtaining a college identification number, enrolling in a college course and receiving a college transcript.

Through these activities and opportunities, the dual enrollment programs encouraged participation in the community college and began the depersonalization process for the rural secondary school students. Thus, dual enrollment programs used acculturation phases and participation factors to "activate" the college identity of rural secondary school students.

However, on-campus activities did not surface as a significant element within the study. Students did not participate in the activities and dual enrollment programs did not provide, integrate or encourage students to participate in the activities. Thus, the rural secondary school students did not receive a stimulus through on-campus activities. Although, the finding supports the program's role in depersonalizing the rural secondary school students' identity for college; yet, additional research is necessary.

Social Identity Theory also stresses that when an identity is activated or depersonalization occurs, the individual behaves in ways that are consist with the group and enhances their own evaluation as a group member (Harper & Quaye, 2009). The study's findings are consistent with this tenet of the theory because an increased sense of person or autonomy and enhanced skills were noted by the students of the study (Harper & Quaye, 2009). Autonomy or the increased sense of person focused on the new behaviors that the students gained. Independence noted as "freedom", "treatment as

adults" and "less stress" as well as "responsibility" characterized the new behavior that was emphasized.

Active learning, support and involvement skills were also realized in the dual enrollment program. Rural secondary school students participated in authentic college activities, which began the students' college skill development process (Becker, 1993). For example, study participants stated that the course content was more rigorous, challenging and more specific than high school curriculum and it required the students to delve deeper into the class subjects. Thus, the rural secondary school students participated in higher-level thinking and gained certification and knowledge above high school trainings.

Active learning skills identified in the study included time management skills, increased writing and research, discussion and presentation skills along with accessing online assignments, which was identified as a unique learning opportunity for rural secondary school students. Support skills identified in the program focused on the registration, testing and enrollment process, accessing services and information as well as the use of specific support services such as email, Blackboard and the library.

Students acquired advanced coursework skills such as active learning skills and study habits needed for the demanding college level courses of the program, which is significant given that rural college persisters indicated a need for better college study habits (Schonert, et al., 1989). In addition, students realized the necessary steps to enroll in college. Thus, participating in the dual enrollment programs yielded college-going skills and knowledge for the rural secondary school students (Becker, 1993; Lin, 2001).

Dual enrollment programs provided rural secondary school students an opportunity to expand their identity through exposure to college enrollment and academic strategies. The programs also encouraged the rural secondary school students to participate in authentic community college activities as members. Thus, dual enrollment programs shifted the rural secondary school students' identity for college.

Implications

Based on the findings of the study and its relationship to existing research, implications for practice, policy and theory, as well as suggestions for future research are presented.

The findings of the study offered contributions to practice for secondary and post-secondary institutions. The study suggested that instructors of dual enrollment courses were key active learning resources. The faculty members were noted for their knowledge and facilitation strategies. Therefore, to create relevant interactions between faculty members and students, practitioners should make the classroom experience authentic. Practitioners would provide relevant training programs for high school and college faculty focused on active learning opportunities for dual enrollment participants, particularly rural secondary school students who often attend high schools that lack the resources to provide advanced coursework (Alliance for Excellent Education, 2010). Dual enrollment instructors would attend professional development and training sessions that focused on the academic character of underrepresented populations, best college level pedagogy, college specific active learning opportunities and the proven strategies in delivering these elements (Robertson, et al., 2001).

The sessions could also provide strategies to use on a regular basis to share college information with the rural secondary school students in the classrooms. Findings of this study suggested that dual enrollment faculty members received college information relevant to the rural students' college enrollment; however, the delivery of the information in the classroom was not realized in the study. Therefore, a training session that outlined strategies to use to share the college information with rural secondary school students would foster the college-going motivations and commitments of the rural secondary school students. The strategies could also assist the students in participating in on-campus activities, which was not a significant college-going element of this study.

Another consideration for the authenticity of the classroom includes the dual enrollment course. Findings indicated that the course was a significant element in the college-going process of rural secondary school students. The courses were characterized as "rigorous", "advanced" and "above high school." However, the quality of the course including control of the delivery presented challenges in the study. Therefore, practitioners should create shared objectives between secondary and post-secondary institutions that will be utilized to ensure a college-level experience in the dual enrollment classrooms. In addition, dual enrollment faculty members should design and host best practices sessions that distinguish college level instruction from high school instruction as well as offer and participate in dual enrollment course-specific workshops throughout the year.

