

MOTIVATION AND DUAL ENROLLMENT: AN ANALYSIS OF THE
MOTIVATION OF HIGH SCHOOL STUDENTS TO PARTICIPATE IN DUAL
ENROLLMENT IN ASSOCIATION OF CHRISTIAN SCHOOLS INTERNATIONAL
SCHOOLS

by

Mitchell Acri Salerno

Liberty University

A Dissertation Presented in Partial Fulfillment

of the Requirements for the Degree

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APPROVED BY:

DR. RALPH MARINO, JR., Chair Date

DR. JEFFREY CRAWFORD, Committee Date

DR. JARED BIGHAM, Committee Date

DR. SCOTT WATSON, Chair of Graduate Studies Date

ABSTRACT

A phenomenological study utilizing the Consensual Qualitative Research method was conducted to understand the motivation of high school students dually enrolled in high school and college, commonly referred to as dual enrollment, in relation to the Self-Determination Theory and to connect this motivation to research on personal calling. This qualitative study begins a research thread linking dual enrollment as a reform model to research on motivation and personal calling. The participants were high school students in two Association of Christian Schools International schools in the southeastern United States dual enrolled in an evangelical Christian university in the Southeast. Data was collected through an open-ended questionnaire, a self-report instrument, and individual interviews. The results of this study indicated that the participants were motivated to participate in the dual enrollment program because of an investment in the future, relationships/people, it was a “no brainer,” personal betterment, and an interest in the subject. In general, it was determined that the participants were primarily extrinsically motivated to participate. Furthermore, it was evident that the students did not express a personal calling to participate in the dual enrollment program.

Descriptors: Dual Enrollment, Self-Determination Theory, Motivation, Christian Education, Calling, Vocation, Consensual Qualitative Research

DEDICATION

I would like to dedicate this dissertation to my family. Alexis, Katie, Emma, Mom, Dad, Kim, Scott, Lorenzo, Grammy, Grandad, Mammaw, Grandpa Salerno, Uncle Buddy, Aunt Arleen, Matt, Christa, and Uncle Oliver. You will find that your memory has been written into this dissertation. I love you and am forever honored to be a member of this family!

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LIST OF ABBREVIATIONS

Academic Motivation Scale (AMS)

Association of Christian Schools International (ACSI)

American College Testing (ACT)

Advanced Placement (AP)

Consensual Qualitative Research (CQR)

Career and Technical Education (CTE)

Freedom Christian School (FCS)

Grade Point Average (GPA)

Higher Level (HL)

Institutional Review Board (IRB)

International Baccalaureate (IB)

International Baccalaureate Organization (IBO)

Intrinsic Motivation (IM)

Scholastic Aptitude Test (SAT)

Self-Determination Theory (SDT)

Standard Level (SL)

Project Advance at Syracuse University (SUPA)

Unity Christian University (UCU)

Victory Christian School (VCS)

CHAPTER ONE: INTRODUCTION

Not much has changed in the last 25 years since Deci and Ryan (1985) asserted that “the central problem [in education] is how to utilize extrinsic structures in such a way as to encourage self-regulation and not alienate the children from the process of learning or stifle their intrinsic motivation for related topics and concerns” (p. 246). Teachers, administrators, and policy-makers are continually attempting to implement sustainable reform that promotes and encourages life-long learning. One such reform effort is dual enrollment. Dual enrollment is a broad title representing a variety of programs through which high school students obtain postsecondary and high school credit simultaneously (Clark, 2001). Dual enrollment, commonly referred to as concurrent enrollment or dual credit (Andrews, 2001), includes programs such as Advanced Placement, International Baccalaureate, Early College, Middle College, and Career and Technical Education Programs.

Dual enrollment, regardless of its form, has emerged as a popular reform effort that promises to transform the educational experience for both high and low achieving students. However, dual enrollment is an extrinsic structure, potentially enticing students to participate to obtain financial benefits or to obtain credits for college (Buchanan, 2006). While these motivations are necessary, solely relying on extrinsic motivation may limit the sustainability of dual enrollment as a reform model. Therefore, it is critical to fully understand why students participate in dual enrollment programs. If students participate solely from an extrinsic motivation, schools should consider exploring options that encourage the development of intrinsic motivation. Conversely, if students indicate that they are intrinsically motivated to participate, it is essential to understand this

motivation so that all students can be encouraged to develop intrinsic motivation.

Dual enrollment programs have increased in popularity throughout the country in recent years (Kim, Kirby, & Bragg, 2006; Kleiner & Lewis, 2005; Marshall & Andrews, 2002), including partnerships between evangelical Christian high schools and evangelical Christian universities. These dual enrollment partnerships are not unique; however, the faith traditions within the evangelical Christian education movement distinguish dual enrollment partnerships between Christian institutions from typical arrangements between secular high schools and community colleges. This study, then, seeks to understand the motivation of high school students in Association of Christian Schools International schools to participate in dual enrollment programs, exploring whether students are extrinsically and/or intrinsically motivated to participate. Furthermore, the study seeks to develop a link between student motivation and the concept of calling by exploring students' reasons for pursuing particular college and career options.

Background

Dual enrollment is a rapidly growing high school reform initiative (Kim, Kirby, & Bragg, 2006; Kleiner & Lewis, 2005; Marshall & Andrews, 2002); however, it is difficult to find literature documenting dual enrollment partnerships between Christian high schools and Christian postsecondary institutions. Furthermore, there is a paucity of research linking student motivation to participation in dual enrollment programs. The current study seeks to unite research on the efficacy of dual enrollment to the Self-Determination Theory (SDT), providing support for dual enrollment as a sustainable high school reform effort (Deci & Ryan, 1985; Ryan & Deci, 2000). Deci (2009) considered

the SDT a viable theoretical framework for school reform efforts, yet a documented research study linking dual enrollment to the SDT has yet to be found in the literature.

Dual enrollment programs have existed for many years (Puyear, Thor, & Mills, 2001) and have experienced incredible growth in the last 15 years (Kleiner & Lewis, 2005). The increase in popularity may be attributed to a national call for high school reform that addresses significant challenges facing the American educational system including increased global competition and collaboration (Richardson, 2007; Schultz, 2007), a fragmented K-16 educational system (Hughes, 2010), and a generally useless and meaningless senior year of high school (National Commission on the High School Senior Year, 2001). Dual enrollment has been advanced as a solution to each of these challenges. Despite the recent increase in popularity of dual enrollment programs and its potential to solve many of these problems facing American education, there has been limited research documenting its efficacy and effectiveness (Johnson & Brophy, 2006).

Educational leaders have suggested a variety of forms of dual enrollment, initially targeting academically advanced students (Kim et al., 2006). As dual enrollment has expanded, it has grown to include low-level academic students and career and technology education students (Bailey & Karp, 2003). Dual enrollment programs range from Advanced Placement courses on high school campuses taught by high school teachers to Early College programs housed entirely on college campuses, making generalizable research difficult because each form is so unique (Clark, 2001).

Even when researchers have been able to determine that dual enrollment has had a positive effect on student learning outcomes; questions arise due to the self-selection of students into the program (Lewis & Overman, 2008). This study attempts to begin to answer the questions of self-selection by determining the motivation of students

participating in dual enrollment programs. The SDT provides an excellent framework for understanding and categorizing motivation and could allow researchers to determine if students with certain motivational profiles outperform students with similar profiles. The current qualitative study seeks to understand why high school students participate in dual enrollment programs in relation to the SDT.

The challenge for advocates of dual enrollment is the mixed messages sent to students. On one level, students are encouraged to become life-long learners through increased rigor at the high school level; however, to entice them to participate in the program, educators must promise significant rewards such as college credit. The two goals are in conflict, with the former encouraging intrinsic motivation and the latter extrinsic motivation. While these two forms of motivation are not in conflict with each other, it is possible that solely relying on extrinsic motivation could lead to a lack of persistence (Deci & Ryan, 1985). Furthermore, relying on extrinsic enticements may discourage students from developing and discovering a personal calling. As educational institutions at the high school and postsecondary levels seek to expand and enhance dual enrollment programs, it is essential to provide holistic support, developing a proper student motivation toward the future and encouraging the development of the whole person (Dalton, 2001).

Career counseling, then, is a critical endeavor within schools, especially Christian schools, because shaping a student's vision for the future is more complex than creating and implementing a program. While dual enrollment has the potential to save students money, provide a head start in college, or prepare students for college level work (Buchanan, 2006), it may not inspire a vision for the future or the development of a personal mission without significant personal interaction and guidance.

The success of reform efforts such as dual enrollment needs to be measured quantitatively through studies measuring college persistence and academic performance (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Lewis & Overman, 2008; Swanson, 2008); however, the definition of success might significantly change through a qualitative study highlighting the motivation of students participating in the program. A qualitative study of this nature may develop an understanding as to why students who have participated in dual enrollment are more likely to persist in college and are more academically prepared than students who do not. Perhaps, students who have developed a clear vision for the future (i.e., a personal calling) are motivated and driven to accomplish this calling. Creating sustainable high school reform requires rigorous qualitative research that develops an understanding of student motivation, grounding this motivation in current motivational theory and linking it to the current understanding of a personal calling.

Problem Statement

Dual enrollment continues to increase in popularity and has been suggested as a way to unite high school and postsecondary institutions, increase postsecondary completion, and provide much needed rigor to the high school senior year (Karp & Jeong, 2008). Given the monumental expectations for dual enrollment reform efforts, one would expect that the efficacy of such programs were well supported in the literature through both quantitative and qualitative studies; however, this is not so. Furthermore, researchers have noted that student motivation is a critical factor in determining success, yet no study was found that explicitly sought to unite current motivational theory to the efficacy of dual enrollment programs. Likewise, research linking motivation for participation in dual enrollment and personal calling was difficult to find.

Understanding student motivation is essential as schools seek to create programs that propel students into the future. Often, education is proposed as a means to improving students' socioeconomic status and making life more enjoyable; however, merely increasing income does not sustain happiness or encourage persistence. In particular, Christian education seeks to develop students to have a passion for helping those in need, both physically and spiritually. To this end, dual enrollment should be a means of accomplishing this mission. Therefore, this study seeks to understand why students in Christian schools participate in dual enrollment.

Purpose Statement

The purpose of this phenomenological study is to understand student motivation for participation in dual enrollment in relation to the SDT (Deci & Ryan, 1985; Ryan & Deci, 2000) and to connect this motivation to research on calling (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009; Elangovan, Pinder, & McLean, 2009). Dual enrollment has been advanced as a promising, viable, and sustainable reform model (Quint, Thompson, & Bald, 2008); however, little research has been conducted to substantiate why students participate in dual enrollment or to determine if students in dual enrollment programs have a defined life purpose for participating. In the last five years, research on job satisfaction and enjoyment has increased in the literature, indicating that the concept of a calling is central to human fulfillment. Therefore, it is essential to understand if high school students in Christian schools express a sense of calling.

Significance of the Study

Research on the efficacy of dual enrollment indicates that students benefit from participating in dual enrollment programs; however, this benefit is often muted by the student's self-selection into the programs (Lewis & Overman, 2008). This study will

provide a research base exploring students' motivation for participating in dual enrollment programs and begin to link current motivational theory to the implementation of dual enrollment.

Currently, educational reformers have advanced dual enrollment as a sustainable reform model despite limited empirical data supporting its efficacy. Successful implementation of dual enrollment; however, hinges on developing a full understanding of individual motivation. Farkas, Johnson, and Foleno (2000) stated,

Understanding what matters to people, what motivates them and why they do what they do can make the difference . . . between reforms that zero in on a problem and those that are off the mark. And it can make the difference between policies that actually work and those that go awry. (p. 8)

Therefore, the current study will begin a research thread exploring why students in Christian high schools are choosing to participate in dual enrollment, providing support for administrative and guidance personnel as they counsel individual students, develop sustainable Christian high school dual enrollment programs, and seek to graduate motivated students prepared to enter adulthood with a personal mission.

Research Questions

The following questions will guide this study:

1. What do students indicate as their motivation to participate in dual enrollment programs?

While research on student motivation to participate in dual enrollment has been conducted (Buchanan, 2006; Carraway, 2006; Medvide & Blustein, 2010), the literature lacks a study that develops a thorough understanding of why students are participating in dual enrollment programs. Buchanan (2006) and Carraway (2006) found that students

participated to realize financial benefits of earning college credit in high school, to have an academic head start in college, and to be more prepared for college level coursework. Medvide and Blustein (2010) found that dual enrollment programs facilitated increased levels of motivation in urban minority students; however, they were unable to identify “the factors within and outside of dual enrollment programs” contributing to increased motivation (p. 551). This study will identify all factors for participation, providing context for why students in Christian schools are motivated, intrinsically and extrinsically, to participate in dual enrollment programs.

2. Are students intrinsically and/or extrinsically motivated to participate in dual enrollment programs?

While documenting the factors contributing to students’ motivation to participate in dual enrollment is necessary, it is equally necessary to delineate between intrinsic and extrinsic factors. Deci and Ryan (1985) suggested there is a fundamental difference between intrinsic and extrinsic motivation, with increased levels of intrinsic motivation leading to greater psychological health and well-being (Krapp, 2005). Medvide and Blustein (2010) found that urban minority students mentioned both intrinsic and extrinsic motivations for participating in dual enrollment; however, since a complete profile of factors contributing to participation in dual enrollment was not obtained, it is unclear whether students were driven to participate for intrinsic or extrinsic reasons.

Because there are a variety of factors that could motivate students to participate in dual enrollment, answering this research question will highlight the primary motivation for participation. Current research indicates that most students are extrinsically motivated to participate in dual enrollment (Buchanan, 2006; Carraway, 2006); however, this research was not solely focused on determining students’ motivation for

participating. This research will explore, in depth, why students in Christian schools are participating in dual enrollment. Understanding student motivation at this level will aid in the implementation and expansion of dual enrollment programs and will assist school personnel in creating and maintaining an environment where students are able to properly develop.

3. The students participating in this study are attending a Christian high school; therefore, is there a sense of personal calling to participate in dual enrollment?

Within the context of Christian education, it would be valuable to document the motivation of Christian school students. This knowledge would greatly assist Christian school leaders as they develop and disciple Christian school students. As students describe their motivation to participate in dual enrollment programs, do they articulate a personal calling? Dalton (2001) defined personal calling as “a special summons by God to pursue a life role or task” (p. 20). Similarly, Dik and Duffy (2009) defined calling as “a transcendent summons, experienced as originating beyond the self, to approach a particular life role . . . that holds other-oriented values and goals as primary sources of motivation” (p. 427). College students typically possess a strong sense of personal calling; however, this calling is often not articulated (Dalton, 2001). Since the high school students in the current study are enrolled in college by virtue of the dual enrollment program, it is essential to understand their sense of personal calling.

For the purpose of this study, participants will not be forced to describe a particular type of calling. Rather, the participants will be free to describe their personal calling, if one exists, regardless of the type. In order to develop an understanding as to why students are participating in dual enrollment programs, it is essential for participants to articulate their calling organically. In particular, students in Christian schools may

tend to articulate a religious calling if they are stimulated to do so. Therefore, this study will explore calling in a broad sense.

Elangovan et al. (2009) linked calling and intrinsic motivation, suggesting that individuals will exhibit a calling when they are acting autonomously. Therefore, exploring calling is essential in understanding motivation. Students that are motivated by monetary gain, for example, should tend to articulate extrinsic motivation. In contrast, intrinsically motivated students should articulate a sense of personal calling. Exploring calling, then, illuminates individual motivations and provides practical evidence of the reasons individuals participate in dual enrollment.

Regardless of whether students are or are not motivated by a sense of personal calling, this information will be particularly useful to Christian school administrators and guidance counselors as they seek to expand and enhance current Christian school dual enrollment programming and career counseling. Providing quality dual enrollment programs “involves exploration with students of their sense of personal calling and destiny to understand their deepest values and commitments for the future” (Dalton, 2001, p. 20).

Delimitations and Limitations

Delimitations. The delimitations of the study are the selective nature of the population studied. The students attend an Association of Christian Schools International (ACSI) Christian high school and are dual enrolled in an evangelical Christian university in the Southeast. The participants are strong academic students, maintaining an un-weighted grade point average (GPA) greater than or equal to 3.0 and enrolling in at least two core dual enrollment courses. The GPA requirement of this study corresponds directly with the admission criteria of the host university. Core dual enrollment courses

include content areas such as English, mathematics, science, social science, and foreign language.

Limitations. Generalizing the results of this study is limited by the selective nature of the population under investigation. Dual enrollment has been employed in all 50 states (Andrews, 2001), includes students of varying academic ability (Clark, 2001), and is generally considered a public school reform model. This study, however, is limited to students in private, ACSI schools with a GPA greater than or equal to 3.0. The GPA limitation is due to the admission criteria determined by the host university. While students are generally similar, there is the potential that the motivations underlying this population's participation are not congruent with the motivations of students in public schools or with the motivations of students with less academic acumen. The participants attend religious institutions; therefore, the potential exists that the faith of the students could be a source of motivation to participate in the dual enrollment program. Students attending public schools might not share a similar faith tradition or might not be trained to include faith as a motivational rationale for action.

Research Plan

The research sought to understand student motivation for participation in dual enrollment in relation to the SDT (Deci & Ryan, 1985; Ryan & Deci, 2000) and to connect this motivation to research on calling (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009; Elangovan et al., 2009). A phenomenology utilizing the Consensual Qualitative Research (CQR) method was conducted to explicitly explore the student perspective for enrolling in dual enrollment programs (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, Knox, Williams, & Ladany, 2005). Consistent with recommendations by Hill, Thompson, and Williams (1997) and Hill, Thompson, Hess, et al. (2005), a total

of fifteen students from two ACSI schools, eight from one school and seven from another, were given an open-ended questionnaire and interviewed individually to determine their motivation for participation in the dual enrollment program. Students also completed the Academic Motivation Scale (AMS) as a means of investigating their motivation to participate in dual enrollment (Vallerand, Pelletier, Blais, Briere, Senecal, & Vallieres, 1992). The data analysis followed the protocol recommended in CQR (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess et al., 2005), utilizing a research team and research auditors. The research team created domains based on the data from the open-ended questionnaire and individual interview. The AMS was utilized alongside the open-ended questionnaire and individual interview in developing the domains, providing additional insight into the student's motivation to participate in the dual enrollment program. Domains were then analyzed to determine the core ideas emerging from the data. Following confirmation from the research auditors, the data from individual participants was cross-analyzed to determine the representativeness of the sample.

CHAPTER TWO: LITERATURE REVIEW

Introduction

High school reform efforts are prevalent, with current reform models focusing on increasing rigor, relevance, and relationships in high schools to improve students' motivation and engagement (Jerald, 2006). Dual enrollment programs have arisen nationally within this reform framework and are an increasingly common reform initiative (Jerald, 2006; Kim et al., 2006; Kleiner & Lewis, 2005; Marshall & Andrews, 2002). Research has documented dual enrollment policies and procedures (Harnish & Lynch, 2005), the benefits of dual enrollment (Bailey, Hughes, & Karp, 2002; Swanson, 2008), and constituent perceptions toward dual enrollment programs (Wright & Bogotch, 2006); however, there is a paucity of research exploring why students participate in dual enrollment programs (Johnson & Brophy, 2006). The following chapter explores dual enrollment in the context of current high school reform efforts and student motivation. Several established dual enrollment models are analyzed and the theoretical framework of the Self-Determination Theory (SDT) is established to deepen the understanding of students' motivation to participate in dual enrollment (Deci & Ryan, 1981, 1985; Ryan & Deci, 2000). Finally, the concept of a calling is defined and explored.

Theoretical Framework

The SDT provides a framework for understanding human motivation (Deci & Ryan, 1985; Ryan & Deci, 2000). According to the SDT, motivation has three dimensions: intrinsic, extrinsic, and amotivation, comprising the whole of an individual's motivation (Deci & Ryan, 2008a). Intrinsic motivation (IM) describes actions that are undertaken because the action is "interesting and spontaneously satisfying" (Deci &

Ryan, 2008a, p. 15). Specifically, there are three types of IM, IM - to know, IM - to accomplish, and IM - to experience stimulation (Vallerand et al., 1992). In contrast, extrinsic motivation is when an individual engages in an activity because of a separate consequence. Vallerand et al. (1992) described three types of extrinsic motivation: external regulation, introjected regulation, and identification. Amotivation is the absence of intrinsic and extrinsic motivation (Gagne & Deci, 2005; Vallerand et al., 1992).

Motivation can further be delineated according to two types: autonomous and controlled motivation (Deci & Ryan, 2008b). Autonomous motivation contains all forms of intrinsic motivation and extrinsic motivation that has been incorporated into one's sense of self. In contrast, controlled motivation,

consists of both external regulation, in which one's behavior is a function of external contingencies of reward or punishment, and introjected regulation, in which the regulation of action has been partially internalized and is energized by factors such as an approval motive, avoidance of shame, contingent self-esteem, and ego-involvements. (Deci & Ryan, 2008b, p. 182)

Based on the SDT, Deci (2009) suggested that all human beings need competence, autonomy, and relatedness. These needs drive behavior. In particular, Deci (2009) described effective school reform from the perspective of the SDT, concluding that successful reform will fulfill these needs. Dual enrollment programs, then, as a reform initiative, must meet each of these psychological needs in order to be successful.

Deci and Ryan (2008b) highlighted the importance of proper aspirations for participating in an activity. They define aspirations as “a function of the degree to which the basic needs for competence, relatedness, and autonomy have been satisfied versus thwarted over time” (p. 183). If an individual's needs have been suppressed, they will

show a proclivity for extrinsic motivation rather than a propensity for intrinsic motivation. In the end, extrinsically motivated individuals are less likely to exhibit psychological wellness (Deci & Ryan, 2008a).

Amotivation	Extrinsic Motivation				Intrinsic Motivation
	External Regulation	Introjected Regulation	Identified Regulation	Integrated Regulation	
Absence of intentional regulation	Contingencies of reward and punishment	Self-worth contingent on performance; ego-involvement	Importance of goals, values, and regulations	Coherence among goals, values, and regulations	Interest and enjoyment of the task
Lack of Motivation	Controlled Motivation	Moderately Controlled Motivation	Moderately Autonomous Motivation	Autonomous Motivation	Inherently Autonomous Motivation

Figure 1: SDT continuum. This figure illustrates the levels of motivation within the SDT and their relationship to controlled and autonomous motivation (Deci & Ryan, 2008a; Gagne & Deci, 2005).

Review of the Literature

This qualitative study attempts to understand dual enrollment within the context of ACSI Christian education; however, it was difficult to locate literature exploring dual enrollment within this context. As a result, it is imperative to connect dual enrollment within Christian education to dual enrollment in other contexts. The following literature review explores common reasons for pursuing dual enrollment as a reform model and the most common types of dual enrollment programs. Subsequently, the concept of calling is defined, explored, and connected to dual enrollment, the SDT, and Christian education.

High school reform. American society has changed dramatically over the last 100 years; however, the structure and scope of the American high school has not appreciably been altered (Frey, 2005). Reform efforts are not new; they have been a constant theme in American education, dating back to the beginning of education in our nation (Office of Vocational and Adult Education, 2004). Current political, cultural, and social concerns, however, have accelerated the call for high school reform and have

intensified the interest in producing college ready high school graduates (Kuo, 2010).

Twenty-first century reform efforts must address three rapidly emerging issues:

globalization, the continuity of the educational system, and the wasted senior year.

Globalization. At the dawn of the twenty-first century, globalization has increased concern that new skills are necessary for individuals and nations to thrive (Boswell, 2001; Center for Teaching Quality, 2007; Richardson, 2007; Schulz, 2007). Competition from emerging economies, such as India and China, are challenging the traditional American economic dominance and are forcing policy makers to consider substantive educational change (Kuo, 2010). Friedman (2007) recorded the dramatic technological influences that have led to the “flattening” of the world and he suggested that new skills are required to participate in this flat world. For example, Friedman highlighted twenty-first century skills such as collaboration, adaptation, and synthesis. Recognizing the same economic and global challenges, Richardson (2007) suggested that the American educational system must no longer seek low-level thinking skills such as information recall, but rather should focus on higher-level cognitive skills such as critical thinking, evaluation, and assessment.

Reform efforts in the flat world center on creating environments promoting rigor, relevance, and relationships: the three Rs (Alaie, 2011; Boggess, 2007; Frey, 2005).

While each of the three Rs is important, considerable attention has been placed on increasing rigor in high schools (Washor & Majkowski, 2006). Boggess (2007) defined rigor as “learning in which students demonstrate an in-depth mastery of challenging concepts through thought, analysis, problem solving, evaluation or creativity” (p. 62).

Increasing rigor is seen as a means to produce college-ready students that are equipped to

successfully participate in the rapidly changing global marketplace (Washor & Majkowski, 2006).

Educational continuity. Education in America has changed considerably since its inception in 1635 (Boyer, 1983). Boyer (1983) documented the dramatic rise in high school enrollment throughout the twentieth century, stating, “the high school had, in fact, become the people’s college” (p. 54). Early in the twenty-first century, however, high school is no longer viewed as an educational end and educational reformers are seeking to promote more students to attend postsecondary educational opportunities.

A key limitation in encouraging and preparing students to enroll in postsecondary education is the lack of continuity between high school and postsecondary institutions (Andrews, 2004; Orr, 1998). Often, high schools and institutions of higher education duplicate efforts by teaching similar curriculum, wasting students’ time and the taxpayers’ precious financial resources (Bontrager, Clemetsen, & Watts, 2005).

Traditionally, compulsory education has focused on K-12 education; however, current reform efforts are expanding the limits of the system to include K-16 (Mensel, 2010; National Commission on the High School Senior Year, 2001). Mensel (2010) described a successful program at Victor Valley College in California that is connecting the local community college to the high school and community by blurring the line between the K-12 educational system and traditional community college. The program, aptly titled “the Bridge,” seeks to encourage a positive transition from the K-12 educational system to college and university. Increased communication and collaboration between two educational systems that have historically been isolated has the potential to dramatically alter the educational landscape and address concerns regarding college persistence and completion (Hughes, 2010).

The senior year. The senior year of high school poses a unique challenge for many students and schools because of the perception that the senior year is largely meaningless (Koszoru, 2005; National Commission on the High School Senior Year, 2001). Many seniors are able to take reduced academic loads because they have already completed required courses for graduation and fulfilled college admission requirements (Andrews, 2004). As a result, few seniors grow academically, and many regress, resulting in a difficult transition to postsecondary expectations.

Andrews (2000) suggested that new programs, such as dual enrollment are needed to provide senior high school students adequate courses that provide incentive to develop academically. When senior students are properly challenged, their transition to college is mediated and they are more likely to persist in college. Rather than a time of relaxation and celebration, the senior year should be a “launching pad” for the future (National Commission on the High School Senior Year, 2001). The National Commission on the High School Senior Year (2001) summarizes the aim of modern high school reform,

In the agricultural age, postsecondary education was a pipe dream for most Americans. In the industrial age it was the birthright of only a few. By the space age, it became common for many. Today, it is just common sense for all. (p. iii)

Dual enrollment as reform. Dual enrollment has emerged as a viable option for policy makers interested in high school reform efforts centered on increasing rigor, aligning secondary and postsecondary education, and redeeming the senior year (National Commission on the High School Senior Year, 2001; Quint et al., 2008). Participation in dual enrollment programs has exploded in recent years. Kleiner and Lewis (2005) estimated that 813,000 high school students took college level courses in 2002-03, with 680,000 taking college courses through dual enrollment programs. Dual enrollment

programs have been established in all 50 states (Andrews, 2001) and more than 87% of public high schools offer students the opportunity to earn college credit before graduation (Waits, Setzer, & Lewis, 2005).

The history of dual enrollment is vague; however, Puyear et al. (2001) credited J. W. Osborn with initiating the dialogue on removing the repetition in curriculum between high school and postsecondary schools. Osborn's vision was not realized until the advent of the Advanced Placement program in 1956. Traditional dual enrollment programs, however, probably began in 1972 at Syracuse University with Project Advance (Project Advance, 2009; Puyear et al., 2001). Project Advance at Syracuse University (SUPA) was initiated to combat senior complacency and was generally reserved for academic students; however, the program has grown substantially, currently enrolling over 8000 high school seniors interested in participating in rigorous coursework from 165 high schools (Project Advance, 2009). Regardless of the actual date of commencement, it is clear that dual enrollment arose to address concerns in curriculum, rigor, and system unity.

Despite the increasing popularity of dual enrollment programs, little research has substantiated its effectiveness (Karp & Jeong, 2008; Welsh, Brake, & Choi, 2005). In the absence of research, however, dual enrollment programs have expanded to include students of all abilities, with many reformers suggesting that dual enrollment is a potential solution for motivating struggling students and increasing access to postsecondary education for underserved and underrepresented groups (Puyear et al., 2001; Welsh et al., 2005). The epicenter for the expansion of dual enrollment programs, then, is the community college because the community college is viewed as the proper postsecondary option for many of the academically underserved and underrepresented

students in America (Welsh et al., 2005). Reform efforts have transitioned from a narrow focus on the academic elite to include the underserved in an attempt to increase the opportunities for students in the future. The rapidly changing global economy is placing pressure on the American education system to produce knowledge workers rather than laborers or manufacturers (Orr, 1998).

Furthermore, dual enrollment programs exist in a variety of forms. Each form represents service to a specific target academic demographic. In order to understand how dual enrollment promises to fuel reform and ease the nation's educational challenges, it is essential to consider the numerous types of dual enrollment programs that exist.

Types of dual enrollment. Dual enrollment is a broad title representing a variety of programs through which students obtain college credit and high school credit simultaneously (Clark, 2001). Dual enrollment programs are often referred to as concurrent enrollment or dual credit; however, Bailey and Karp (2003) referred to credit-based transition programs for all programs that offer college credit. Regardless of the title, credit-based programs are found in four basic forms.

Clark (2001) divided credit-based transfer programs into four categories: Type I, Type II, Type III, and Type IV. Type I programs are exam based, meaning that students complete college coursework throughout the school year, but do not receive college credit until a satisfactory score is earned on an end of the year exam (Griffith, 2009). Such programs include the Advanced Placement (AP) program and the International Baccalaureate (IB) program.

Type II programs are school based where students attend college courses at their local high school (Clark, 2001). The courses may be taught by college professors or by qualified high school faculty. Students completing the courses earn high school credit,

sufficing their high school graduation requirement, and they earn college credit from the institution validating the work completed. College credit is awarded based on the overall course grade.

Type III programs differ slightly from Type II programs. Rather than attending class on the high school campus, students leave their high school and attend classes on the college campus (Clark, 2001; Krueger, 2006). Students may either take courses with college students or they may be isolated into courses with other high school students.

Distance learning courses are becoming increasingly popular as a format for delivering credit based courses. Krueger (2006) considers them in the same category as Type III courses since both the instructor and the credit are off-campus. It is possible, however, to consider distance learning dual credit programs as Type II because the students do not leave their high school campus. In the end, the distinction may be merely semantic as it is more critical to acknowledge that distance learning opportunities are rapidly increasing and are a viable option for high schools seeking dual enrollment opportunities.

Type IV programs are career preparation programs (Clark, 2001). These programs provide students with the opportunity to learn technical skills and are often funded by federal grants through the Perkins Act (Boswell, 2001; Clark, 2001). Type IV programs generally attract average to low achieving academic students, providing them with the necessary skills to enter immediately into the job market.

Bailey and Karp (2003) further delineated dual enrollment programs as singleton, comprehensive, and enhanced comprehensive programs. Singleton programs are designed to provide students with a “head start” in college and represent a fraction of the courses taken in high school. Comprehensive programs are complete programs, requiring

students to take most, if not all, of their courses within the program. Enhanced comprehensive programs are fully developed, including curriculum and students services. Enhanced comprehensive programs are generally created to help students that struggle academically or are less likely to progress to postsecondary education, providing an adequate transitional program.

Advanced placement. Advanced Placement (AP) programs are type I, singleton programs (Bailey & Karp, 2003; Clark, 2001). College Board trained high school teachers on the high school campus usually teach AP courses. However, schools with limited resources or limited enrollment often permit students to take AP courses through distance learning providers. Students do not receive college credit until they matriculate to college. Generally, a passing score of three will enable a student to earn college credit; however, each college or university determines its own policy for accepting AP scores.

International baccalaureate. The International Baccalaureate Organization (IBO) offers three programs for students dependent on the age of the student: The Primary Years Programme (ages 3-12), The Middle Years Programme (ages 11-16), and The Diploma Programme (ages 16-19; International Baccalaureate Organization, 2010). The Diploma Programme is a comprehensive, type I program for junior and senior students (Bailey & Karp, 2003). Students take courses in six groups: language, second language, experimental sciences, the arts, mathematics and computer science, and individuals and societies. High school teachers teach the courses on the high school campus. In addition to coursework, students must complete an extended essay, take a course in the theory of knowledge, and participate in creativity, action, and service (IBO, 2010).

If the students successfully complete all of the requirements, including passing scores on the end of course exams; they receive an International Baccalaureate (IB)

diploma and may earn college credit. As with AP, postsecondary credit is awarded after matriculation and is dependent on a student's exam score and the level of the course taken. IB courses are offered at two levels, higher level (HL) and standard level (SL). A score of four, out of seven, is considered passing (IBO, 2010).

Early college. Early college programs are a relatively new reform effort and are a rapidly growing option, currently enrolling approximately 47,000 students nationwide (Steinberg & Allen, 2011). Early college programs are type III, enhanced comprehensive programs. These programs are usually "small, autonomous schools" (Hoffman, Vargas, & Santos, 2009, p. 47), founded in partnership with a college or university. Similar to a traditional high school, students enter in ninth grade; however, prior to graduation students are encouraged to complete the requirements for an associate's degree. Often early college programs encourage students to choose an area of interest as a method of motivation (Brewer, Stern, & Ahn, 2007). Some early college programs extend through a fifth year to ensure that students are able to complete the necessary postsecondary graduation requirements.

Early college programs are unique in the target population. Typical dual enrollment is created to provide a head start for academically advanced students. Early college, however, targets underserved and underrepresented students, seeking to provide them with a pathway to a postsecondary degree (Alaie, 2011; Hoffman et al., 2009; Kuo, 2010). The Bill and Melinda Gates Foundation is a major advocate for early college and has provided funding for many of the early college schools throughout the nation (Alaie, 2011; Ongaga, 2010).

Middle college. Middle college programs are slightly different than early college programs; however, it is often semantics as the name is often a matter of choice. Krueger

(2006) makes a distinction between middle college schools and early college schools because early college schools are enhanced comprehensive programs while middle college programs are singleton programs. Middle colleges, then, would be classified as type II, singleton programs. Students completing middle college programs do not graduate with an associate's degree.

Career and technical education programs. Career and technical education programs (CTE) are type IV, enhanced comprehensive programs. Some CTE programs are referred to as Tech Prep programs; however, as with other types of dual enrollment, there is little consensus on the use of specific titles. CTE programs began in 1990 with the reauthorization of the Carl D. Perkins Vocational and Technical Education Act and are generally characterized by an articulation agreement between a high school and a postsecondary school (Bailey & Karp, 2003; Barnett & Hughes, 2010).

CTE programs target academically challenged students so students are not necessarily taking college courses in high school (Kazis, 2005). Students are earning “credits in-escrow” when they matriculate into the college of choice (Hughes, Karp, Bunting, & Friedel, 2005). In this format, students are not truly dual enrolled; rather students are enabled to enter a technical school and bypass the entry-level courses. Courses are offered on high school campuses, at a technical school, or on the community college campus (Clark, 2001).