College faculty would visit high school dual enrollment classrooms as guest lecturers, designate course assessments or host course assessment development

workshops. Practitioners should host high school dual enrollment classes on the college campus a few times a semester.

In addition, the study suggested that high schools were a significant support element in the dual enrollment programs. Therefore, high schools should be included in all college-based initiatives that seek to inform students and parents about higher education institutions. High schools should be provided the adequate resources to assist rural parents and students with the college-going process.

The study also suggested that parents were involved in the dual enrollment programs. Parents are contributors to the rural students' post-secondary success and parents promoted the dual enrollment programs in the rural communities of the study (Yan, 2002). Therefore, parents should be included in the creation and delivery of dual enrollment and college initiatives. Yan (2002) found that 95 percent of the persistent rural college students reported that their mother expected them to go to college. Therefore, parents could gain emerging college information, serve as advocates for college and share the information with their children and the community. In the study peers were consulted about the dual enrollment program. Therefore, former students would participate in the colleges' awareness efforts, which would provide current college information that the former students could share with the high school audience.

Indicators of mastery surfaced in the study as a factor that identified the students' accomplishment of a college-going activity. Chenoweth and Galliher (2004) found that rural females, when arriving at a decision to attend college, explained that they did not go to college because of barriers to college enrollment such as a lack of competency. The study also suggested that participating in the dual enrollment programs helped the

students realize active learning, support and involvement resources and skills. The findings of the study suggested that dual enrollment programs provide authentic college-based learning opportunities that connect underserved secondary student populations to activities appropriate to a college environment. Thus, practitioners should identify and implement the relevant genuine learning opportunities that assist their students in realizing the greatest academic successes. For example, the placement assessment could be used to align high school and college requirements. College enrolled rural students in Yan's (2002) study were more likely to take a standardized achievement test for college enrollment. Thus, practitioners could use the college placement examination early in the high school experience to assist students with readiness for college and careers as well as build the college expectation of the underrepresented populations. They could also acknowledge or celebrate the students' successful scores as well as plan the necessary interventions for students who did not receive the appropriate placement exam scores.

Implementing these strategies potentially could assist underrepresented students in achieving academic and social integration in the classroom since on-campus services and activities were not significant findings of the study. Moreover, when students referred to the on-campus activities or services, they identified services that related to the college course, such as Blackboard and electronic equipment in classes. Finally, the strategies would assist the dual enrollment programs in enhancing the programs' enriching educational experiences.

Policymakers interested in dual enrollment initiatives should create legislation that outlines common standards regarding the financial aid structure of dual enrollment programs to ensure the consistent implementation of the programs. Even though

financial assistance for students enrolled in the program are suggested and not required, findings of the study suggest that dual enrollment programs reduced the financial barriers that rural populations encounter when considering a college education (Schonert, et al., 1989; Yan, 2002). Therefore, policymakers should create financial aid legislation that allows underrepresented students to participate in programs that enroll secondary school students in college. The legislation could have at its core the concept of a merit-based system. The aid could be awarded as a scholarship or fellowship contingent on the students' enrollment in an academically advanced program such as dual enrollment. Local legislators could require secondary and post-secondary institutions that collaborate to offer dual enrollment programs to identify alternative ways to fund the students' tuition rather than suggesting that institutions not charge the students and parents a fee.

The study found that dual enrollment program courses were "rigorous," "advanced," and "above high school," thus, policymakers should also consider legislation that allows dual enrollment college-level courses taught by trained community college faculty to be implemented as advanced coursework for underrepresented populations such as rural secondary school students (Adelman, 1999; Alliance for Excellent Education, 2010; Horn, et al., 2001).

In addition, the study also suggested that dual enrollment participants are eligible to begin their core major courses when they enroll as full-time college students. Therefore, allowing rural secondary schools to provide dual enrollment courses as advanced coursework would require regulations for the portability of college credits. Current programs have no official guidelines, policies or accepted procedures in order to transfer college credits. Thus, policymakers must establish clear, universal articulation

agreements between secondary schools and public and private colleges and universities to assure the portability of the advanced coursework provided to rural secondary school students. Given the current focus on public education reform to enhance the delivery of classroom education beyond memorization and recall, dual enrollment programs can serve as advanced coursework for rural and underrepresented secondary school populations who typically do not have the opportunity to enroll in advanced level coursework (Alliance for Excellent Education, 2010).

The research community can inform several student development models in regards to the findings of the study. Given that the study expanded current knowledge of dual enrollment programs through an internal view, further in-depth research is warranted to gain additional insight into the meaning of the dual enrollment program and its contributions to the post-secondary success of the participants. In particular, the research community should continue to conduct internal investigations of rural America given that they are often excluded from scholarly work (Hardre', et al., 2009). As a result of the study, which focused on community college programs, researchers should investigate the post-secondary motivations and commitments of rural secondary school students who participate in dual enrollment programs offered by four-year institutions of higher education.

Rural students who persisted in a 2002 study were more likely to apply to a four-year college as their first choice and 75 percent of the rural students who persisted were more likely to attend their first college choice (Yan, 2002). In addition, Schonert, Elliott and Bills (1989) found that 87 percent of four-year rural student persisters enrolled the first semester after high school graduation. Thus, future studies should focus on the

programmatic features of dual enrollment programs hosted by four-year institutions and the impact on the post-secondary success of rural secondary school participants. The qualitative examination would further expand the knowledge of rural communities and their college enrollment requirements as well as their impact on the post-secondary attendance patterns of their residents.

Additionally, the study's findings will assist administrators and policymakers in understanding academic strategies and college-based learning opportunities that influence the educational success of rural secondary school students who participate in dual enrollment programs at four-year institutions. The examination will note any differences about dual enrollment program guidelines observed by four-year institutions versus two-year institutions such as, funding, student selection and quality of courses. In addition, the internal study will survey the nuances realized in the dual enrollment partnerships between four-year institutions and secondary schools. Thus, the study could begin discussions about the best strategies to use to develop significant partnerships in rural areas between four-year institutions and local high schools. Possible inquiries could include: Would rural schools expand their course offerings? Would the secondary school students participate in on-campus activities or enriching educational experiences? Would the secondary school educators increase their educational credentials? Or, would the four-year higher education institutions increase their adjunct faculty rosters? The results for these types of inquiries would surface in the findings of the qualitative study and would outline the characteristics of the dual enrollment partnerships between high schools and four-year institutions.

Dual enrollment programs alter the relationship between high schools and colleges and future research should seek to identify the elements of that "altered relationship" that influences the post-secondary success of its dual enrollment participants (Bailey, et al., 2002). The study suggested that dual enrollment programs are cooperative partnerships between secondary and post-secondary institutions. Partnerships are opportunities to solve shared issues and achieve mutual goals by combining resources, skills and knowledge of individual partners (Eddy, 2010). Thus, future research could include an internal study to understand how the dual enrollment partnerships are created, how goals are established and what steps are followed to combine resources, skills and knowledge. Program constituents such as parents, college personnel, community members, students and secondary school division administrators would be included to provide a comprehensive perspective of the program. The study would provide information about the development of dual enrollment partnerships. The study would also provide information about the delivery of services to secondary school students. In addition, the examination could identify the practices of the partnership that most engage the secondary school students.

The findings of the study contributed to theory by presenting an ecological framework upon which to understand the influence of the community college environment on the post-secondary motivations and commitments of rural secondary school students enrolled in an education acceleration program, dual enrollment. Through the detailed examination, the programmatic features of the dual enrollment program, void of the characteristics of the secondary school students, are realized. By noting only the characteristics of students in regards to post-secondary success, researchers negate the

meaning of dual enrollment programs as well as how the program features relate to the post-secondary success of the rural secondary school students. Therefore, using the interpretive investigation emphasizes the nuances of the social and academic attributes of dual enrollment programs that may influence the academic success of dual enrollment participants.