Dual credit. Dual credit programs are type II or type III, singleton programs where students take courses for both high school and college credit (Andrews, 2001). Dual credit courses may be taught by qualified high school teachers or by college faculty on the high school campus (Rochford, O’Neill, & Gelb, 2009). Students participating in

dual credit programs graduate high school with a high school transcript and a postsecondary transcript.

Concurrent enrollment. Concurrent enrollment is a type III, singleton program. Concurrent programs are very similar to dual credit programs; however, these programs provide students with postsecondary credit only (Andrews, 2001).

Benefits of dual enrollment. Dual enrollment programs continue to expand and increase throughout the nation, though research documenting the efficacy of dual enrollment has been limited. Despite the lack of research, educators believe that dual enrollment is vital to achieving substantive high school reform and uniting secondary and postsecondary educational systems. Karp and Jeong (2008) documented nine benefits commonly cited for dual enrollment programs: extending academic challenges to gifted students who have exhausted the traditional high school curricula, increasing academic rigor and encouraging challenging coursework, encouraging low-achieving students to graduate from high school, reducing the need for remediation in college, increasing student motivation to attend college, easing the transition to college, improving the relationships between high schools and universities, improving college graduation rates, and reducing the cost of college.

Rigorous research supporting these claims; however, is quite limited (Speroni, 2010). Lewis and Overman (2008) found that students participating in dual enrollment were slightly more likely to show positive outcomes compared to students that did not participate in dual enrollment. Their research, however, did not significantly support the efficacy of dual enrollment. Smith (2007) found that participation in dual enrollment was significantly correlated to increased educational aspirations. Kim and Bragg (2008) found that as students increase the amount and rigor of courses taken, they are more

likely to be college ready. Dutkowsky, Evensky, and Edmonds (2009) researched the cost benefits of dual enrollment and AP, concluding that each provided financial benefits for students.

Karp et al. (2007) conducted research on dual enrollment programs in Florida and New York, concluding that dual enrollment significantly impacted persistence in college, postsecondary GPAs, and the number of postsecondary credits earned. Their research included both dual credit and CTE programs, highlighting the efficacy of both types of dual enrollment. Speroni (2010), however, found that the benefits of dual enrollment were limited to students that enrolled in a particular math course as opposed to general enrollment in dual enrollment courses.

In the first study on a nationally representative population, Swanson (2008) found that participation in dual enrollment increased the likelihood to persist through the second year of college and students were more likely to immediately enroll in post secondary education. In effect, dual enrollment propelled students forward, providing them with a “nest egg” of credit (Swanson, 2010).

Student perspectives of dual enrollment. Dual enrollment programs have been heralded as potential solutions to high school reform and research has indicated that dual enrollment programs positively impact a variety of educational outcomes; however, dual enrollment programs have little impact unless students choose to participate in the programs. Research indicates that students participate in dual enrollment programs for a variety of reasons. O’Connor and Justice (2008) found students participation in dual enrollment in rural northeast Texas was impacted by increasing the challenge of high school, improving college readiness, realizing financial benefits, and improving college scheduling opportunities.

In a similar study on the Running Start program in Washington State, Meld (2000) found students were motivated to participate to earn college credit, reduce the cost of college, take control of their learning, and to be in school fewer hours. Buchanan (2006) agreed, finding that students in rural western North Carolina chose to participate in dual enrollment to benefit from reduced tuition costs in college.

Creating programs to enhance or reform high school initiatives is an excellent goal; however, merely altering the system is not enough to stimulate substantive change unless students are participating in the program. Furthermore, student participation for the wrong reasons does not encourage sustainable reform. Therefore, it is necessary to ground dual enrollment participation in motivational theory.

Motivation, calling, and the self-determination theory. Research on calling and vocation is well established in the literature (Farkas, Johnson, & Foleno, 2000; Sweezy, 2009); however, “research has not yet investigated specific mechanisms that may link these variables in the career development process” (Dik, Sargent, & Steger, 2008, p. 26). Dual enrollment, a mechanism in the career development process, is situated in a pivotal location and, if implemented properly, has the potential to significantly determine an individual’s career direction. Therefore, it is essential to develop an understanding of the motivations students have as they engage in programs such as dual enrollment.

While definitions of calling are often confounding (Dik, Duffy, & Eldridge, 2009), it is possible to find consensus. Elangovan et al. (2009) generally defined calling as “a course of action in pursuit of pro-social intentions embodying the convergence of an individual’s sense of what he or she would like to do, should do, and actually does” (p. 430). Throughout history, interpretations of calling have evolved, generally falling into one of four categories (see Figure 2; Elangovan et al., 2009).

Religious Non-Occupational	Secular Non-Occupational
Religious Occupational	Secular Occupational

Figure 2: Perspectives on calling. This figure illustrates the four perspectives on calling (Elangovan et al., 2009).

Religious definitions of calling center on an external summons (Davis, 1997; Dik & Duffy, 2009). Individuals experiencing a calling are compelled to participate in an activity or profession and often find it difficult to refuse (Davis, 1997). Within the context of Christian education, then, Davis (1997) provided the most salient definition of calling, “the call of God as a summons, as a compelling experience, as a coercive invitation practically impossible to refuse” (p. 131).

Vocation, in contrast, is defined as an “approach to a particular life role that is oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation” (Dik & Duffy, 2009, p. 428). Vocation is a calling without a transcendent, external summons by God (Dik & Duffy, 2009); therefore, fitting the definition of secular. Dalton (2001) defined calling as a “sense of personal destiny, that one is guided by an unfolding life plan or purpose” (p. 19).

From a Christian perspective, however, it is critical to make a distinction between a calling and a vocation. A calling has religious significance while a vocation lacks religiosity. In the literature, this is epicenter of discrepant definitions (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009; Elangovan et al., 2009). Millard (2009), for example, defines an individual’s life purpose as the intersection of one’s foundational values, personal mission, and unique design. This model is not inherently religious, yet when a Christian worldview is juxtaposed on the model, it is transformed into a calling.

Beyond calling and vocation, however, lies a third motivation for participating in dual enrollment. Dik et al. (2009) suggested that individuals pursue a career for “materialistic ends, that is, a path to accruing power, status, or wealth” (p. 26). Students participating for these reasons are drawn to external rewards and should articulate an extrinsic and controlled motivation (Gagne & Deci, 2005).

Although it would not be expected, a calling, a vocation, or material gain might not motivate some students. These students could articulate that they do not know why they are participating or they may remain silent. Within the SDT, these students would be described as amotivated because they lack motivation entirely (Gagne & Deci, 2005).

Motivation to participate in dual enrollment, then, could be viewed along a motivational continuum, with calling associated with autonomy and intrinsic motivation (Elangovan et al., 2009). Vocation would occupy the center of the continuum, mediating between a religious calling and humanistic materialism. Understanding and developing this continuum within the context of Christian education is essential for programs such as dual enrollment and for career development in general.

Juxtaposing the dual enrollment motivational continuum with the SDT motivational continuum (see Figure 3) illustrates the importance of proper motivation and illuminates the need for career placement programs, such as dual enrollment, to guide students to develop a proper motivation (Dalton, 2001). This need is particularly salient within Christian education because the prevailing mission of Christian schools is to produce students that are prepared for life (Association of Christian Schools International, 2008). Dual enrollment is a perfect opportunity for Christian educators to train both the head and the heart, integrating intellectual and spiritual development and

uniting the attainment of an education to one's ultimate purpose in life (Dalton, 2001; Millard, 2009; Veith, 2002).

Amotivation	Extrinsic Motivation				Intrinsic Motivation
	External Regulation	Introjected Regulation	Identified Regulation	Integrated Regulation	
Absence of intentional regulation	Contingencies of reward and punishment	Self-worth contingent on performance; ego-involvement	Importance of goals, values, and regulations	Coherence among goals, values, and regulations	Interest and enjoyment of the task
Lack of Motivation	Controlled Motivation	Moderately Controlled Motivation	Moderately Autonomous Motivation	Autonomous Motivation	Inherently Autonomous Motivation
No Motivation	Materialist Motivation	Vocation		Calling	

Figure 3: The SDT continuum juxtaposed with career selection motivations. This figure illustrates how career motivations relate to the SDT continuum (Deci & Ryan, 2008a; Gagne & Deci, 2005).

Summary

Research on dual enrollment is limited, mainly focusing on descriptive research and outcomes of dual enrollment programs. Few researchers have attempted to understand why students are motivated to participate in dual enrollment programs, with most of these studies focusing on the partnership between rural school districts and a local community college (Buchanan, 2006; Carraway, 2006; Meld, 2000; O'Connor & Justice, 2008).

In order for educators to create successful and sustainable dual enrollment programs, it is essential to understand student motivation more fully. This research grows from the research on high school reform and the efficacy of dual enrollment, seeking a deeper understanding of the student motivations for participation. The SDT provides the theoretical framework for this study as dual enrollment programs potentially send students mixed messages. On one side, dual enrollment programs have the potential

to increase autonomy and choice, theoretically increasing the potential to develop intrinsic motivation (Deci & Ryan, 2008a). However, these same dual enrollment programs entice students with extrinsic rewards such as college credit and reduced tuition costs (Andrews, 2004).

This study attempted to develop an understanding of student motivation as it relates to dual enrollment, thereby filling a gap in the literature. Connecting reform efforts to motivation is a critical step in providing a theoretical framework for dual enrollment and spurring further research on the foundational assumptions of dual enrollment programs (Johnson & Brophy, 2006).

CHAPTER THREE: METHODOLOGY

Introduction

I conducted a phenomenology utilizing the Consensual Qualitative Research method (CQR) to gain a deep understanding of what motivates students in evangelical Christian high schools to participate in concurrent enrollment programs with evangelical Christian universities (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). While much has been written about types of dual enrollment programs (Jordan, Cavalluzzo, & Corallo, 2006; Kleiner & Lewis, 2005), minimal research has been conducted on the motivations driving students to dual enroll, with most of the research documenting students' perceptions of dual enrollment programs (Buchanan, 2006; Carraway, 2006; Harnish & Lynch, 2005). Furthermore, research is minimal linking students' motivation to participate in dual enrollment programs to motivational theories. This research attempted to understand student motivation for participation in dual enrollment programs in relation to the Self-Determination Theory (Deci & Ryan, 1985, 2008a, 2008b) and to connect this motivation to research on calling (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009; Elangovan et al., 2009).

Personal Biography

I am an assistant superintendent at a Christian school in Central Florida. I have been in education for 14 years, spending seven years as a chemistry teacher and seven as an administrator. I obtained a B.S. in Chemistry from Wheaton College (IL) and a M.S. Ed. in Secondary Education from Duquesne University. Additionally, I completed coursework at Indiana University of Pennsylvania to obtain administrative certification. Currently, I am a doctoral candidate at Liberty University.

This study was motivated by my personal experience with dual enrollment. The school where I am the assistant superintendent is currently partnering with the Christian university in this study, offering dual enrollment to junior and senior students. Throughout the development and implementation of the program, I became interested in understanding why students were choosing to participate in the program. Personally, I have found the marketing of the program through extrinsic motivators to be in conflict with my larger mission of developing lifelong learners. Many of my students and their families seem to be motivated by the amount of college credit that can be acquired and the corresponding financial benefits resulting from the acquisition of credit. Rarely, if ever, have I experienced students choosing to participate in dual enrollment as a result of a desire to accomplish a life mission or advance their learning. As a Christian educator, I am interested in assisting students in understanding and developing God's plan for their life. Therefore, I am interested in developing a deep understanding of students' motivation to participate in dual enrollment and connecting this motivation to a personal calling.

Based on my experience with dual enrollment, I have developed opinions as to why students are participating in dual enrollment; however, I am conducting this study openly, setting aside previous notions. The methodology was chosen such that I am not the only one analyzing the data, thereby reducing my personal biases. Additionally, I have chosen to study schools other than my own to eliminate any influence I might have over my own students.

Research Design

I conducted a phenomenology utilizing the CQR methodology (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess et al., 2005). Phenomenological studies

“attempt to understand the meaning of events and interactions to ordinary people in particular situations” (Bogdan & Biklin, 2007, p. 25). A phenomenological design was chosen because the voice of the students is the most authoritative source to understand why these students are participating in dual enrollment. Specifically, the CQR method was chosen because this method is clearly defined, providing much needed research structure, and a stable, reliable, and sustainable approach to qualitative research.

Consistent with Ponterotto’s (2002) thinking that “a scholar’s personal philosophy of science will directly influence her or his selection of research paradigm to guide the research” (p. 396), I chose the CQR methodology because it most closely aligned with my personal worldview. Ponterotto (2005) described CQR as falling “between the postpositivism and constructivist paradigms, leaning toward the postpositivist end” (p. 133). While neither postpositivism nor constructivism is congruent with a Biblical worldview, postpositivism philosophy acknowledges that truth exists. In contrast, constructivism presumes multiple, equally valid truths. Since I believe in absolute truth, I chose a qualitative research paradigm that acknowledges truth and encourages its discovery.

A variety of potential motivations could exist for why students participate in dual enrollment programs; however, the student voice is largely absent from the literature. Current research documents types of dual enrollment programs, including vocational and advanced academic programs (Clark, 2001; Jordan et al., 2006; Kleiner & Lewis, 2005). A few qualitative studies have been conducted on student perceptions; however, these studies tend to focus on students’ perceptions of the comprehensive programming, rather than isolating students’ motivation for participation (Buchanan, 2006; Carraway, 2006; Harnish & Lynch, 2005). The current study will explore and answer the following

research questions:

Research Question 1: What do students indicate as their motivation to participate in dual enrollment programs?

Research Question 2: Are students intrinsically or extrinsically motivated to participate in dual enrollment programs?

Research Question 3: The students participating in this study are attending a Christian high school; therefore, is there a sense of personal calling to participate in dual enrollment?

Participants

The participants in the study were 15 high school students, purposively selected, from two Christian high schools, seven from one school and eight from the other school, dual enrolled at the same evangelical Christian university in the southeastern United States. Of the 15 participants, 8 were male and 7 female and 7 were juniors and 8 seniors. All participants were Caucasian (see Table 1). The selection methods of this study were most closely aligned with criterion sampling (Patton, 1990) because the participant sample met predetermined criteria. All students admitted to the dual enrollment program at each research site met the selection criteria to participate in the dual enrollment program established by the host university, including maintaining a cumulative GPA of at least 3.0. The administration at each school site identified a pool of all dual enrollment students who were enrolled in at least two core dual enrollment courses (Polkinghorne, 2005). Core courses were defined as courses in English, mathematics, science, social science, and foreign language. Once the pool of students had been identified, eight participants from each school were randomly selected from the pool (Hill, Thompson, & Williams, 1997). There were several participants who were

unable to participate due to a variety of reasons, including an unwillingness to miss class time and forgetting to return the consent form. Additional participants were selected from the research pool based on the random selection process. However, one of the students who was scheduled to participate did not return her assent/consent form; therefore, she was removed from the study, yielding 15 rather than 16 participants. The sample size for this study was consistent with the recommendations for CQR (Hill, Thompson, & Williams, 1997).

Table 1

Participants

Participant	Age	Gender	Ethnicity	Academic Year
Freedom Christian School				
Kathy	17	Female	Caucasian	Junior
Tom	16	Male	Caucasian	Junior
Kim	17	Female	Caucasian	Junior
Helen	19	Female	Caucasian	Senior
Scott	17	Male	Caucasian	Junior
Albert	17	Male	Caucasian	Junior
Isabel	16	Female	Caucasian	Junior
Victory Christian School				
Alexis	17	Female	Caucasian	Senior
Charles	16	Male	Caucasian	Junior
Matt	17	Male	Caucasian	Senior
Arleen	18	Female	Caucasian	Senior
Christa	17	Female	Caucasian	Junior
Greg	18	Male	Caucasian	Senior
Oliver	18	Male	Caucasian	Senior
Lorenzo	17	Male	Caucasian	Senior

Notes: All names provided are pseudonyms.

Setting

There were two sites for this research since the students attend two different evangelical Christian high schools. The Christian schools participating in this study were located in Florida and South Carolina and were members of the Association of Christian Schools International (ACSI). Additionally, a description of the host university was included because the students were also enrolled at this institution even though they do not actually attend classes on the university's campus.

The schools were in their first year of the dual enrollment partnership with the evangelical Christian university in the southeastern United States and adopted a similar

program structure. The dual enrollment program was available to junior and senior students with an un-weighted GPA higher than 3.0. Faculty of the high schools that met the minimum standards of the Christian university's accrediting body (an earned master's degree plus 18 graduate hours in the content area) taught the dual enrollment courses. The faculty at each school were considered adjunct faculty at the Christian university.

The high school sites were chosen for this study based on the recommendations of the administration at the host university, the volume of students participating in the dual enrollment program at each site, the site's location, and my professional relationships with the site administrators. The university was chosen because the high school where I am currently the assistant superintendent was partnering with the university for dual enrollment; however, my school was not a research site in this study.

Freedom Christian School. Freedom Christian School (pseudonym, FCS) was a K-12 school in Florida with 626 students school wide and 230 students in the high school. FCS was an independent, non-denominational school serving families from over 50 churches. The school was governed by a Board of Directors and had four administrators: a president, an elementary principal, a secondary principal, and a director of development. FCS did not discriminate on the basis of race, color, national and ethnic origin. The high school tuition at FCS was approximately \$11,000, including most fees for the 2010-2011 academic year.

FCS offered a college prep diploma and an honors diploma, with 24 and 25 credits required, respectively. Students desiring the honors diploma completed ten full credit courses with the designation of honors, Advanced Placement, or dual enrollment. Additionally, students maintained a 3.0 unweighted GPA.

FCS provided an opportunity for students to focus on human health and medicine through a science magnet program. Students in this program enrolled in advanced coursework and participated in two student internship experiences and two years of honors research.

FCS students sat for both the Scholastic Aptitude Test (SAT) and the American College Test (ACT) and their scores were higher than both the national and state averages (see Table 2).