The study also suggested that on-campus activities are not significant college-based learning opportunities for rural secondary school students who participate in a dual enrollment program offered by a community college. Prior research finds that student involvement in various campus activities along with academic activities influences the students' post-secondary success (Astin, 1984; Pascarella & Terenzini, 2005). However, the study complemented recent findings that academic integration is the more important form of involvement especially given that dual enrollment programs are academic organizations (Tinto, 1998). Programs of the study are provided to rural secondary school students who have the support of their local community, high school faculty and staff as well as fellow secondary school students. In addition, the dual enrollment students participate in the program as community college students and in some cases attend the dual enrollment college courses at their high school. Therefore, the social integration could occur at the high school while the academic integration is only necessary at the college.

The current qualitative study is of the first of few to examine the influence of the programmatic features of dual enrollment programs on the post-secondary motivations and commitments of rural secondary school students enrolled in a dual enrollment program provided by a community college. The study informs current literature

regarding the college-based learning opportunities available to rural secondary school students through the dual enrollment programs provided by community colleges. However, it does point to questions about the rural secondary school students' social integration inside or outside of the dual enrollment classroom and additional research is warranted on the topic.

Directions for Future Research

While the study examines the programmatic features of dual enrollment programs to understand its influence on the post-secondary motivations and commitments of rural secondary school students, other areas of investigation also emerged including authentic college experiences and cooperative partnerships.

To understand how authentic college-going activities of dual enrollment programs are provided to rural secondary school students who participate in the program on the high school campus, a qualitative study is suggested to understand how the program provides the authentic activities to the rural secondary school students. The inquiry could also investigate how the rural secondary school students experience social integration since the study suggested that social integration on the college campus was not significant. The study could include interviews and site observations to gain an internal view of the rural students' experiences in the program.

An unintended finding of the study suggested that the perceptions of the dual enrollment professionals may influence the college-going motivations and commitments of rural secondary school students (Helfgot, 2001). Therefore, future research should investigate how the perceptions or program climate influences the college-going success of rural secondary school students.

Another area of investigation that was generated through the study included the cooperative partnerships. A quantitative study could focus on the types of partnerships that exist in dual enrollment programs nationally. The study could outline a description of the partnership types and identify the features and partnership resources of each type.

Limitations

Even though every effort was utilized to assure the accuracy and credibility of the study, limitations and delimitations surfaced. The study's limitations were noted in site selection, data collection and participant selection. To answer the study's questions, programs were purposefully selected based on the programs' efforts and success rates in realizing post-secondary success for its participants. In addition, community college programs were selected because community colleges host dual enrollment programs more often than four-year institutions do (Kleiner, et al., 2005). Therefore, the programs of the study were not randomly selected. As such, purposeful sampling of the three case study sites decreased the generalizability of the findings. The study was not generalizable to all facets of secondary and post-secondary partnerships.

Moreover, the study's data collection methods had a few limitations. Case study protocol recommends using multiple researchers to collect data in order to increase a study's reliability (Yin, 2003). This study included only one researcher and the researcher's values and interests and personal bias likely influenced her interpretation of the data (Creswell, 2003). Other limitations of the data collection methods included distributive sampling of study participants, and timing. The categories of research participants did not exemplify a distributive sample in the study. Some categories included more interview participants than other categories due to position descriptions

and participant availability. For example, more dual enrollment faculty members were interviewed than dual enrollment coordinators. In addition, parents were interviewed only at Campus I of Welsh Community College. Secondary school professionals indicated that a permission process was required to conduct interviews hosted through the secondary school system. Due to the staffing needs required to secure parental permissions for the interviews and the time of year that the study was conducted, secondary school professionals were unable to assist site contacts in identifying parents for the study. The limited number of parent interviews provided only the perspective of parents who participated in the dual enrollment program at Campus I of Welsh Community College. Furthermore, the study's site observations and artifact reviews collected at all three sites were aligned only with the findings presented by the Welsh Community College Campus I parents. The alignment may have emphasized or deemphasized findings that may have emerged for parents of the other two sites. Another limitation of the data collection methods included the timing of the study. The time of year for the data collection varied. Some data collection occurred in the spring semester while the final data collection occurred in the fall semester.

Finally, selection bias was a limitation of the study. Site contacts organized the roster of interview participants for the study. Given this method, the site contacts' or the institutions' biases about the dual enrollment programs may have guided the selection of the participants. While some of the positions were ex-officio, some participants may have been selected by the site contacts to represent the site contacts' or institutions' views of dual enrollment programs.

Delimitations

The delimitations of the study included location and participants. Location was included as a delimitation because the study consisted of programs in the state of South Carolina only. In addition, the study's participants included rural secondary school students of community college dual enrollment programs.

Conclusion

The investigation began with a conjecture regarding the need for secondary schools to outsource the final years of high school to institutions of higher education in such programs as dual enrollment. Bailey, Hughes and Karp (2002) stated that students may realize better academic or emotional preparedness due to their participation in dual enrollment programs. However, researchers found that dual enrollment programs do not benefit its participants' post-secondary experiences (Bragg & Kim, n.d.). Therefore, the study examined how the resources and opportunities of dual enrollment programs facilitate the post-secondary motivations and commitments of rural secondary school students. The study provided a detailed investigation into the meaning of dual enrollment programs to understand how the elements of the programs impact the academic success of rural secondary school students as recorded in current quantitative studies.

While the quantitative findings presented the program's impact on student behavior, the current study helped to understand how the impact occurs (Tinto, 1998). The study helped to understand the functions of the dual enrollment programs including structure, policies and practices. The study also considered how the programs executed their services to influence the post-secondary success of rural secondary school students. During the examination, Dual enrollment programs exhibited a catalytic association with

the post-secondary enrollment of rural secondary school students. Dual enrollment programs initiated the rural secondary school students' participation in college.

Secondary and post-secondary partnerships created awareness about higher education for rural America and became "college" for the underrepresented population. In the study, dual enrollment programs:

- provided authentic college-based learning opportunities such as active learning, support and involvement resources
- integrated secondary school students into authentic college-based learning opportunities
- encouraged participation in authentic college-based learning opportunities as a member
- shifted the college identity of rural secondary school students

Program standards, a cooperative partnership, coordinated network, acculturation, college participation factors and college behaviors characterized the dual enrollment programs of the study as elements that foster the college-going motivations and commitments of rural secondary school students.

Secondary and post-secondary institutions of the study utilized a cooperative dual enrollment partnership to offer a community college enrollment experience to rural secondary school students. The cooperative partnerships provided active learning, support and involvement resources that assisted rural secondary school students in developing college success skills such as registering for classes, interacting with college faculty members and completing advanced coursework.

The programmatic features of the dual enrollment programs involved rural parents, provided financial assistance, provided subject matter experts, provided advanced coursework and high school support. In addition, the study found that the rural student's participation in dual enrollment programs allowed the expansion and execution of college behaviors such as independence and responsibility. Thus, the programmatic features advanced the students' identify for college.

Taken together, the findings suggested that participation in dual enrollment programs may help underrepresented secondary school students such as rural students overcome barriers including but not limited to a lack of competence, a lack of college awareness and financial constraints; thus, the programs would encourage the secondary schools students in advancing and continuing their post-secondary enrollment.

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Appendix A

Interview Questions Protocol

Interview Questions for High School Counselors

1. Compare and contrast dual enrollment courses versus typical high school courses: (What are the differences/similarities between dual enrollment courses and regular high school courses?)
2. How are students informed about the dual enrollment program? How are parents informed about the dual enrollment program?
3. Describe the partnership agreement. What is unique about it? Describe the policies that support the program. Where is the program housed?-What department/division - rationale for the location? How do you decide what dual enrollment courses to offer? Who manages the dual enrollment schedule?
4. How do students enroll in the dual enrollment courses? Describe the process used to register the students for the courses? How do students qualify for the dual enrollment programs?
5. How are entrance exams purchased? How is FAFSA utilized? How is the tuition paid? How are textbooks purchased? How are students and parents involved in the process?
6. How does the program express the expectations of college to the students? Parents?
7. Since the dual enrollment students are participants in high school and college, how does the dual enrollment program help students prepare for/manage the college environment?
8. Given a definition of college-based learning opportunities as academic, social and institutional experiences that are germane to a college environment. Describe the rural students' college-based learning experiences while a participant in the dual enrollment program
9. What is the policy to hire instructors? What is the policy to train instructors? Are they trained on rural-specific topics? Do instructors receive a stipend for professional development, textbooks or other items that may enhance the dual enrollment learning experience? Do instructors receive payment/compensation?
10. How does the on-campus location provide dual enrollment information? Describe the services students and parents receive from the office. How does the

dual enrollment program facilitate the students' participation in the program's activities? college's activities? Describe the process used to retrieve the students' final grades?