Table 2

Comparison of FCS SAT and ACT Scores

Standardized Tests	FCS (Top 50%)	FCS (Top 25%)	Florida	National
SAT				
Critical Reading	600	640	496 ^a	501 ^a
Mathematics	552	600	498 ^a	516 ^a
ACT				
Composite	27	29	19.5 ^b	21.1 ^b

Notes: FCS only reported SAT Critical Reading, SAT Mathematics, and ACT Composite scores.

^a (College Board, 2010a)

^b (ACT, 2010)

Through the dual enrollment program, FCS allowed students to enroll in over 28 college credits. There was no charge to students for participating in the dual enrollment program and students remained on campus, obtaining instruction from FCS faculty. The FCS faculty met the requirements of the sponsoring university and were considered adjunct faculty. FCS had 60 students participating in seven dual enrollment courses (Lifetime Fitness, General Psychology, Trigonometry and Analytic Geometry, College Algebra, Evangelism and Apologetics, United States History I, and United States History II) taught by five FCS instructors.

Victory Christian School. Victory Christian School (pseudonym, VCS) served 1059 students from 18 months through grade 12 in the state of South Carolina. The high school at VCS enrolled 313 students. VCS was an independent non-denominational school. A Board of Governors governed VCS. Administratively, a superintendent, an upper school principal, a lower school principal, and an early education principal led

VCS. The high school tuition at VCS was approximately \$9,500, including fees for the 2010-2011 academic year.

VCS excelled academically. The Lower School had been commended by the United States Department of Education as a Blue Ribbon School. In the Upper School, students consistently scored above local, state, and national averages (see Table 3). One hundred percent of the Class of 2010 received college acceptances and 91% received scholarship offers. The Advanced Placement passage rate for the 2010 testing session was 81%.

Table 3

Comparison of VCS SAT and ACT Scores

Standardized Test	VCS	South Carolina	National
SAT			
Critical Reading	562	484 ^a	501 ^a
Mathematics	529	495 ^a	516 ^a
Writing	535	468 ^a	492 ^a
ACT			
Composite	25.3	19.8 ^b	21.1 ^b
English	23.5	19.2 ^b	20.6 ^b
Mathematics	25.1	20.0 ^b	21.0 ^b
Reading	23.7	19.9 ^b	21.4 ^b
Science	24.5	19.8 ^b	20.9 ^b

Notes:

^a (College Board, 2010b)

^b (ACT, 2010)

There was no charge to students for participating in the dual enrollment program. VCS currently had 102 students participating in five dual enrollment courses (American Federal Government, Principles of Microeconomics, General Psychology, Lifespan Development, and Trigonometry and Analytic Geometry) taught by four VCS instructors.

Unity Christian University. Unity Christian University (pseudonym, UCU) was a comprehensive, interdenominational Christian university with 3,659 students enrolled for the 2010-2011 academic year. UCU began a dual enrollment program during the 2010-2011 academic year, enrolling 415 dual enrollment students from six Christian high schools in South Carolina and Florida. The dual enrollment program had expanded rapidly and indications were that participation would continue to increase in the coming years.

Data Collection

Three methods of data collection were utilized, including an open-ended questionnaire, a self-report instrument, and individual interviews to understand and describe why students dual enroll (Polkinghorne, 1994). Institutional Review Board (IRB) approval was applied for and gained before collecting any data (see Appendix G).

Open-ended questionnaires. Prior to conducting interviews, all participants randomly selected from the pool were given an open-ended questionnaire (see Table 4). I ensured that the questionnaire items had face and content validity by organizing an expert panel comprised of high school and university individuals. The panel reviewed the questionnaire, providing insight and guidance. The questionnaire was also piloted with students from my high school that met the research criteria in this study (Patton, 1990). The students in the pilot study were not included in the actual research sample.

Based on the responses collected from the expert panel and in the pilot implementation, the questionnaire was adjusted. Initially, question 2 read, “Why did you choose to take these courses?” It was determined that adding the word “specific” prior to “courses” would make the question easier to understand. Question 7 was also amended. It initially read, “How has dual enrollment helped you achieve your college and career goals?” to “Do you think dual enrollment will help you achieve your college and career goals?”

The questionnaire was administered prior to conducting interviews to allow the participants’ time to reflect on their responses and it afforded me an opportunity to prepare for the individual interview (Hill, Thompson, & Williams, 1997). The open-ended questionnaire was administered at each research site. A script was read prior to the

administration of the questionnaire, ensuring that participants at both research sites were instructed in a similar manner (see Appendix F).

Table 4

Open-Ended Questionnaire

-
- Question 1: What courses are you taking in the dual enrollment program?
- Question 2: Why did you choose to take these specific courses?
- Question 3: What research did you do before you signed up for dual enrollment classes?
- Question 4: Who influenced your decision to participate in dual enrollment?
- Question 5: Why are you participating in the dual enrollment program?
- Question 6: Describe your college and career plans.
- Question 7: Do you think dual enrollment will help you achieve your college and career goals?
-

The questionnaire was designed to identify particular motivators for participation in the dual enrollment program. The responses, along with the data from the self-report instrument, provided initial areas of motivation. The individual interviews probed and illuminated each area of motivation. Questions 1 and 2 were designed to highlight a student's content interests and to document motivation. Questions 3 and 4 were designed to provide context to the processes by which the student chose to participate in the dual enrollment program. Consistent with perspective of Elangovan et al. (2009), students seeking their calling should be attempting to find meaning in their life, be attentive, be willing to experiment with new paths, and be growing in their understanding of self. If this is so, it would be expected that students would be actively engaged in the dual enrollment process, including conducting research and interacting with a variety of the influential adults. Furthermore, understanding the research that was conducted and who

the key influencers are provides insight into the level of external pressure placed on the student. Exploring these influences aided in determining if the students exhibited external or introjected regulation (Gagne & Deci, 2005; Deci & Ryan, 2008a).

Question 5 asked the students in plain language to explain why they were participating in the program. Not only was this information able to be catalogued and compared across participants, providing insight into the motivations for participation, but also it provided information for me in the interview to build rapport and to define particular areas of exploration (Kvale & Brinkmann, 2009).

Based on the definitions of calling and vocation (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009), questions 6 and 7 were created to determine how students viewed dual enrollment in relation to their personal career goals.

Self-report instrument. Each of the randomly selected participants completed the Academic Motivation Scale (AMS) to determine each student's motivational profile (Vallerand et al., 1992; see Appendices A). Hill, Thompson, Hess et al. (2005) suggested that including standardized measures enhance data analysis, permitting the researcher to substantiate the results of the initial data analysis.

The AMS is a self-report scale comprised of 28 questions, revealing each student's intrinsic motivation, extrinsic motivation, and amotivation. The AMS has seven subscales, each with four questions, measuring three types of intrinsic motivation (to know, toward accomplishments, and to experience stimulation), three types of extrinsic motivation (external regulation, introjected regulation, and identification), and amotivation. The AMS was originally designed for college students; however, it has been used, in an amended form, for high school students (Ratelle, Guay, Vallerand, Larose, & Senecal, 2007). I used the original college version because the dual enrollment

program was a pseudo-university program and the high school students were enrolled in college, receiving college credit for their work.

The AMS provided an additional voice for the students and allowed me to examine the underlying motivations for why students had chosen to enroll in the dual enrollment program. The AMS was administered along with the open-ended questionnaire, prior to the individual interviews. It was advantageous to have the self-report results prior to the individual interviews so that I could explore particular motivations that had emerged from the AMS. For example, a student could have indicated that they had participated in the dual enrollment program because they were interested in obtaining a high paying job. In the interview, I was able to ask questions that permitted the student to expound on why a high paying job was important. Without the information from the AMS, it would have been difficult to move beyond surface responses in the interview.

The AMS was originally published in Canada in French as the Echelle de Motivation en Education (EME) and then translated into English (Vallerand et al., 1992). The EME has an internal consistency represented by a mean alpha of .80 and an index of temporal stability of .75 (Vallerand et al., 1992). Like the EME, the AMS has seven subscales with an internal consistency measured by a Cronbach's alpha range of .83-.86. The identification subscale of the AMS has lower internal consistency with an alpha value of .62 (Vallerand et al., 1992). Vallerand et al. (1992) also measured the temporal stability of the AMS, determining that the mean correlation between pretest and posttest results was .79. The test retest Cronbach's alphas ranged from .72-.91 for the pretest and .78-.90 for the posttest. The identification subscale showed better internal consistency in the pretest-posttest analysis, ranging from .72-.78.

Individual interviews. I personally conducted individual face-to-face, semi-structured interviews at the research site, in a conference room, with each of the randomly selected participants following the administration of the open-ended questionnaire and the self-report instrument. Permission from the school administration and the participants' parents was obtained so that the interviews could occur during the school day. Students were pulled from class to be interviewed; however, great care was taken to minimize disruption to the school day for the participant and the school by coordinating and scheduling the interviews through each school's high school principal.

The interview was bracketed with briefing and debriefing statements, providing context and closure to the interview (Kvale & Brinkmann, 2009). The interviewer asked all of the questions on the interview protocol (see Table 4); however, the interviewer was free to explore additional questions based on the questionnaire responses, self-report results, and the participants' responses during the interview (Hill, Thompson, & Williams, 1997; Kvale & Brinkmann, 2009; Polkinghorne, 1994). The interview protocol was piloted with a few students from my high school to ensure that the questions asked had face and content validity and to allow me to practice interviewing (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005; Patton, 1990). Since I am a novice interviewer, practicing the interview reduced question ambiguity and increased interviewer confidence. Based on the feedback received from the participants in the pilot interviews, the interview protocol could have been refined (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). As it turned out, no changes were needed based on the feedback from the pilot interviews.

Interviews were conducted in person, allowing and maintaining a personal connection (Hill, Thompson, & Williams, 1997; Kvale & Brinkmann, 2009).

Immediately after each interview, I recorded observational data from the interview, noting my impressions of the interview, the participant, and the data collected (Hill, Thompson, & Williams, 1997; Polkinghorne, 2005). The interviews were digitally recorded for transcription and analysis.

There are few studies exploring the motivations of students to participate in dual enrollment programs; therefore, the interview protocol for the current study was exploratory. Buchanan (2006) found that students were motivated to participate in dual enrollment for financial reasons, to have a head start in college, and to be more prepared for university work. The study, however, did not explore these motivations nor did it attempt to understand them in the context of current motivational theory.

Table 5

Individual Interview Protocol

Introductory Questions

- Question 1: What courses are you taking in the dual enrollment program?
- Question 2: Why did you choose to take these courses?
- Question 3: Have you enjoyed your experience in the dual enrollment program?

Questions on Motivation

- Question 4: On your questionnaire/self-report you indicated that you chose to participate in the dual enrollment program because . . . are there any other reasons?
- Question 5: Tell me more about . . . [insert specific reasons sequentially]
- Question 6: On your questionnaire you mentioned . . . having a significant impact on your decision to participate in the program. Describe their impact in more detail. Why were they so influential?

Questions Exploring Calling

- Question 7: On your questionnaire you indicated that you wanted to attend . . . and pursue a career in . . . Tell me more about your aspirations?
- Question 8: Why do you want to attend this college and pursue this career?
- Question 9: Has dual enrollment helped you achieve these aspirations? How?

Questions about Dual Enrollment

- Question 10: Would you recommend the dual enrollment program to younger students? Why or why not?
 - Question 11: What advantages do you feel you have gained compared to your peers who are not in dual enrollment?
 - Question 12: Based on your experience, should your school continue to offer the dual enrollment program?
-

The questions in the interview protocol were intentionally similar to those in the open-ended questionnaire and the self-report instrument so that information from the open-ended questionnaire and the self-report instrument could be utilized in the interview, providing triangulation of data (Hill, Thompson, & Williams, 1997).

Questions 1 and 2 repeated the first two questions from the questionnaire. These

questions were general in nature and provided adequate opportunity for the interviewee to warm-up (Hill, Thompson, & Williams, 1997; Patton, 1990). Additionally, students' answers to question 2 provided insight into why they chose to participate in the program (Hill, Thompson, & Williams, 1997). Responses to this question indicated whether students were extrinsically or intrinsically motivated to participate in the dual enrollment program. Based on the answers provided in question 2, probing follow-up questions were asked. Question 3 was added because Krapp (2005) suggested that questions focused on feelings lend insight into the satisfaction of the three basic psychological needs: competency, autonomy, and relatedness. These needs are central to the SDT and have the potential to illuminate a student's motivation. Students that were satisfied with the program were likely to perceive that dual enrollment had fulfilled their expectations and enhanced their personal goals. Similarly, dissatisfied students recognized dissonance between their personal goals and the dual enrollment program.

Questions 4 and 5 were designed to probe why students were participating in dual enrollment. The AMS (Vallerand et al., 1992) provided information as to the motivation of students to participate in dual enrollment and the questionnaire gave the students an opportunity to write about why they had chosen to participate; however, it was necessary to ask the questions again, providing an opportunity for elaboration. As with previous questions, I had the opportunity to follow particular thought processes and assisted the student in elaborating on their intrinsic and extrinsic motivations.

Question 6 was designed to give the students an opportunity to mention individuals that had been influential in guiding them into the dual enrollment program. Understanding who impacted students provided insight into what motivated the students to participate. For example, if students indicated that their parents had a significant

impact, I asked the students to describe why. It could have been that this particular student's parents were experiencing financial issues and participation in dual enrollment made sense to reduce the cost of college tuition (Buchanan, 2006).

Question 7 was a general, introductory question and was created to transition the interview to a focus on calling, permitting students to discuss their future plans (Hill, Thompson, & Williams, 1997). Question 8 followed immediately after the transition question, attempting to determine why students wanted to pursue a particular career or profession. Consistent with Deci and Ryan (2008a) and Gagne and Deci (2005), responses to question 8 determined if the students were pursuing a career based on a calling, a vocation, or material gain. The question was intentionally open-ended, permitting students to articulate their particular life calling. For example, one student could have indicated that a medical career was preferred because this profession offers the highest likelihood of earning a large salary. Conversely, another student might have indicated a call to the same medical profession; however, this student might have been motivated to help others by helping them remain healthy. Finally, another student might have indicated a call to be a physician because God had called them to serve others and to deliver the gospel through ministering to physical needs.

Question 9 was developed to determine if students perceived dual enrollment as assisting them as they pursued their career choice. Answers to this question shed additional insight into why students participated in dual enrollment and provided insight into whether students connected participation in dual enrollment to their future goals and aspirations.

Finally, at the end of the interview, the participants were given the opportunity to reflect on the dual enrollment program. Question 10 was designed to determine what

aspects of the dual enrollment program each participant valued by asking them why younger students should participate. Question 11 encouraged participants to highlight the advantages of participating in the program. Finally, question 12 sought to determine if the students valued the dual enrollment program. The answers to these three questions illuminated student motivations and connected these motivations to calling.

Since the purpose of this study was to understand student motivation for participation in dual enrollment in relation to the SDT (Deci & Ryan, 1985; Ryan & Deci, 2000) and to connect this motivation to research on calling (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009), the questions in the interview were designed to gather as much information as possible on student motivation. The CQR method “provides a means of assessing both the frequency and the meaning of students’ responses” (Medvide & Blustein, 2010, p. 544); therefore, the interviews were designed to collect ample data for an exploratory analysis.

Data Analysis

The data was analyzed according to the protocol suggest by the CQR methodology (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess et al., 2005). A research team comprised of two colleagues and myself performed the data analysis (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005; Polkinghorne, 1994). One of the colleagues was the upper school principal at my school. She was given the pseudonym Kate. Kate had served in a variety of capacities throughout her 25 years in Christian education. She was a science teacher for 15 years and had served as a Dean of Students, Middle School Principal, and a High School Principal in the previous 10 years. Kate was a doctoral student at Liberty University. The second colleague was the guidance director at my school. She was given the pseudonym Emma. Emma had been

in Christian education for six years as a guidance director and was the president of a local guidance consortium of 13 private schools. Prior to serving as a guidance director, Emma was on the board of an independent school for six years. She held a bachelor's degree in business management and marketing, as well as certification in college counseling.

The research team was trained in CQR methodology through several means. First, I educated my colleagues in the details of CQR by providing them with access to the two formative works on CQR (Hill, Thompson, and Williams, 1997; Hill, Thompson, Hess, et al., 2005). Second, I continually explained the CQR process to my colleagues, providing them with ample opportunities to request more information or clarification. Finally, I routinely engaged my colleagues in discussions regarding the process and progress of the dissertation process. This ensured that both Kate and Emma were fully informed of the details of my research and allowed them to feel included as active members of my research team.

To ensure participant confidentiality, the research team members did not have access to the participants' names or school. The dissertation committee, led by the dissertation chair, served as the auditors of the study. All members of the dissertation earned terminal degrees in their field of study. Hill, Thompson, and Williams (1997) suggested that auditors verify all data analysis by the research team. For dissertations, Hill, Thompson, and Williams (1997) recommended that the chair and committee members fulfill this role. In CQR, data analysis occurs according the following pattern.

Preliminary data analysis. The research team created domains based on the open-ended questionnaires and interview transcripts. Hill, Thompson, and Williams (1997) suggested that the group seek consensus on the most appropriate domains prior to

continuing to the next step. Furthermore, they recommended that all interaction with data in the preliminary stage occur with isolated questionnaires and interviews. Once domains were identified, each member of the research team analyzed one questionnaire and one interview transcript for one student, placing data into the domains. The group reconvened, critically evaluating each other's work with the intention of substantiating consensus on final domains.

Next, each member analyzed all of the data within each domain for a particular participant to determine the core ideas that emerged. After the individual researchers completed one participant, the research group met to analyze the work. The goal of this meeting was to determine the core ideas that were utilized throughout the remainder of the data analysis.

Once the research team had defined the domains and core ideas, the data analysis was submitted to the auditor to ensure that the team has not introduced bias or missed essential domains or core ideas. Based on the feedback provided by the auditor, adjustments were made.