11. How do dual enrollment students interact with college faculty, students and staff? What services are provided to the dual enrollment students? What college services do the dual enrollment students have access? college identification cards? Other college services? How do students locate assistance for dual enrollment needs?
12. How does the dual enrollment program provide college-level classroom experiences for the dual enrollment students? How are dual enrollment students exposed to active learning while a participant in the program?
13. Describe the dual enrollment orientation process. Is there a place to learn about dual enrollment information online or other locations? Is there a place for information about specific dual enrollment courses that are being offered – information such as, what courses are being offered and information about the courses that are being offered?
14. How might dual enrollment programs encourage rural students to attend college? What do you think motivates a rural student to attend college? What do you think motivates the rural students to enroll in the dual enrollment programs? Not enroll?

Interview Questions for Parents

1. How was your child informed about the dual enrollment program? How were you informed about the dual enrollment program?
2. How did your child enroll in the dual enrollment courses? Describe the process used to register your child for the courses? How do students qualify for the dual enrollment programs?
3. How were you involved in the financial aid process? How was the tuition paid? How were the textbooks purchased and received? After enrolling, where do you find information about the dual enrollment program?
4. Given a definition of college-based learning opportunities as academic, social and institutional experiences that are often found in college environments, Describe the college-based learning experiences that your child had while a participant in the dual enrollment program. What college-like things did your child do? What services are provided to the dual enrollment students? What college services do the dual enrollment students have access? college identification cards? Other college services?
5. Describe the dual enrollment orientation process. How did it prepare your child to take the dual enrollment courses? What information did you share with your child about college before he/she took the dual enrollment course(s)?
6. What would motivate your child to attend college? What do you think motivated your child to enroll in the dual enrollment programs? What would cause your child not to participate?

Interview Questions for Students

1. Compare and contrast dual enrollment courses versus typical high school courses: What are the differences/similarities between dual enrollment courses and regular high school courses? What is the same? Describe the work required in the dual enrollment course. Is it different from the work required in regular high school courses? Explain. What did you do in the courses?
2. How did you learn about the expectations for college? For dual enrollment?
3. What did you know about college before enrolling in the dual enrollment program? Did you plan to go to college before participating in the dual enrollment program? If so, what did you think about the dual enrollment experience? How did it compare to your perception/thoughts of college?
4. After participating in the dual enrollment program, what about the experience would encourage you to enroll in college? Not enroll in college?
5. Given a definition of college-based learning opportunities as academic, social and institutional experiences that are usually found in college environments. Describe your college-based learning experiences while a participant in the dual enrollment program. What college-like things did you do?
6. What services are provided to you in the dual enrollment programs? What college services do the dual enrollment students have access? college identification cards? Other college services? How was the tuition paid? Textbooks purchased and received? How did you get assistance with dual enrollment matters such as tutoring, course changes, questions about class assignments, etc.?
7. If you needed assistance with a dual enrollment course, what would you do? How did you interact with college faculty, staff and students while a participant?
8. How were you informed about the dual enrollment program? The college? How were your parents informed about the dual enrollment program? Describe the dual enrollment orientation process? Describe the college that sponsors the dual enrollment program? How do you receive your final grades?
9. How did you qualify for the dual enrollment program? How did you enroll in the dual enrollment program? Describe the process you followed to register for the courses? How did you select your courses? Where did you register for the courses? Where do you find information about the dual enrollment courses?
10. What did you think about college before enrolling in the dual enrollment program? After enrolling in the program?
11. What would motivate you to attend college? What motivated you to enroll in the dual enrollment programs? Not enroll? Does the program encourage you to want to go to college?