The self-report scores for the AMS allowed the research team to understand the motivational profile of each participant. The potential existed that students would write answers on the questionnaire or articulate responses in the individual interviews based on their perception of the proper way to answer. The AMS provided a window into the students' motivation without the opportunity to adjust their answers to meet a preconceived notion of the expected answer. The AMS highlighted each student's relative level of intrinsic motivation, extrinsic motivation, and amotivation. These results were utilized during the analysis of the questionnaire and interview, providing context and information on the students' motivation. They also permitted me to explore

motivations for participation that might have otherwise gone unnoticed because the participant would have been reticent to share. For example, students who were primarily amotivated might have been unwilling to reveal this for fear of embarrassment; however, if the AMS had shown the student was primarily amotivated, interview questions would have been tailored to explore why the student was amotivated.

Interpreting data. Once the research team had completed data analysis on individual interviews and the auditors were satisfied, the group began to cross analyze the data. Cross analysis was completed as a group. The research team developed categories from the core ideas in each domain (Hill, Thompson, & Williams, 1997).

Once consensus was achieved, Hill, Thompson, and Williams (1997) recommended that the research team determine the representativeness of the sample. If a category applied to 14 or more interviews it was considered to be general (Hill, Thompson, Hess, et al., 2005). If the category applied to at least eight but less than 13 participants, the category was considered typical. Variant categories were those that applied to between three and seven interviews. Categories applying to one or two interviews were reevaluated to determine if they fit into other categories. If this was unsuccessful, the categories were declared rare (Medvide & Blustein, 2010).

Finally, the complete data analysis was submitted to the auditors for review. The auditors reviewed the data analysis and determined that no additional analysis was needed.

Trustworthiness

Dependability and reliability. The dependability and reliability of the study was ensured through the use of a variety of strategies. I utilized stability checks, transcription, member checks, quasi statistics, feedback, and triangulation.

Stability checks. In order to determine when saturation had been achieved, a portion of the data was analyzed independent of the remaining data (Hill, Thompson, & Williams, 1997; Polkinghorne, 1994). Since 15 participants were interviewed, 13 were included in the initial analysis. The remaining two were analyzed after the initial analysis was complete. The withheld interviews did not substantially alter the initial analysis; therefore, saturation had been achieved (Hill, Thompson, & Williams, 1997).

Transcription. In order to establish dependability and reliability, I digitally recorded each interview. A personal assistant was hired to transcribe the digital recordings. To ensure confidentiality, the personal assistant was not provided with the participants' names or identifying information. The only information available was the participant number. Following transcription, the interview transcripts were re-read for accuracy. Throughout the process of transcribing, detailed memos were taken, noting additional questions, conclusions, and generalizations (Polkinghorne, 2005).

Member checks. Member checks were employed to verify the accuracy of the transcripts and provided the participants with the opportunity to add, clarify, or amend their comments. Copies of the interview transcripts were emailed to the participants immediately after transcription for verification. Every participant responded that the transcription of the interview was accurate and declined to provide additional comments or clarification (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005).

Quasi statistics. Consistent with the CQR methodology, quasi statistics were collected to determine the frequency of responses (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). Medvide and Blustein (2010) utilized CQR as a basis to determine general themes, typical themes, variant themes, and rare themes.

Determining themes based on frequency aided in determining an understanding of the student motivations to participate in dual enrollment.

Feedback. In order to remove researcher bias, I sought feedback from two colleagues (the research team) and the dissertation chair and committee (the auditors; Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). The research team aided in removing bias by ensuring that the creation of domains and core ideas was not solely based on my personal perspective of the data. Since I was a novice qualitative researcher, the auditors provided expert feedback and guidance, ensuring that the conclusions drawn were supported by the data and the data analysis process was conducted properly.

Triangulation. Triangulation was obtained on two levels in this study: triangulation of sources and analyst triangulation (Patton, 1990). Triangulation of sources was obtained through collecting three forms of data: open-ended questionnaires, a self-report instrument, and face-to-face interviews (Hill, Thompson, & Williams, 1997). Utilizing multiple data collection tools permitted the participants ample opportunity to articulate their thoughts (Patton, 1990; Polkinghorne, 1994). Analyzing the results from the three data sources eliminated error and provides “cross-data validity checks” (Patton, 1990, p. 188).

Analyst triangulation was achieved by implementing the CQR methodology. As the primary researcher, I was the first analyst. The research team served as the second analyst and the dissertation committee provided the third. Utilizing three analysts ensured that individual researcher bias was reduced or eliminated (Patton, 1990). Additionally, Patton (1990) suggested that employing member checks increased analyst

triangulation by permitting participants to self-analyze. Member checks were utilized in this study.

Finally, Polkinghorne (2005) suggested that triangulation should be obtained by using multiple participants. This study used multiple participants from two schools in two different states. The use of multiple sites and participants increased credibility and triangulated the experiences of the participants.

Transferability. The results of this study generalized within the Christian school movement. Furthermore, extrapolation of the results of this study were limited by the selective nature of the population studied; however, it was reasonable to assume that many of the motivations discovered were ubiquitous among adolescents if the results were congruent with previous studies (Buchanan, 2006; Carraway, 2006).

Ethical Issues

Maintaining ethical standards is essential for research. To this end, I ensured that this research was conducted in a manner congruent with the mission and vision of Liberty University and with my personal faith as Christian. Ambiguity is inherent in the qualitative research approach; therefore, “the trustworthiness of the data depends on the integrity and honesty of the research” (Polkinghorne, 2005, p. 144). I was certain to maintain integrity and honesty throughout the research process.

Specific care was taken to protect the privacy of all participants, including students, parents, and schools. Proper consent was obtained from the parents of each participant, outlining the exact purpose of the study. Similarly, proper assent was obtained from the students (see Appendix C). The document was written at an appropriate intellectual level for the audience. I further obtained written permission from each site school to conduct research on the campus with constituents within the

institution (see Appendix B). Confidentiality of all data, information, and subjects was maintained throughout the study. Pseudonyms were utilized for all individuals and institutions throughout the study to maintain and protect the privacy of all participants.

CQR required the researcher to interview individuals. Since this study required minors to be interviewed, I conducted interviews in a public setting such as a conference room within the school, protecting both the student and the researcher. I further took particular care to collect data as unobtrusively as possible, minimizing disruption the daily school schedule and the individual student schedule. Data was collected in a limited timeframe to minimize the impact on the school setting. At all times throughout the course of this research, I followed documented IRB procedures and sought to maintain least restrictive interference in the environment studied.

Phenomenological studies require the researcher to interpret the voice of the participants, raising questions regarding researcher bias. The CQR methodology reduced, as much as possible, researcher bias, by incorporating consensual group interaction. Furthermore, the group's analysis was reviewed by at least one auditor, ensuring that bias was further reduced (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). Minimizing researcher bias added credibility to the research and eliminated ethical issues.

CHAPTER FOUR: RESULTS

Introduction

The focus of this phenomenology was to understand the motivation of high school students to participate in dual enrollment. In particular, this research sought to identify the motivators, connecting them to the Self-Determination Theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000) and to research on calling (Dalton, 2001; Davis, 1997; Dik & Duffy, 2009; Elangovan et al., 2009). Three research questions guided the research, moving the analysis from a mere listing of motivators for participation in dual enrollment to a deeper understanding of these motivations in light of personal and social forces. The research questions guiding this study were:

Research Question 1: What do students indicate as their motivation to participate in dual enrollment programs?

Research Question 2: Are students intrinsically or extrinsically motivated to participate in dual enrollment programs?

Research Question 3: The students participating in this study are attending a Christian high school; therefore, is there a sense of personal calling to participate in dual enrollment?

Data Analysis

The data collected from the self-report, the questionnaire, and the interview were analyzed according to the Consensual Qualitative Research protocol (CQR; Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). I conducted most of the data analysis, utilizing a research team to ensure consistency, reduce personal bias, and allow for interaction and dialogue. The research process was greatly enhanced by the

interaction with the research team.

Based on my work and the work of the research team, domains for each individual participant were established. Typically each participant yielded two to five domains, with several participants yielding up to seven domains. The research team met to discuss the domains of individual participants. As a result of this meeting, a working list of possible domains was created. Further discussion by the research team condensed the list of domains into 18 core ideas. The core ideas were reviewed and further condensed into six categories or themes. Table 6 illustrates the results of this study, presenting the six themes as well as the core ideas for each theme. The number of cases, or frequency, refers to the number of participants determined to have mentioned this theme. Following CQR protocol, the number of cases was labeled general, typical, variant, or rare (Hill, Thompson, & Williams, 1997; Hill, Thompson, Hess, et al., 2005). In this study, there were 15 total participants; therefore, themes were deemed general if they appeared in 14 or more participants. Typical themes appeared in at least eight but less than 13 participants. A theme was considered variant when participant representation was between three and seven. All themes appearing in one or two participants were determined to be rare.

Table 6

Motivations to Participate in Dual Enrollment

Theme	Frequency ^a	Theme Type
Investment in the Future	15	General
College Credit	15	General
GPA Increase	5	Variant
Save Time	4	Variant
Save Money	3	Variant
Relationships/People	15	General
Family ^b	13	Typical
Parents	12	Typical
School Personnel ^c	11	Typical
Teachers	8	Variant
Guidance Counselor	7	Variant
Friends	6	Variant
Siblings	1	Rare
Administration	1	Rare
Uncertainty about the Future ^d	15	General
It was a “No Brainer”	11	Typical
Requirement	9	Typical
Scheduling Issues	5	Variant
Subject was Easy	2	Rare
Personal Betterment	11	Typical
Experience College	8	Typical
Gain Confidence	7	Variant
Experience a Challenge	4	Variant
Interested in the Subject	3	Variant

Notes:

^a There were 15 participants in this study.

^b Family is the combination of two core ideas: parents and siblings.

^c School Personnel is the combination of three core ideas: guidance counselor, teachers, and administration.

^d This theme relates to research question number 3 and is not specifically about motivation to participate in dual enrollment. It is; however, essential to present due to its persistence in all participants.

Student Motivation

The first research question sought to determine what students indicated as their motivation for participation in the dual enrollment program. The students in this study were motivated by a variety of factors (see Table 6); however, the most common motivators were an investment in the future, relationships with others, it was a “no brainer,” personal betterment, and an interest in the subject.

Investment in the future. Students were consistently focused on the potential of dual enrollment to help them in the future. Participants mentioned the opportunity to earn college credit, to save time in college, to earn a higher high school GPA, and saving money in the future as motivators for participating in the dual enrollment program. Each of these motivators would not necessarily benefit the student immediately; therefore, it was determined that the students were projecting that their effort and participation now would yield benefit in the future. Lorenzo suggested, “In the future, I’ll see it pay off.” Kathy summarized this thinking best when she said, “It’s basically the same class you’ll take. You just get credit for it. It’ll save you money. It’ll save you time. It’s just a good investment.”

College credit. The participants in the study consistently and emphatically declared that college credit was the single most important reason to participate in dual enrollment. Every participant in the study articulated that college credits were a factor in the decision to participate in the dual enrollment program. Matt stated, “It will help me get college credit.” Greg declared, “I really want to try to exempt [college classes] while I’m in college.” Albert explained why he chose to participate. “Just to make it easier on me, I guess, when I get to college.” Charles stated, “I’m going to graduate with a high

school diploma and I'm going to have college credits along with it." Most clearly, Kim pronounced, "I wanted college credits, so that's why I took it."

GPA increase. The students in the study participated in the dual enrollment because, when calculated into a student's GPA, dual enrollment receives a full quality point increase. Students suggested that the increased GPA would make them more marketable to colleges and universities. Greg stated, "It'll look good on my GPA." Lorenzo concurred, "I did that so I could boost my GPA cause it counts as an AP class in high school." Tom explained the motivation clearly,

Oh, I'm doing good in it, which means that I'm getting a higher GPA. If I get a "B", instead of a 3.0, it's a 4.0 and the colleges look at it as that. And it's . . . they also measure it on how you do . . . you're going to do . . . cause it's like a college course.

Isabel was concerned with her appearance to colleges as well, stating, "Cause I think it looks like really good on your resume when you write it. And you get, like, a college course, like, points for it."

Save time. Four participants specifically mentioned saving time in the future as a motivator for participating in the dual enrollment program. It is possible, perhaps, that more students did not specifically mention time as it is closely linked to earning credits. In response to a prompt to explain more about receiving credit, Kathy stated, "Uh . . . to save money in college, save money, save time. Just get ahead, I guess." Charles explained saving time in a different manner by suggesting, "It's a good way to just kinda ease your way into the freshman year." Scott more succinctly noticed that as a future student-athlete time was important. He mentioned, "Yeah, free up time." Greg connected participation in the dual enrollment to increased possibilities in college, "Well,

cause it gives you more time in college to really focus on your major and you won't have to just mess around with these, uh, minor classes to pass to get to your major."

Save money. Surprisingly, few students specifically mentioned saving money as a motivator for participation in the dual enrollment program. Only three students, Kathy, Albert, and Charles, indicated that money was a factor in their decision. Kathy stated, "It'll save you money." Albert discussed how his parents impressed upon him that participating in dual enrollment would equal "time and money." Charles more specifically suggested,

You know you have to pay a certain amount for different classes and for different books. And if you don't have to, you know, if you don't have to pay that, like, once you get into college, you know, it's definitely a plus.

Relationships/people. The theme of relationships/people emerged on two levels. The first level was participants that mentioned others as a motivating factor in their decision to participate in the dual enrollment program without prompting. The second level was expressed by every participant after being prompted by the question, "Who influenced your decision to participate in dual enrollment?"

Without prompting. There were five participants, Matt, Helen, Lorenzo, Kathy, and Isabel, that mentioned an individual motivated them to participate in the dual enrollment program prior to being prompted in the interview to reflect on individuals that influenced their decision to participate. At this level, the theme of relationships would merely be a variant theme, with the individual core ideas each considered variant.

Analysis of the five students revealed two motivators, parental and teacher motivation. Kathy indicated that she participated in dual enrollment because, "my parents wanted me to. . .I guess to see like what an actual college course was like."

Isabel concurred, “my parents kinda wanted me to take it.” Lorenzo’s comments were similar, “me and my parents thought it would be best if I did that.”

Matt, Helen, and Kathy commented on the teacher of the dual enrollment course, indicating that the teacher drew them to participate in the dual enrollment program.

Helen stated, “I like the, um, professors who taught them and I knew that I would have a lot of one on one teaching.” Kathy’s motivation was not quite so academic, yet the teacher certainly influenced her decision to participate. She commented, “Mostly because I’m family friends with the teacher.” Matt’s expressed his motivation clearly, “I heard the teacher was great. . . I heard the teacher is really experienced and he makes the class fun.”

After prompting. After prompting, all of the participants revealed that others had a significant impact on their decision to participate in the dual enrollment program. After discussion, the research team decided that the impact was more than mere influence. The significant people in the students’ lives played a critical role in the development of the motivation for participation. Therefore, it was decided to include all of the participant responses in the theme, yielding a general notation for this theme. Furthermore, analysis of the frequency of differing categories of individuals within this general theme illuminates the importance of elders in the decision making process of young people.

Analysis of the core ideas within the theme yielded multiple groups of individuals who impacted the students’ decisions to participate in the dual enrollment program. The research identified parents, teachers, guidance counselors, friends, administration, and siblings as key influencers. While these core groups are significant, it became clear that further consolidation of the core ideas could yield even more valuable information. For example, each of the core ideas relating to individual groups within the school was

determined to be a variant or a rare theme. However, when condensed into one core idea, school personnel, a new, more powerful typical theme emerged.

Focus in an investment in the future. The focus of the participants' motivation was different compared to level one participants when they were asked why the individuals were so influential in their decision to participate. The focus of the responses generally centered on the students' investment in the future. For example, when asked why her mom was so influential, Alexis said,

She just kinda read me what was going to happen, just, uh, the credit I'll receive, um, the money I could save, the time it will save. She just really impressed upon me how, you know, important, how good this could be for me. So I thought it was a good idea.

Scott indicated, in response to the reasons his parents influenced him to participate in the dual enrollment program, "To definitely knock out, um, some college classes." Kim suggested a similar reason, "Well my mom wanted me to just take it because I'd get college credit and, yeah, that's pretty much it." She went on to comment that her guidance counselor said, "It would look better, I guess, on my transcript." Greg noted that he was influenced by the administration of his school to participate because,

They like enforced to me that if I take this and pass it, it'll look better on my transcripts as well as look good on my GPA. And so when colleges are looking at me, when I am trying to get enrolled in their university, they'll say, 'Oh, he's dual enrolled. He's actually trying a lot harder than other kids.'

Friends. In addition to parents and school personnel, participants mentioned the importance of friends as they decided to participate in the dual enrollment program. Two lines of thinking emerged for the influence of friends. Most commonly, students

indicated that they participated so that they could simply be with their friends. Scott said, “Well, I don’t want to take a class with people I don’t really know or talk to.” Greg indicated a similar thought process when he stated, “Well, just because they were all doing it with me. That if I had a question, they said they could be able to help me.”

Christa clearly articulated the motivation of many of the students in her school,

Cause I think one, only one person in my class decided not to do it. And everyone was doing it. Cause we were the first group to do dual enrollment. So we all just wanted to experiment with it and see what it was.

Lorenzo indicated that he was not necessarily interested in being with other classmates; rather he was interested in his appearance. He said,

Um, just because here at Victory, it’s real, like, grades are sort of competitive sometimes and, you know, when people ask you what classes are you taking, it sounds good if you say, you know, ‘I’m dual enrolled in these classes.’

Oliver articulated a different, more sincere desire to learn from his friends’ mistakes. His motivation was not centered on the students at his current school but on his friends outside of the school that were not making wise choices. He maturely stated,

Well, I mean, I went to public school most of my life and a lot of my friends, you know, they’re not really going to college or anything. And I see what happened to a bunch of them and so, you know, all of its kind of driven me to succeed a little bit more. I mean, we’ve all made mistakes, but I don’t wanna be where they are.

No brainer. “No brainer, yeah, makes sense,” responded Albert, “Just, um, an opportunity to get a college credit and a high school credit in one. I didn’t think it was possible. So when I heard that, I thought, for sure.” Albert clearly articulated a

motivation that others, in different words, expressed as well. There was a feeling that the students “might as well” participate in the program. There was nothing to lose and it “just made sense.” Three core ideas emerged within this typical theme: the courses were a requirement, the schedule required it, and the subject was easy. Each of these core ideas was embodied in Albert’s “no brainer” concept.

It was a requirement. Students at Victory Christian School were more likely to mention that the high school portion of the course was a graduation requirement, with seven out of eight participants mentioning this motivation. Only two of seven students at Freedom Christian School indicated that graduation requirements motivated them to participate. Regardless, the mere fact that the course was a regular part of the high school curriculum influenced the students’ decision to participate in the dual enrollment program. Charles said,

Well, you have to take the classes anyway for Victory. You know, there is a certain amount of credits you have to have to, uh, graduate. And, uh, you know, um, and I don’t know, I guess, since you know you have to take it every year, I figured if you can get credit with it then that would be the perfect way to go with it.

Matt confidently stated, “Well we could either choose to audit the class or take it for college credit and there is no reason to audit it because you wouldn’t get college credit.”

Christa shared similar thinking, “Well in order to graduate you need to take government and economics, um, one semester of each and I just decided to get them out of the way.”

Lorenzo also mentioned that the course requirement affected his decision stating, “So, you know, just that I can say I was dual enrolled, cause no matter what, I have to take the class here.”

Scheduling. Tom, Kim, Helen, Arleen, and Christa indicated that they chose to participate in the dual enrollment program because of scheduling issues. Tom, referring to his dual enrollment trigonometry class, said, “I kind of got stuck with that.” Specifically, he was alluding to the fact that he had already take all of the previous math courses and his teacher recommended that he take this course. Kim noted in a rather serious tone, “It just fit in my schedule.” Helen indicated that dual enrollment “helps you, like, fill up your schedule.” Christa, a junior at Victory Christian, noted that she participated in dual enrollment “because there was no room in the U.S. History that I was supposed to take.” Finally, Arleen was the only participant to mention that it was her decision to choose dual enrollment based on the types of courses offered and the supposed level of difficulty. She specifically chose the dual enrollment courses because they were only one semester each and she did not want to take an AP course.

The subject was easy. Tom and Helen indicated that they chose to participate in the dual enrollment program because they traditionally did well in the subjects offered in the dual enrollment program. Each of them noted that it simply made sense to dual enroll in courses that they typically learned easily. Tom suggested, “Basically, because for history, I’m pretty good at it and it’s, like, it helps out the GPA.” Helen poignantly noted,

History is, like, the one of my easiest subjects. I’ve maintained a 98 the whole year in my two history classes. So that just comes really natural to me. So I figured, I just might as well just go ahead and get it over with.

Personal betterment. Participants indicated that improving their perspective of college and their ability to succeed once in college influenced their motivation to participate in the dual enrollment program. Overall, the theme of personal betterment

was a typical theme. Three core ideas, experiencing college, gaining confidence, and experiencing a challenge, contributed to the overall theme.

Experience college. Students regularly mentioned that participating in dual enrollment afforded them the opportunity to experience college academics. Kim simply stated, “Yeah, I wanted to see if, like, it would be harder than high school, but it’s not. It’s harder, but not as I expected.” Helen added,

It’s helping me realize how college is supposed to be laid out. Like, you’re not going to have a teacher with a projector, like, mapping out everything all of the time. Like, you’re going to have to go home with your book and read between the lines of what the teacher says.

Alexis chose to take the courses so that she could “have an understanding of what the classes will expect when I get into college.” Matt indicated that dual enrollment would help him “get out there into the college world.” Greg articulated a similar thought, “Just to be able to understand what I’m about to encounter next year.”

To gain confidence. Not only did participants indicate that dual enrollment allowed them to experience college, they alluded to an increased confidence because they have experienced college level work. Oliver noted,

Plus, you know, um, I’ve learned even if I don’t get college credit, I can go in there having already taken kind of similar course material and go on and, you know, ace that class, if I have to take it again in college.

Matt mentioned that he would recommend the dual enrollment program because, “We use college books. For economics, we use the actual Unity University book. So, it’s a huge book. So, it’s kind of getting us ready for college I would say.” Alexis announced, “Now I know kind of what to expect if I were to take them again in college.” Isabel

suggested that she has now seen “what we’re capable of.” Helen articulated the thinking best when she stated, “Well, I guess it’s given me that extra push to realize that in college I can achieve what I need to achieve by having it in high school.” She went on to say,

I guess it’s just like I’ve said, realizing that you’re going to have to put in extra effort in order to achieve what you want to achieve in college. Like, it’s not gonna be simple, as you know, one, two, three in college. Like, you’re going to have to do your part along with the teacher doing their part to be able to graduate from the class and get the grade you want.

To experience a challenge. Scott, Isabel, Greg, and Oliver mentioned that they were motivated to participate in dual enrollment to experience a challenge. In response to why he took the dual enrollment course, Scott suggested that the course was “a little more challenging.” Isabel wisely commented, “I think you could, you should take every opportunity you can to take harder things and challenge yourself every day.” Oliver noted, “the exams are a little bit more challenging so I think it’s good.”

Interest in the subject. Three participants were motivated to participate in the dual enrollment program because they were interested in the subject offered. Alexis suggested, “I have always been interested in the field of psychology.” Matt stated that he took psychology because he “knew it was the study of the mind, um, and I just wanted to know what that was about.” Isabel shared a similar thought, “And for psychology, I was kind of interested in the, in the field.” She went on to say, “And, like, I was kinda curious about it so I took it. I think it’s really interesting.”

Type of Motivation

Once a full understanding of student motivation was developed, the second research question sought to determine if students were primarily intrinsically or

extrinsically motivated to participate in the dual enrollment program. In the literature review, intrinsic motivation (IM) was defined as actions that were undertaken because the action was “interesting and spontaneously satisfying” (Deci & Ryan, 2008a, p. 15). In contrast, extrinsic motivation was when an individual engages in an activity because of separate consequences. Therefore, in order to determine if students were intrinsically or extrinsically motivated to participate in the dual enrollment program, the themes and core ideas discovered in the previous section were examined and analyzed through the lens of these definitions.

In addition to the themes gleaned from the questionnaire and interview, the Academic Motivation Scale (AMS; Vallerand et al., 1992) was utilized to understand student motivation. The results of the AMS, coupled with the aforementioned themes, yielded valuable insight into the motivation of students to participate in the dual enrollment program.

Academic Motivation Scale. The AMS (Vallerand et al., 1992) was a quantitative tool; however, it was utilized as a qualitative tool in this research. The AMS measures seven types of motivation, intrinsic motivation (to know, to accomplish, and to experience stimulation), extrinsic motivation (identified, introjected, and external regulation), and amotivation. Scores for each type of motivation ranged from one to seven with one indicating that the responses “do not correspond at all” and seven indicating “corresponds exactly.” There were four questions for each type of motivation. The mean and standard deviation for each motivation subscale score were calculated as a means of determining which type of motivation corresponded to the participants in this study (see Table 9).

Table 7

FCS Individual AMS Scores

AMS Subscale ^a	Kathy	Tom	Kim	Helen	Scott	Albert	Isabel
Amotivation	1	1.75	1	1	1	1	1
Extrinsic Motivation							
External Regulation	3.75	6.75	5.75	6.5	7	5	6.25
Introjected	4.5	3.25	5.25	6.5	3.25	1	5.5
Identified	5.25	5.5	6.5	6	6.5	5.75	6.75
Intrinsic Motivation							
To Experience Stimulation	3.5	2.25	4	4.25	3.75	1.75	4
To Accomplish	5	2.75	5.5	5.25	3.25	2	5
To Know	5.25	3.25	6	5.75	5.25	5.5	5.75

Notes:

^a All AMS subscale scores are an average of four questions. A score of 1 indicates that the response “does not correspond at all.” A score of 7 indicates that the response “corresponds exactly.”

Table 8

VCS Individual AMS Scores

AMS Subscale ^a	Alexis	Charles	Matt	Arleen	Christa	Greg	Oliver	Lorenzo
Amotivation	1	1.25	1	1	2.75	1.25	1.25	1.25
Extrinsic								
External Regulation	7	6.75	6.5	4	3.5	7	5	6.25
Introjected	4.5	2.25	2.5	6	4	6.25	2.5	7
Identified	7	5.25	6.25	7	5.5	6.25	5.25	6.75
Intrinsic								
To Experience Stimulation	4.5	1.25	1.5	5.5	4.75	3.75	5	3.25
To Accomplish	4.75	2.25	2.5	5.75	2.75	5.5	2.75	4.75
To Know	5.5	3.75	3.25	4.75	5	5.5	6.5	5

Notes:

^a All AMS subscale scores are an average of four questions. A score of 1 indicates that the response “does not correspond at all.” A score of 7 indicates that the response “corresponds exactly.”

Table 9

Academic Motivation Scale Results

Motivational Subscale ^a	Mean	Standard Deviation
Intrinsic Motivation		
To Know	5.07	.96
To Accomplish	3.98	1.38
To Experience Stimulation	3.53	1.30
Extrinsic Motivation		
Identified	6.10	.65
Introjected	4.28	1.79
External Regulation	5.80	1.24
Amotivation	1.23	.47

Notes:

^a All AMS subscale scores are an average of four questions. A score of 1 indicates that the response “does not correspond at all.” A score of 7 indicates that the response “corresponds exactly.”

The results of the AMS indicate that students were motivated rather than amotivated, as evidenced by the low amotivation mean and relatively larger intrinsic and extrinsic motivation means. Student motivation tended to be more extrinsic than intrinsic, as evidenced in the higher identified and external regulation means compared to the corresponding intrinsic motivation means.

A large mean for identified motivation indicated that students were driven by outside goals and values. For example, on the AMS students were asked, “Why do you go to college?” and they reported that the following highly corresponded to their motivation: because I think that a college education will help me better prepare for the career I have chosen, because eventually it will enable me to enter the job market in a field that I like, because this will help me make a better choice regarding my career

orientation, and because I believe that a few additional years of education will improve my competence as a worker.

A high external regulation mean suggested that students were motivated by reward or punishment. On the AMS students rated the following responses as corresponding highly to their motivation to go to college: because with only a high-school degree I would not find a high-paying job, in order to obtain a prestigious job later on, because I want to have “the good life” later on, and in order to have a better salary later on. In each of the responses above, the students were indicating that something external draws them to college.

The third highest motivation, as measured by the AMS, was intrinsic motivation to know. This motivation was related to being motivated by a pleasure of learning. On the AMS students agreed that the following responses corresponded to their motivation: because I experience pleasure and satisfaction while learning new things, for the pleasure I experience when I discover new things never seen before, for the pleasure that I experience in broadening my knowledge about subjects which appeal to me, and because my studies allow me to continue to learn about many things that interest me.

The remaining three motivations only moderately corresponded to the participants’ motivation to go to college and were considered to be a minor motivation for participation in dual enrollment. Therefore, a qualitative analysis of the AMS results indicated that the participants were primarily extrinsically motivated with a minor contribution of intrinsic motivation.

Analysis of participant motivation. Students who are extrinsically motivated are driven by consequences separate from the activity itself. For example, being motivated to perform a task because one could earn a wage or for the approval of another

would illustrate extrinsic motivation. When the themes developed in response to the first research question were analyzed, it became apparent that students were primarily motivated to participate in the dual enrollment program based on the consequences of their action rather than the satisfaction of participation (see Table 8). While there was evidence of some intrinsic motivation, it was clear that the primary motivators for participation were extrinsic.

Table 10

Research Themes and Motivational Type

Research Theme	Theme Type	Motivational Type
Investment in the Future	General	Extrinsic
Relationships/People	General	Extrinsic
“No Brainer”	Typical	Extrinsic
Personal Betterment	Typical	Extrinsic and Intrinsic
Experience College	Typical	Extrinsic
Gain Confidence	Variant	Extrinsic
Experience a Challenge	Variant	Intrinsic
Interest in the Subject	Variant	Intrinsic

Extrinsic motivation. The most common themes emerging from the qualitative analysis of student data yielded three themes that were primarily centered on extrinsic motivation. The students in the study commonly suggested that they participated to obtain a reward in the future. The most common reward was college credit; however, the participants were also interested in saving time, saving money, and earning a higher GPA. Recall, Kathy’s statement, “It’s basically the same class you’ll take. You just get credit for it. It’ll save you money. It’ll save you time. It’s just a good investment.” Inherent in Kathy’s thinking was the idea that something will be obtained at a later date by virtue of participation in and successful completion of a dual enrollment course.

Likewise, the participants were motivated to participate because of the people in their lives. Regardless of whether people were mentioned prior to prompting or after, the students indicated that the influence of others focused on an external motivation. Consider Matt’s comment regarding his motivation, “I heard the teacher was great. . . I

heard the teacher is really experienced and he makes the class fun.” The focus of Matt’s motivation is the teacher and the environment the teacher is able to provide. Similarly, Kim suggested, “Well my mom wanted me to just take it because I’d get college credit and, yeah, that’s pretty much it.” As for Kim’s guidance counselor, she said, “It would look better, I guess, on my transcript.” Each of these individuals reinforced the motivation that dual enrollment provided sufficient future reward and, therefore, should be an activity in which the students participate.

The participants also indicated that their friends were a significant motivation to participate in the dual enrollment program. This motivation was also primarily extrinsic. Consider Lorenzo. He indicated that he was not necessarily interested in being with other classmates; rather he was interested in his appearance. He said,

Um, just because here at Victory, it’s real, like, grades are sort of competitive sometimes and, you know, when people ask you what classes are you taking. It sounds good if you say, you know, ‘I’m dual enrolled in these classes.’

Lorenzo is interested in avoiding social punishment. If he were not in the program, others would not consider him as highly as they would if he were in the program.

Participating in the dual enrollment program because it is a “no brainer” indicates that students would be foolish to refrain from receiving a reward when the reward is readily and easily obtained. Matt summarized this thinking when he said, “Well, we could either choose to audit the class or take it for college credit and there is no reason to audit it because you wouldn’t get college credit.” He clearly articulated the extrinsic motivation (college credit) and linked it to the idea that there was “no reason” not seek the college credit, especially when he was already required to take the high school portion of the course.

The theme of personal betterment contained core ideas that were both extrinsic and intrinsic motivation. Two core ideas, experience college and gain confidence, were determined to be extrinsic motivators because they hinged on students gaining a reward in the future. These two core ideas were quite similar to the theme of investment in the future. Listen to Greg when he said, “Just to be able to understand what I’m about to encounter next year.” The core of Greg’s motivation was future gain. He was motivated to participate in the dual enrollment program so that he would be more prepared “next year.” Greg was seeking a reward for his action to participate. Likewise, the students indicating that gaining confidence motivated them were interested in a reward. Oliver noted,

Plus, you know, um, I’ve learned even if I don’t get college credit, I can go in there having already taken kind of similar course material and go on and, you know, ace that class, if I have to take it again in college.

His motivation, while on the surface seemed intrinsic, actually hinged on the ability to “ace that class” later on. So, even if he did not obtain credit immediately, he would obtain a higher grade the second time around.

Helen articulated a similar motivation when she stated, “Well, I guess it’s given me that extra push to realize that in college I can achieve what I need to achieve by having it in high school.” On the surface, it appeared that Helen was intrinsically motivated; however, she went on to say,

I guess it’s just like I’ve said, realizing that you’re going to have to put in extra effort in order to achieve what you want to achieve in college. Like, it’s not gonna be simple, as you know, one, two, three in college. Like, you’re going to

have to do your part along with the teacher doing their part to be able to graduate from the class and get the grade you want.

Notice that the motivation was not simply to pursue achievement or to take pleasure in achievement: it was “to graduate from the class and get the grade you want.”

Achievement hinged on getting a grade or, in other words, obtaining a reward.

Intrinsic motivation. Very few students indicated that they were intrinsically motivated to participate in the dual enrollment program. One theme, an interest in the subject, and one core idea, experiencing a challenge, emerged as intrinsic motivators.

The students that sought to experience a challenge were motivated by discovery and inquisitiveness. Isabel commented, “I think you could, you should take every opportunity you can to take harder things and challenge yourself every day.” Her comment illustrated a desire to improve herself and to discover what she does not know. This motivation embodied a desire to obtain satisfaction by accomplishing tasks that seem to be difficult or improbable. Oliver confirmed this thinking, “the exams are a little bit more challenging so I think it’s good.” Inherent in his comment was the idea that while more difficult, dual enrollment exams stretched him and that was “good.”

There were three students that explicitly expressed that they participated in the dual enrollment program because they were interested in the subject. Alexis suggested, “I have always been interested in the field of psychology.” Matt stated, “I just wanted to know what that was about.” Isabel shared a similar thought, “I think it’s really interesting.” These students were driven by a pleasure to learn. They were clearly intrinsically motivated.

Personal Calling

The third research question sought to determine if students in the dual enrollment

program articulated a sense of personal calling to participation in dual enrollment. The students were given the opportunity to describe their motivation to participate in the dual enrollment program and to describe their plans for the future. Additionally, students were asked if the dual enrollment program had helped them achieve their aspirations. In general, the participants in this study did not articulate a personal calling. Furthermore, the participants in this study were particularly uncertain about the overall benefits of the dual enrollment program and the ability of dual enrollment to help them achieve their aspirations. Finally, it appeared that the lack of calling is partly contingent on the counsel of elders in the students' lives.

Uncertainty. The participants in this study primarily exhibited extrinsic motivation for participation in the dual enrollment program and did not express a sense of personal calling. Elangovan et al. (2009) has linked the presence of intrinsic motivation to a personal calling and generally defined calling as “a course of action in pursuit of pro-social intentions embodying the convergence of an individual’s sense of what he or she would like to do, should do, and actually does” (p. 430). The participants did not express a connection between what they would like to do and dual enrollment, their current engagement. In particular, the students expressed a significant amount of uncertainty regarding the future and the ability for dual enrollment to assist them in their pursuit of their aspirations. All 15 participants indicated that they were uncertain about the ability of dual enrollment to help them achieve their aspirations.