Interview Questions for Administrators:
High School and College Professionals

1. Compare and contrast dual enrollment courses versus typical high school courses: What are the differences/similarities between dual enrollment courses and regular high school courses?
2. Describe the partnership agreement. What is unique about it? Describe the policies that support the program? Where is the program housed?-what department/division - rationale for the location? How do you decide what dual enrollment courses to offer? Who manages the dual enrollment schedule?
3. Given a definition of college-based learning opportunities as academic, social and institutional experiences that are germane to a college environment. Describe the rural students' college-based learning experiences while a participant in the dual enrollment program.
4. What services are provided to the dual enrollment students? What college services do the dual enrollment students have access? college identification cards? Other college services?
5. How does the dual enrollment program provide college-level classroom experiences for the dual enrollment students? How are dual enrollment students exposed to active learning while a participant in the secondary and post-secondary partnership?
6. What is the policy to hire instructors? What is the policy to train instructors? Do instructors receive a stipend for professional development, textbooks or other items that may enhance the dual enrollment learning experience? Do instructors receive payment/compensation?
7. How does the dual enrollment program facilitate the students' participation in the program's activities? college's activities?
8. How do dual enrollment students interact with college faculty, students and staff?
9. How might dual enrollment programs encourage rural students to enroll in college? What do you think motivates the rural students to enroll in the dual enrollment programs? Not enroll? Why do you think rural students might enroll in college following participation in dual enrollment programs? Not enroll?

Interview Questions for Instructors

1. Compare and contrast dual enrollment courses versus typical high school courses: What are the differences/similarities between dual enrollment courses and regular high school courses?
2. Given a definition of college-based learning opportunities as academic, social and institutional experiences that are germane to a college environment. Describe the rural students' college-based learning experiences while a participant in the dual enrollment program.
3. Describe the instructor training that you receive to participate in the program. Any rural student specific information? Do instructors receive a stipend for professional development, textbooks or other items that may enhance the dual enrollment learning experience? Do instructors receive payment/compensation?
4. How do you decide what dual enrollment courses to offer? Who manages the dual enrollment schedule? Describe the process used to report the students' final grades.
5. How does the dual enrollment program facilitate the students' participation in the program's activities? college's activities?
6. How do students qualify for the dual enrollment programs? How do dual enrollment students interact with college faculty, students and staff?
7. What services are provided to the dual enrollment students? What college services do the dual enrollment students have access? college identification cards? Other college services? Where do students find assistance for difficult lessons?
8. How does the dual enrollment program provide college-level classroom experiences for the dual enrollment students? How are dual enrollment students exposed to active learning while a participant in the program? Is there a place to learn about dual enrollment course information online or other locations? Is there a place for information about specific dual enrollment courses that are being offered - what courses are being offered and information about the courses that are being offered?
9. How might dual enrollment programs encourage rural students to enroll in college? What do you think motivates the rural students to enroll in the dual enrollment programs? Not enroll?

Interview Questions for College Dual Enrollment Coordinator

1. Compare and contrast dual enrollment courses versus typical high school courses: What are the differences/similarities between dual enrollment courses and regular high school courses?
2. How are students informed about the dual enrollment program? How are parents informed about the dual enrollment program?
3. Describe the partnership agreement. What is unique about it? Describe policies that support the program? Where is the program housed?-what department/division - rationale for the location? How do you decide what dual enrollment courses to offer? Who manages the dual enrollment schedule?
4. How do students enroll in the dual enrollment courses? Describe the process used to register the students for the courses? How do students qualify for the dual enrollment programs?
5. How are entrance exams purchased? How is the tuition paid? How are textbooks purchased? How are students and parents involved in the process?
6. How does the program express the expectations of college to the students? Parents?
7. Since the dual enrollment students are participants in high school and college, how does the dual enrollment program help students manage the college environment?
8. Given a definition of college-based learning opportunities as academic, social and institutional experiences that are germane to a college environment. Describe the rural students' college-based learning experiences while a participant in the dual enrollment program
9. What is the policy to hire instructors? What is the policy to train instructors? Are they trained on rural-specific topics? Do instructors receive a stipend for professional development, textbooks or other items that may enhance the dual enrollment learning experience? Do instructors receive payment/compensation?
10. How does the on-campus location provide dual enrollment information? Describe the services students and parents receive through the office. How does the dual enrollment program facilitate the students' participation in the program's activities? college's activities? Describe the process used to retrieve the students' final grades?
11. How do dual enrollment students interact with college faculty, students and staff?
12. What services are provided to the dual enrollment students? What college services do the dual enrollment students have access? college identification cards? Other college services? How do students locate assistance for dual enrollment needs?

13. How does the dual enrollment program provide college-level classroom experiences for the dual enrollment students? How are dual enrollment students exposed to active learning while a participant in the program?
14. Describe the dual enrollment orientation process. Is there a place to learn about dual enrollment information online or other locations? Is there a place for information about specific dual enrollment courses that are being offered - what courses are being offered and information about the courses that are being offered?
15. How might dual enrollment programs encourage rural students to attend college? What do you think motivates a rural student to attend college? What do you think motivates the rural students to enroll in the dual enrollment programs? Not enroll?

Appendix B

Rural Dual Study Nvivo Codes

Rural Dual Study
\\Q1 - Structure, Policies and Practices
\\Q1 - Structure, Policies and Practices\Agent
\\Q1 - Structure, Policies and Practices\Agreement
\\Q1 - Structure, Policies and Practices\Artifacts Q1
\\Q1 - Structure, Policies and Practices\Climate
\\Q1 - Structure, Policies and Practices\Collaboration
\\Q1 - Structure, Policies and Practices\Instructor, Parent, Student Involvement
\\Q1 - Structure, Policies and Practices\Quality
\\Q2 - Academic, Support, Institutional Opportunities
\\Q2 - Academic, Support, Institutional Opportunities\Components
\\Q2 - Academic, Support, Institutional Opportunities\Components\Academic DE Component
\\Q2 - Academic, Support, Institutional Opportunities\Components\Institutional DE Component
\\Q2 - Academic, Support, Institutional Opportunities\Components\Support DE Components
\\Q2 - Academic, Support, Institutional Opportunities\Self-Actualization - Skills
\\Q2 - Academic, Support, Institutional Opportunities\Self-Actualization - Skills\Can do work
\\Q2 - Academic, Support, Institutional Opportunities\Self-Actualization - Skills\Skill Development
\\Q2 - Academic, Support, Institutional Opportunities\Self-Actualization - Skills\Supported Preparation
\\Q3 - Acculturation-Exposure
\\Q3 - Acculturation-Exposure\Application
\\Q3 - Acculturation-Exposure\Artifact Q2
\\Q3 - Acculturation-Exposure\Introduction
\\Q3 - Acculturation-Exposure\Simulation - Modeling
\\Q3 - College Participation Factors
\\Q3 - College Participation Factors\Artifacts Q3
\\Q3 - College Participation Factors\College Level Services
\\Q3 - College Participation Factors\College Level Services\$
\\Q3 - College Participation Factors\College Level Services\Blackboard
\\Q3 - College Participation Factors\College Level Services\Placement
\\Q3 - College Participation Factors\College Level Services\Resources
\\Q3 - College Participation Factors\College Level Services\Transcript
Nvivo Reports\\Node Structure Report

Rural Dual Study
\\Q3 - College Participation Factors\College Level Work
\\Q3 - College Participation Factors\College Level Work\Aligns to college course & hs SOL
\\Q3 - College Participation Factors\College Level Work\Instructors
\\Q3 - College Participation Factors\College Level Work\textbook
\\Q3 - College Participation Factors\College Level Work\Workload-Content
\\Q3 - College Participation Factors\College Level Work\Workload-Content\Writing
\\Q3 - College Participation Factors\Motivation
\\Q3 - College Participation Factors\Motivation\Credits-Degree Earned
\\Q3 - College Participation Factors\Motivation\Money
\\Q3 - College Participation Factors\Motivation\Parental Awareness
\\Q3 - College Participation Factors\Motivation\Preparation
\\Q3 - College Participation Factors\Motivation\Time
\\Q4 - Self-efficacy - College Behaviors
\\Q4 - Self-efficacy - College Behaviors\CBL - Responsibility - Autonomy
\\Q4 - Self-efficacy - College Behaviors\CBL - Responsibility - Autonomy\Freedom
\\Q4 - Self-efficacy - College Behaviors\CBL - Responsibility - Autonomy\Initiative
\\Q4 - Self-efficacy - College Behaviors\CBL - Responsibility - Autonomy\Responsibility-Ownership
Nvivo Reports\\Node Structure Report