With dual enrollment. When asked about how dual enrollment had helped achieve aspirations, the participants consistently made qualifying statements such as “I think”, “maybe”, “if”, “depending”, “[I] hope, maybe”, “so far I guess”, and “I don’t know yet.” These qualifiers were consistently centered on the ability of dual enrollment

to deliver extrinsic rewards in the future. The participants consistently linked the benefits of dual enrollment to the return on the investment. Tom stated, “Uh, I don’t know yet. Uh, it hasn’t hurt it. I just don’t know yet cause I haven’t been accepted to college.” Isabel clearly articulated her thoughts when she commented on how dual enrollment has helped achieve her aspirations, “I don’t think they do. I just think, I think they help me for, like, college, but, like, I don’t think they help me achieve like what I want to do.” Sadly, Isabel, like the other students in this study, did not see a connection between her education and what she wanted to do. Isabel lacked a sense of personal calling.

Like Isabel, when asked if dual enrollment had helped her achieve her aspirations Christa said, “Not really.” She continued, “Cause I think, as far as dual enrollments been in my life, it’s just been, um, like stuff, like, this or on the tests we take Unity tests. So that’s all I really seen on the dual enrollment side.” Christa suggested that dual enrollment had not been particularly different than other aspects of her education. Christa had not connected participation in the dual enrollment program to her future.

With the future. The participants’ view of the future varied greatly. Some students indicated a vision of their preferred future. Alexis indicated that she wanted to be a teacher. She was also the only student to say that she was open to God’s plan. She said, “I either want to teach at a small Christian school or a public school, wherever the Lord wants me, or overseas.” However, other students were uncertain about their future. Tom said, “To be honest, I have no clue.” He continued, “I’m open right now.” Still other responses were nebulous. Scott said, “Hmmm, I just want to have a good career.”

The participants in this study had difficulty articulating a clear plan for the future, which made connecting dual enrollment to the future equally difficult. Perhaps the inability to have a clear vision for the future impacted the students’ ability to connect

their current educational activities to their future aspirations. Regardless, the participants had difficulty articulating a personal calling for participation in dual enrollment or for the future.

Influential people. A clear pattern emerged in this study. The students' motivation seemed to have been significantly impacted by the influence of the adults in their lives, in particular by their parents and school personnel. The participants continually indicated that the adults in their lives encouraged them to participate in the dual enrollment program for extrinsic reasons. It was common to hear comments such as the following from Kim. "Well my mom wanted me to take it because I'd get college credit and, yeah, that's pretty much it." She continued, "Oh, she (her guidance counselor) just, she just said it would look better, I guess, on my transcript." Greg's comments regarding his parents were similar.

They were just kind of saying the same thing; kind of about how it would make it easier once I get to college and to be able to basically bang out two separate classes. I mean, that's time and money that goes into one class. So they're just, I mean, they didn't force me to, but they were just saying; they were kind of explaining how it would be a good idea.

Tom indicated that his guidance counselor met with the students in his school, encouraging participation for extrinsic reasons. He said,

Well, our guidance counselor, you know, came into the class and told us all about it and, and, you know, said that you could get these dual enrollment credits, uh, you know, if you complete the, like, their part of it and, then, like, the regular classroom part. Uh, so, you know, I talked with my parents about it and we looked up, you know, the university and it looked pretty good. So, I guess,

probably, just my parents, guidance counselor, and the teachers of all the classes kind of encouraged it, too.

Tom's comments indicated that the school pushed the dual enrollment classes based on the rewards that the students could gain.

The influence of the adults was not solely extrinsically focused; however, the extrinsic theme was always persistent. Several students, including Lorenzo, indicated that their parents or school officials encouraged dual enrollment for other reasons as well. He said,

Um, cause my parents didn't go to college, neither of them. My mom didn't graduate high school; she got her GED. My dad, like, he graduated high school, but they wanted me to go ahead and they really wanted me to get my college degree. So they wanted me to go ahead and get that done. You know, start early.

Isabel commented that her parents were a significant influence on her decision. She mentioned both extrinsic rewards and encouragement as factors for her participation.

They, usually they, they tell me what's best for me. But, like they help me, like, to decide when I can't decide. And they're, like, you know, they say, well this is going to do, you know, this is going to look better for you on your report cards and stuff like that. And for colleges, they're going to want you, you know, like, they just kinda support me, you know. Cause I usually think, 'Oh, I can't do this.' And they're, like, yeah, you can. So think they kinda push me to work harder.

In summary, the results of this study provided the following answers to the research questions. For the first research question, it was determined that the participants in this study were motivated to participate in the dual enrollment program because of an investment in the future, relationships/people, it was a "no brainer", personal betterment,

and an interest in the subject. The second research question focused on determining whether the students were intrinsically or extrinsically motivated to participate in dual enrollment. In general, it was determined that the participants were primarily extrinsically motivated to participate. Finally, the third research question sought to understand the participants' sense of personal calling to participate in dual enrollment. It was evident that the students did not express a personal calling to participate in the dual enrollment program.

CHAPTER FIVE: DISCUSSION

Introduction

The following chapter explores the results of this study on student motivation in Christian schools, connecting them to current literature on school reform, the self-determination theory, and calling. This chapter also discusses the limitations of this study and offer suggestions as to the study's generalizability. Finally, recommendations for further research are suggested.

Summary of the Findings

This study analyzed the motivation of students in two Christian schools to participate in a dual enrollment program with an evangelical, Christian university. Both high schools participating in this study were in their first year of offering a dual enrollment program and this was the students' first year of participation. The students were given the opportunity to complete the Academic Motivation Scale, a questionnaire, and an interview to explore their motivation for participation. The data was analyzed according to the Consensual Qualitative Research methodology.

Primary motivators. In response to the first research question, it was determined that the participants in this study were motivated to participate in the dual enrollment program because of an investment in the future, relationships/people, it was a “no brainer”, personal betterment, and an interest in the subject. An investment in the future and relationships/people emerged as general themes. This indicates that students were motivated by the opportunity to obtain a reward and were significantly influenced by the opinions and advice of others.

In particular, the students in this study indicated that they were motivated by the opportunity to earn college credits, save money, save time, and increase their high school GPA. The students indicated the investment in dual enrollment classes would pay off in the future.

Every student in this study made the decision to participate in the dual enrollment program based, in part, on the advice received from another person. It was found that the most influential people in the students' lives were their parents and school personnel. In addition, the students indicated that their friends played a role in their decision to participate in the dual enrollment program.

Students in this study were also motivated by the program structure. Many of the dual enrollment offerings were also core curricular requirements that students would have had to enroll in regardless of the potential for dual enrollment credit. Therefore, many of the students mentioned that participation in the dual enrollment program was a “no brainer.” This “no brainer” theme emerged as typical theme.

There was also a sense that participating in the dual enrollment program would lead to personal betterment. This typical theme emerged from the idea that participation in the dual enrollment program would afford the opportunity to experience college, gain confidence, and experience a challenge.

Finally, a few students indicated that their motivation to participate was due to an interest in the subject offered. Therefore, an interest in the subject became a variant theme.

Type of motivation. In answering the second research question, it was determined that the participants were primarily extrinsically motivated to participate in the dual enrollment program. The main motivators, in investment in the future and

relationships/people were clearly extrinsically focused because the students were motivated by the opportunity to receive a reward or avoid a punishment. Additionally, both variant themes centered on extrinsic motivators for participation. Within the theme of personal betterment, only “to experience a challenge” was determined to be an intrinsic motivation. Experiencing college and gaining confidence were determined to be extrinsic motivations because, at their core, these motivations centered, once again, on the ability to reap a reward or avoid a punishment. Very few students indicated that they were motivated to participate for intrinsic reasons.

Personal calling. Finally, the third research question sought to understand the participants’ sense of personal calling to participate in dual enrollment. It was evident that the students did not express a personal calling to participate in the dual enrollment program. The students in this study were unable to convey a sense of personal calling and were particularly uncertain as to the actual benefits of the dual enrollment program. The prevailing encouragement for, and verbalized motivation for, participation in the dual enrollment program hinged on the realization of the future benefits.

Discussion of Relevant Literature

The goal of this study was to develop an understanding of the motivation of students within ACSI schools to participate in dual enrollment programs. It has been shown that the 15 students in the dual enrollment program in the two ACSI schools studied were primarily extrinsically motivated and unable to articulate a sense of personal calling. These results will be discussed in light of current research on high school reform, motivational theory, and calling. Specifically, the results of this study will be connected to current research on the SDT, illuminating the need for educational leaders to

understand the importance of student motivation and design educational environments sensitive to the development of proper motivation.

Implications for Christian education. It is not surprising that the students in this study indicated that the primary motivation for participation in the dual enrollment program was to invest in their future. This is exactly what dual enrollment has been created to do: provide students with high school and college credits simultaneously. Prior research on dual enrollment indicated that students would be motivated by earning credit and saving money (Buchanan, 2006; Carraway, 2006). Students in this program should be motivated by credits and be aware of the implications of early enrollment at a university. The challenge for Christian educators, however, is the overwhelming reliance on extrinsic motivators. Why were the students not able to articulate intrinsic motivations for participation? Are they intrinsically motivated at all? Furthermore, why was there a disconnect between participation in the dual enrollment program and student aspirations? In other words, why were the students unable to indicate a sense of personal calling to participate in the dual enrollment program?

The results of this study begin to illuminate the answers to these questions, although further research is required to fully understand student motivations. This study suggests three key areas where Christian educators should focus attention in order to encourage the development of intrinsic motivation and calling. Christian educators need to examine the structure of the dual enrollment program, develop biblically focused guidance counseling programs, and invest resources in curricula that encourage students to engage the concept of calling.

Program structure. Analysis of the data indicated that one of the typical themes in this research was that participation in dual enrollment was a “no brainer.” Students in

this study perceived participation in dual enrollment to make sense and indicated that it would be foolish for students to decline the opportunity to earn high school and college credit simultaneously. It seems as if the design of the program “forced” the students to participate in the dual enrollment program. While students certainly had a choice to participate, it was all but impossible to refuse. In other words, the program structure had a direct impact on the students’ motivation to participate in dual enrollment.

The dual enrollment program at Victory Christian and Freedom Christian included core academic courses that students were to be enrolled in regardless of the ability to offer dual enrollment. Both schools were in the first year of the dual enrollment program with Unity University and, due to accreditation requirements, had to find qualified instructors prior to offering dual enrollment courses. The schools, therefore, were resigned to offering dual enrollment courses based on the qualifications of their staff. Unfortunately, the schools were unable to completely customize the dual enrollment experience for their students.

Furthermore, Victory Christian and Freedom Christian offered dual enrollment courses based on their existing curricula. As a result, students were given the opportunity to earn college credit in courses that they would have originally taken. The schools did not invent new courses in the implementation of the dual enrollment program.

Based on the limitations of the accreditation of Unity University and the curricular availability within each school, the schools offered dual enrollment programs to students that provided extrinsic motivators (e.g., college credit) but limited the autonomy of the students (Deci & Ryan, 2008b; Deci, 2009). The lack of autonomy led to students indicating that participation was a “no brainer.” They were literally compelled to participate.

Within the SDT, Gagne and Deci (2005) suggested “that the interpersonal climate within which rewards are administered has a significant influence on the rewards’ effects” (p. 354). If the environment supports autonomous decision-making, the individuals are more likely to exhibit intrinsic motivation. Likewise, the opposite is true. Controlling environments encourage the development of extrinsic motivations (see Figure 4).

Amotivation	Extrinsic Motivation				Intrinsic Motivation
	External Regulation	Introjected Regulation	Identified Regulation	Integrated Regulation	
Absence of intentional regulation	Contingencies of reward and punishment	Self-worth contingent on performance; ego-involvement	Importance of goals, values, and regulations	Coherence among goals, values, and regulations	Interest and enjoyment of the task
Lack of Motivation	Controlled Motivation	Moderately Controlled Motivation	Moderately Autonomous Motivation	Autonomous Motivation	Inherently Autonomous Motivation
No Motivation	Materialist Motivation	Vocation		Calling	

Figure 4: The SDT continuum juxtaposed with career selection motivations. This figure illustrates how career motivations relate to the SDT continuum (Deci & Ryan, 2008a; Gagne & Deci, 2005).

Therefore, students in the dual enrollment programs at the research sites were indicating that the environment did not support autonomous decisions. When the students feel that participation is controlled, the development of intrinsic motivation will be stunted (Deci & Ryan, 2008b). Given the parameters of the dual enrollment programs at the schools in this study, the prevalence of extrinsic motivation is expected.

School administrators need to evaluate the structure of the dual enrollment programs as they are implemented to ensure that the inherent structure does not limit or destroy an autonomy supportive environment. If autonomy is limited, the students will tend to exhibit extrinsic motivation at the exclusion of intrinsic motivation.

Guidance programs. Perhaps the most obvious, yet challenging, result of this study was the impact of the adults on student motivation. The students clearly indicated that the adults in their lives wanted them to participate in the dual enrollment program for the extrinsic rewards. This counsel probably contributed to the aforementioned

controlling environment, further exacerbating the development of extrinsic motivation. This research, then, suggests that Christian schools need to consider developing and enhancing biblically focused guidance programs.

Historical thinking on vocation and calling offer a beginning point for guidance programs. Veith (2002) offered a working definition of vocation (i.e. calling) that transforms life and literally provides a basis for the development of a proper motivation. Veith (2002) suggested that counseling according to the doctrine of vocation requires a different approach. He stated, “Instead of ‘what job shall I choose?’ the question becomes ‘what is God calling me to do?’ Our vocation is not something we choose ourselves. It is something to which we are called” (p. 48).

This study, however, suggests that the need for a change in perspective is pandemic across all of the adults impacting students. According to this study, parents, guidance counselors, teachers, and even administration encouraged students to participate for extrinsic reasons at the exclusion of the development of a calling. Perhaps a change in counsel would have led to the development and presence of a personal calling. This study challenges Christian school administrators to passionately and unapologetically focus on encouraging students to find their calling.

Within the SDT framework, this research suggests that guidance counseling should focus on encouraging students to pursue tasks that are inherently enjoyable and that connect an individual's goals, values, and regulations (see Figure 4). Guidance programs that merely provide counsel centering on reward and punishment limit the students' motivational development, potentially inhibiting the opportunity for students to develop intrinsic motivation.

Finally, and most challenging, Christian schools should consider developing programs that provide counsel for parents. As the most influential individuals in the students' lives, parents have the ability to direct students in the development of a personal calling. If schools are able to adjust adult counsel, it is possible to alter student motivation to include intrinsic motivation.

Invest in curricula. Christian schools desiring to graduate students with a Kingdom focus (Schultz, 2005) must also invest in curriculum to assist students in the development of a personal calling (see Figure 4). Understanding the results of this study within the SDT illuminates the importance of encouraging the development of a personal calling. The participants in this study did not exhibit a personal calling and clearly articulated extrinsic motivations for participating in the dual enrollment program. Additionally, the adults provided counsel focused mainly on extrinsic motivators. While this research cannot confirm that providing counseling programs and curricula focused on the development of a personal calling will increase intrinsic motivation, it suggests that the lack of such will inhibit the development of intrinsic motivation. Within the SDT, it becomes clear that schools should provide students with planned, curricular opportunities to engage in the development of a personal calling.

For example, Millard (2009) developed a curriculum designed to guide students in the pursuit of their life purpose. Christian school leaders should consider offering such courses as an elective, a pre-requisite, or a co-requisite. Regardless of the format, investing in curricular options legitimizes the seriousness of the school and provides students with a fully developed dual enrollment program.

Implications for non-Christian education. The results of this study are illuminating in light of current calls for overarching high school reform. In particular, the

current focus of reform efforts are interested in producing college ready high school graduates (Kuo, 2010); however, this study has shown that there is a dichotomy between academic readiness and motivational readiness. All of the participants in this study were excellent students, maintaining a high school GPA greater than 3.0 and participating in college courses, yet there was a prevailing extrinsic motivational theme for their participation in the dual enrollment program. Students may be academically ready for college, but it appears that they may not be motivationally ready for college.

Educational continuity. Educational reformers are interested in ensuring and improving the integrity of the traditional K-12 environment, as well as expanding the system to include K-16, encouraging access for all students (Mensel, 2010). Barnett and Hughes (2010) suggested that increasing the partnerships between community colleges and high schools, in particular the expansion of dual enrollment programs, could lead to larger college enrollments, increased college readiness, and increased college persistence. These are excellent educational goals that must be pursued; however, this research suggests that educational reforms need to consider an additional variable: motivation.

While dual enrollment has the ability to affect the number of students enrolling in college, their ability to succeed in college, and their likelihood of persistence, it may not provide the students with a sustainable motivational foundation (Karp et al., 2007; Karp & Jeong, 2008; Kim & Bragg, 2008; Lewis & Overman, 2008; Smith, 2007; Swanson, 2008). This study provided evidence that high school students, and the system supporting them, were primarily extrinsically motivated. Furthermore, the students in this study were unable to articulate a sense of personal calling. High school reform, therefore, should not only seek to matriculate students to college; it should focus on preparing students to live lives of purpose.

The senior year. High school reform efforts, such as dual enrollment, have been instituted to remedy the meaninglessness of the high school senior year (Koszoru, 2005; National Commission on the High School Senior Year, 2001). This study found that adding meaning to the high school senior year might require more than providing advanced courses for students. While providing students with the opportunity to take advanced courses increased the students' ability to know what to expect from college courses and increased their confidence, it did not translate into a sense of purpose or calling. The students in this study were participating in the program "to get a head start" or "to invest in the future." This study does not provide evidence that the dual enrollment program added meaning to the senior year of high school.

Perhaps the observed lack of meaning is the result of the overall lack of intentionality toward the development of intrinsic motivation (see Figure 4). There was little evidence that Victory Christian or Freedom Christian encourages students to participate in the dual enrollment program because of interest or enjoyment. Furthermore, there was not an observed connection between the students' goals and values. Rather, students continually focused on future rewards for participation.

Understanding these results within the SDT suggests that meaning and purpose are not accidentally obtained. Simply providing students with opportunities to enroll in advanced courses does not ensure the development of purpose. In fact, this research suggests the opposite. Dual enrollment alone does not produce purpose driven students.

Rigor, relevance, and relationships. Current reform efforts center on creating environments promoting rigor, relevance, and relationships: the three Rs (Alaie, 2011; Boggess, 2007; Frey, 2005). This research confirmed the importance the three Rs, finding in particular that student relationships had a significant impact on the focus of

student motivation. Dual enrollment, when instituted properly, certainly increases academic rigor. However, it is imperative that schools implementing dual enrollment programs expand their focus beyond increased academic rigor. Creating relevant curricula involves more than implanting interesting courses; it involves encouraging students to develop intrinsic motivation and a sense of personal calling.

While the students in this study did not exhibit intrinsic motivation or a sense of personal calling, there was a prevailing sense that the advice provided by the students' parents and school personnel significantly impacted the thought process of the students. In particular, since this was the first year of the program, there was a sense that the students were parroting the motivation of the adults in their lives. One student commented that a teacher had encouraged participation in the dual enrollment program because, "She [the teacher] needed kids to do it." Increasing rigor, relevance, and relationships requires schools to develop an educational philosophy that is centered on the development of intrinsic motivation and a personal calling. Schools should not "need" students to participate. Rather, they should encourage students to participate in advanced educational opportunities to find their purpose in life. True educational reform will increase rigor, relevance, and relationships, but it will also develop purpose.

Limitations and Recommendations for Future Research

This qualitative study focused on analyzing the motivation of high achieving students to participate in a dual enrolment program in two ACSI schools in two different states. The phenomenology was exploratory in nature, seeking to develop an understanding of student motivation. Based on the results of this study, future research may be more focused and particular, potentially answering questions that have been exposed in this research.

The findings of this phenomenological study were primarily limited by the selective nature of the population studied; however, the study provides guidance for Christian schools seeking to develop dual enrollment programs and illuminates the importance of motivation within high school reform efforts. The participants in this study maintained an advanced academic standing, attended a private, Christian school, and were in the first year of a dual enrollment program at their school. The results of this study are limited by these variables.

Furthermore, the study included eight male students and seven female students. Of the 15 participants, eight were seniors and seven were juniors. All of participants were Caucasian. The research methodology did not differentiate for, or consider, gender, age, or ethnicity as a variable. Further research should develop a specific understanding of the motivation to participate in dual enrollment programs based on gender, age, and ethnicity. Additionally, similar qualitative studies should be considered for partnerships between public schools and public colleges and universities. The potential exists for differing motivators based on the type of educational system.

This study is also limited by the focus on students participating in a dual credit form of dual enrollment. Would similar results be obtained for students in an Advanced Placement or International Baccalaureate programs? Further research on the motivation of students participating in dual enrollment programs should expand to other types of dual enrollment programs. It would be interesting to know if students in early college or career and technical education programs are similarly motivated to students in this study. Future research should isolate and compare differing types of dual enrollment programs to determine if the motivation for participation discovered in this study is ubiquitous across programs.

The results of this study suggest that people and school environments have a significant impact on student motivation and worldview. Future qualitative research should seek to illuminate the impact that people and the school environment have on student motivation through case study methodology. This study centered on the students' voice; however, future research would benefit from exploring the perceptions of parents, school administration, guidance counselors, and teachers. Furthermore, an analysis of the documentation provided to students should yield valuable insight into how the school environment shapes student motivation.

When the study was devised, there was concern that a sense of personal calling would emerge due to the religious nature of the educational system where the students were being educated. The results indicated that a sense of personal calling was not evident; therefore, further research should explore why a personal sense of calling was not present. Additionally, further research on curricula designed to develop a personal sense of calling (Millard, 2009) should be undertaken. This research begs the answer to many questions. Will students that have been educated on calling exhibit an increased intrinsic motivation? Can a school system alter student motivation by altering its educational philosophy? Will educating parents on intrinsic motivation alter the motivation of students? The list is endless. Future research on motivation within all types of schools should explore such questions.

Conclusion

And so, full circle, this research returns to the opening quote from Deci and Ryan (1985), "the central problem [in education] is how to utilize extrinsic structures in such a way as to encourage self-regulation and not alienate the children from the process of learning or stifle their intrinsic motivation for related topics and concerns" (p. 246).

Educators today are still plagued by this tension. This study found that students enrolled in dual enrollment courses in two ACSI schools in Florida and South Carolina were primarily extrinsically motivated. The students were motivated to participate because of an investment in the future, relationships/people, it was a “no brainer,” personal betterment, and an interest in the subject. The students did not exhibit a personal calling to participate in the dual enrollment program.

Therefore, it has been suggested that educators may need to intentionally focus on the development of intrinsic motivation, specifically targeting the nurturing of each student’s personal calling. Specifically, Christian educators need to continue to implement dual enrollment programs; however, it may be necessary to consider the structure of the dual enrollment program, adjust current guidance practices, and implement curriculum specifically designed to assist students in their quest to find their personal calling.

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APPENDICES

APPENDIX A Academic Motivation Scale

Participant #

***** Christian School

WHY DO YOU GO TO COLLEGE?

Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you go to college.

Does not correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly		
1	2	3	4	5	6	7

WHY DO YOU GO TO COLLEGE?

1. Because with only a high-school degree I would not find a high-paying job later on. 1 2 3 4 5 6 7
2. Because I experience pleasure and satisfaction while learning new things. 1 2 3 4 5 6 7
3. Because I think that a college education will help me better prepare for the career I have chosen. 1 2 3 4 5 6 7
4. For the intense feelings I experience when I am communicating my own ideas to others. 1 2 3 4 5 6 7
5. Honestly, I don't know; I really feel that I am wasting my time in school. 1 2 3 4 5 6 7
6. For the pleasure I experience while surpassing myself in my studies. 1 2 3 4 5 6 7
7. To prove to myself that I am capable of completing my college degree. 1 2 3 4 5 6 7
8. In order to obtain a more prestigious job later on. 1 2 3 4 5 6 7
9. For the pleasure I experience when I discover new things never seen before. 1 2 3 4 5 6 7

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| 10. Because eventually it will enable me to enter the job market in a field that I like. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. For the pleasure that I experience when I read interesting authors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I once had good reasons for going to college; however, now I wonder whether I should continue. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Because of the fact that when I succeed in college I feel important. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Because I want to have "the good life" later on. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. Because this will help me make a better choice regarding my career orientation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. I can't see why I go to college and frankly, I couldn't care less. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. To show myself that I am an intelligent person. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. In order to have a better salary later on. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. Because my studies allow me to continue to learn about many things that interest me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. Because I believe that a few additional years of education will improve my competence as a worker. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. For the "high" feeling that I experience while reading about various interesting subjects. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

26. I don't know; I can't understand what I am
doing in school. 1 2 3 4 5 6 7
27. Because college allows me to experience a
personal satisfaction in my quest for excellence
in my studies. 1 2 3 4 5 6 7
28. Because I want to show myself that I can succeed
in my studies. 1 2 3 4 5 6 7
-

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Caroline B. Sénécal, Évelyne F. Vallières, 1992

APPENDIX B
Site Consent Form

REQUEST TO CONDUCT RESEARCH AT *** IN

Project Title: *Motivation and Dual Enrollment: An Analysis of the Motivation of High School Students to Participate in Dual Enrollment in Association of Christian School International Schools*

Principal Investigator:

Mitchell A. Salerno, High School Principal 407-587-5274, masalerno@liberty.edu
Name, Title *Phone, E-mail address*

Faculty Sponsor:

Ralph Marino, Jr., Ed.D., Assistant Professor of Education 607-795-2404, rmarino@liberty.edu
Name and Title *Phone, E-mail address*

The principal investigator agrees to carry out the proposed project as stated in the application and to promptly report to the Superintendents' Office any proposed changes and/or unanticipated problems. Additionally he agrees to maintain records and keep informed consent for three years after completion of the project.

A. PROPOSED RESEARCH RATIONALE

Dual enrollment continues to increase in popularity and has been suggested to unite high school and postsecondary institutions, increase postsecondary completion, and provide much needed rigor in high school. Given the monumental expectations for dual enrollment reform efforts, one would expect that the efficacy of such programs were well supported in the literature; however, this is not so. Furthermore, researchers have noted that student motivation is a critical factor in determining success, yet no study was found that explicitly sought to unite current motivational theory to the efficacy of dual enrollment programs.

The purpose of this study is to understand what motivates junior and senior students in two Christian high schools to participate in a dual enrollment program in relation to the Self-Determination Theory and to connect this motivation to research on personal calling.

B. SUBJECTS TO BE INCLUDED

- The criteria for the subjects to participate in the study would be as follows:
 - Age: High school juniors and seniors
 - Gender: Either
 - Ethnicity: Any can participate
 - Identification: Participants must be enrolled in at least two core dual enrollment courses and maintain a cumulative GPA greater than or equal to 3.0.

- The participant qualification criteria were chosen because the purpose of the study is to determine the motivation of dual enrollment students in Christian schools.
- The minimum number of subjects the researcher is seeking to enroll is 12 (6 from each school site). This number was determined after reviewing the opinions of qualitative research experts.

C. SPECIFIC PROCEDURES TO BE FOLLOWED BY THE SUBJECTS

- The subjects will be asked to attend a short 15 minute meeting that explains the study, the data collection methods, and what will be required of them.
- Each subject will be asked to complete an open-ended questionnaire, a self-report instrument, and participate in a face-to-face interview on the school campus.

D. METHODS OF DATA COLLECTION

- An open-ended questionnaire will be administered to obtain the student's perspective on why they participated in dual enrollment.
- The *Academic Motivation Scale* will be administered to determine the motivational profile of the students.
- An individual face-to-face interview will be conducted following the completion of the open-ended questionnaire and the Academic Motivation Scale.
- The open-ended questionnaire and the *Academic Motivation Scale* will be completed in one sitting lasting approximately one hour. The interview will follow approximately 3 weeks after the completion of the questionnaire and self-report at a public location on the campus. The interview will last between 30-60 minutes.

E. RECRUITMENT OF SUBJECTS AND OBTAINING INFORMED CONSENT

The administration of ***** will identify all of the dual enrollment students that meet the research criteria of the study, creating a research pool. The researcher will then randomly select 8 participants from the research pool from each school. Informed consent will be sent home to the parents and informed assent will be given to the students. If a student is unable or unwilling to participate, an additional student will be selected randomly from the research pool.

F. CONFIDENTIALITY

- The confidentiality of the subjects will be maintained throughout the process. Each subject will be identified only by number when conducting the data analysis. The subject testing data will be kept in a password protected computer file. Paper copies of the assessments will be kept in a locked file cabinet until the data is entered, and then returned to that cabinet.
- The research records and data will be stored both electronically (password protected) and in a locked filing cabinet (as mentioned above) for a period of

three years after the conclusion of the research. After three years the data will be destroyed. The paper files will be shredded and the computer files will be deleted.

- Pseudonyms will be used for all participants and sites.

G. POTENTIAL RISKS TO SUBJECTS

The risk to the subjects of this research is minimal; it is no greater than the risk encountered during everyday educational activities.

H. BENEFITS TO BE GAINED BY THE SUBJECTS AND/OR SCHOOL SYSTEMS

- Current juniors could benefit from this study through an improved dual enrollment program and improved guidance counseling.
- The benefit to school systems is that the knowledge gleaned from this study, if implemented, may ultimately improve dual enrollment and guidance counseling programs within Christian education. The possible benefits to school systems of this study certainly outweigh the almost non-existent risks to the subjects of the study.

J. WRITTEN INFORMED CONSENT FORM

See Attached Form

I. STATEMENT OF CONSENT

I have read and understand the above information. I have asked questions and have received answers. I consent to participate in the study.

Print Name: _____ Title: _____

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

APPENDIX C
Student Assent/Parent Consent Form

ASSENT/CONSENT FORM

Motivation and Dual Enrollment: An Analysis of the Motivation of High School Students
to Participate in Dual Enrollment in Association of Christian Schools International
Schools

Mitchell A. Salerno
Liberty University
School of Education

You are invited to be in a research study of the motivation of students to participate in dual enrollment programs in Christian schools. You were selected as a possible participant because you are currently enrolled in at least two core dual enrollment courses at a Christian school. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Mitchell A. Salerno, Liberty University Department of Education

Background Information

The purpose of this study is to understand why students participate in dual enrollment programs in Christian schools.

Procedures

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

- Record your thoughts on why you participated in the dual enrollment program on a questionnaire. This will take you approximately 30 minutes to complete and will be completed within the school day.
- Complete a survey on your motivation to participate in dual enrollment. This will take you approximately 30 minutes to complete and will be completed within the school day.
- Participate in an interview on your school campus. The interview will be audio recorded for review later. The interview will last between 30-60 minutes and will be conducted in a public place such as the library during the school day.

Risks and Benefits of being in the Study

There is minimal risk to the participants in this research study. Great care will be taken to ensure that the identity of each participant remains confidential and that opinions provided remain anonymous.

The benefits to participation are: the student may experience a better dual enrollment program and better guidance counseling as a result of this study.

Confidentiality

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

The confidentiality of the subjects will be maintained throughout the process. Each subject will be identified only by number when conducting the data analysis and will be referred to by a pseudonym in the final results. The subject testing data will be kept in a password protected computer file. Paper copies of the assessments will be kept in a locked file cabinet until the data is entered, and then returned to that cabinet. The research records and data will be stored both electronically (password protected) and in a locked filing cabinet (as mentioned above) for a period of three years after the conclusion of the research. When the data is destroyed, the paper files will be shredded and the computer files will be deleted. All audio recordings will be deleted after three years.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the Liberty University or with ***** school. If you decide to participate, you are free to not answer any question or withdraw at any time with out affecting those relationships.

Contacts and Questions

The researcher conducting this study is: Mitchell Salerno. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at The Master's Academy, 407-587-5274, masalerno@liberty.edu. You may also contact Dr. Ralph Marino, Jr. at Liberty University, 607-795-2404, rmarino@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at fgarzon@liberty.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _____ Date: _____

Signature of parent or guardian: _____ Date: _____
(If minors are involved)

Signature of Investigator: _____ Date: _____

APPENDIX D
Open-Ended Questionnaire

Open-Ended Questionnaire

Pilot Student #

***** Christian School

Please answer the following questions as completely as possible. You may use an additional piece of paper if necessary.

Question 1: What courses are you taking in the dual enrollment program?

Question 2: Why did you choose to take these specific courses?

Question 3: What research did you do before you signed up for dual enrollment classes?

APPENDIX E
Individual Interview Protocol

<i>Individual Interview Protocol</i>
<u>Introductory Questions</u> Question 1: What courses are you taking in the dual enrollment program? Question 2: Why did you choose to take these courses? Question 3: Have you enjoyed your experience in the dual enrollment program?
<u>Questions on Motivation</u> Question 4: On your questionnaire/self-report you indicated that you chose to participate in the dual enrollment program because . . . are there any other reasons? Question 5: Tell me more about . . . [insert specific reasons sequentially] Question 6: On your questionnaire you mentioned . . . having a significant impact on your decision to participate in the program. Describe their impact in more detail. Why were they so influential?
<u>Questions Exploring Calling</u> Question 7: On your questionnaire you indicated that you wanted to attend . . . and pursue a career in . . . Tell me more about your aspirations? Question 8: Why do you want to attend this college and pursue this career? Question 9: Has dual enrollment helped you achieve these aspirations? How?
<u>Question about Dual Enrollment</u> Question 10: Would you recommend the dual enrollment program to younger students? Why or why not? Question 11: What advantages do you feel you have gained compared to your peers who are not in dual enrollment? Question 12: Based on your experience, should your school continue to offer the dual enrollment program?

APPENDIX F
Questionnaire and AMS Script

Questionnaire and AMS Script

Academic Motivation Scale

Today you will be completing a questionnaire and a self-report. First, we will complete the Academic Motivation Scale. The scale has 28 items. Each item is an answer to the question, “Why do you go to college?” You will rate each answer based on how much you agree or disagree with the answer. For example, if the answer corresponds to you highly, you will circle the number 7. If it does not correspond at all, you will circle the number 1. Please look at the scale now at the top of the Academic Motivation Scale. Are there any questions?

There is no time limit to complete this scale. When you are finished, please turn the scale over and wait quietly for the others to finish. If you have a question, please raise your hand and I will try to answer your question.

Questionnaire

Thank you for completing the Academic Motivation Scale. Now, you will have the opportunity to record your thoughts on an open-ended questionnaire. Please read each question and write your thoughts in the space provided.

There is no time limit to complete the questionnaire. When you are finished, please turn the questionnaire over and wait quietly for the others to finish. If you have a question, please raise your hand and I will try to answer your question. If you need more space, please raise your hand and I will provide you with more paper.

After all data is collected.

Thank you for completing the Academic Motivation Scale and the Open-Ended Questionnaire. Your participation is greatly appreciated. As the final stage of research, I will interview each of you individually. I am looking forward to talking with each of you later today.

APPENDIX G
Institutional Review Board Approval Letter

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The Graduate School at Liberty University

March 15, 2011

Mitchell Salerno

IRB Approval 1052.031511: Motivation and Dual Enrollment: An Analysis of the Motivation of High School Students to Participate in Dual Enrollment in Association of Christian Schools International

Dear Mitchell,

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

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

Sincerely,



Fernando Garzon, Psy.D.
IRB Chair, Associate Professor
Center for Counseling & Family Studies

(434) 592-5054

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40 Years of Training Champions for Christ: 1971-2011