AN EXAMINATION OF THE RELATIONSHIP BETWEEN STUDENT SUCCESS COURSES AND PERSISTENCE, CREDENTIAL ATTAINMENT, AND ACADEMIC SELF-EFFICACY AMONG COMMUNITY COLLEGE STUDENTS

A Dissertation
by
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Submitted to the Graduate School
at Appalachian State University
in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION

August 2015
Educational Leadership Doctoral Program
Reich College of Education
AN EXAMINATION OF THE RELATIONSHIP BETWEEN STUDENT SUCCESS
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Abstract

AN EXAMINATION OF THE RELATIONSHIP BETWEEN STUDENT SUCCESS COURSES AND PERSISTENCE, CREDENTIAL ATTAINMENT, AND ACADEMIC SELF-EFFICACY AMONG COMMUNITY COLLEGE STUDENTS

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The purpose of this study was to explore the relationship between taking a student success course and the educational outcomes of persistence, credential attainment, and academic self-efficacy at one particular community college in North Carolina. Although previous studies have examined student success courses in relation to persistence and credential attainment, few have included a self-efficacy component. This study filled an additional gap in prior studies by seeking student perceptions about their experience in a student success course. Several major findings emerged from the study. Chi-square results revealed significant relationships between enrollment in the student success course and the outcomes of persistence and credential attainment. In addition, logistic regression results indicated that being younger, enrolling in a developmental education course, attending part-time, persisting, and completing a college credential predicted the likelihood of enrolling in the student success course. ANOVA results also revealed a significant relationship on
the Understanding Subscale of the Academic Self-Efficacy Questionnaire for student success course participants as compared to a control group. Student perceptions obtained from a focus group provided further support that taking the student success course positively influenced academic self-efficacy and academic success. Findings from the current study contribute to the growing body of literature that student success courses provide students with certain skillsets and greater confidence to succeed in college.
Acknowledgments

The completion of this journey would not have been possible without the love and support of so many people. First and foremost, I want to thank God for giving me the courage, strength, and fortitude to see this project through to the end. My family has provided unconditional love and encouragement every step of the way. Without them, none of this would be possible. My wife, Tracy, has been my rock for our entire 23 years of marriage but especially during my quest to earn a doctorate degree. Thanks so much for your love, patience, understanding, and inspiration throughout this process. Thank you, Tracy, for being there for me always and for pushing me through to the finish line. My children, Dylan, Bailey, and Carly have sacrificed much during this process and have often been without their dad. Thanks, guys, for your patience, understanding, and support. Thanks for being there for me when I needed you most. Now, I hope Dad can be there for you, and we can have more quality time together. My mom has always been my biggest fan, and this part of my life was no different. Thanks, Mom, for always supporting and encouraging me along the way and for reminding me about “the light at the end of the tunnel.” Thanks, Dad, for instilling in me a desire to work hard always. Even though you are no longer with me on earth, your encouragement was felt through your spirit. I know you are looking down from heaven and smiling with pride. Thanks, Dad—this is for you.

I gratefully acknowledge and thank my awesome dissertation committee—Dr. Amy Trawick (Chair), Dr. Les Bolt, and Dr. Hunter Boylan. Thanks so much for your willingness
to serve as committee members and for challenging me to be the best doctoral student I could be. You all have challenged me beyond measure and taught me so much along the way. I would also like to thank Dr. Barbara Bonham, who was originally a member of my committee but had to step away for health reasons. Thanks, Dr. Bonham, for all you have done for me throughout my educational experience at Appalachian State University (ASU). You are a true inspiration to me.

I also want to thank Dr. Jim Killacky, who was the director of the doctoral program at the time I was admitted and was willing to take a chance on me. Your friendship and encouragement throughout this process will never be forgotten. I also want to express my appreciation to Dr. Vachel Miller, who assumed the director responsibilities upon Dr. Killacky’s retirement. Thanks, Dr. Miller, for providing a seamless transition for students and for keeping my project moving in a positive direction. I also want to express my gratitude to all of the ASU faculty from whom I had the distinct pleasure to learn. Thank you for sharing your expertise and insights with me. It has been an honor. I want to thank my friends and colleagues from Cohort 20. I will ways cherish your friendship and the many great times we had together.

I want to give a special thanks to Dr. Ken Boham, President of Caldwell Community College and Technical Institute. Thank you for being the best mentor and friend anyone who aspires to be a community college leader could hope for. Your commitment and support have been unwavering throughout this process. Thank you for showing me the way to do it right. I also want to thank my friends Dr. Walter Bartlett, Dr. Garrett Hinshaw, and Dr. David Shockley for setting an example for me to follow. All of you are awesome presidents who help make the North Carolina Community College System great. An additional thanks to Dr.
Hinshaw for his willingness to allow me to conduct this study at Catawba Valley Community College (CVCC).

I want to recognize Camille Annas for her contributions as the editor. Thanks for your expertise and attention to detail. To Jay Dill, thanks so much for assisting with the statistical analyses. To Kate Benoit, thanks for helping me understand how to interpret qualitative data. I also want to extend my heartfelt appreciation to CVCC staff members Jerry Sain, Ari Sigal, and Linda McDaniel. Thanks so much for your help with pulling data and arranging for other aspects of this study to be completed.
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Chapter 1: Introduction

Education in the United States has always been viewed as the gateway to future prosperity and upward mobility. Unfortunately, the American Dream and the hope for a better tomorrow may be in jeopardy. According to the American Association of Community Colleges (AACC, 2012), nearly half of all Americans are now categorized as low-income or living in poverty. Researchers such as O’Banion (2013) and Carnevale and Rose (2011) attribute the recent economic hardships in the United States to the lack of citizens with college credentials. According to the Organisation for Economic Co-operation and Development (2013), the United States now lags behind other countries in college graduation rates and has slipped to 12th in the world in the percentage of young adults aged 25-34 who hold college degrees.

Evidence suggests that future economic prosperity and upward mobility are contingent, at least in part, upon college degree attainment. Carnevale, Smith, and Strohl (2013) forecast that there will be approximately 165 million jobs in the United States economy by 2020 and 65% of those will require a college education. Furthermore, Carnevale and Rose (2011) predict that an additional 20 million college-educated Americans are needed within the next 15 years to meet the needs of the United States economy. In addition to a growing demand for college educated workers, citizens with postsecondary credentials stand to earn significantly higher salaries than those with only a high school diploma. According to Carnevale et al. (2013), college educated workers earn approximately 74% higher wages than workers with no postsecondary training. Zaback, Carlson, and Crellin (2012) posit that associate degree holders have median annual income levels of $9,000 more than those with a
high school diploma, and bachelor degree recipients earn average annual wages in excess of $20,000 more than those with only a high school diploma.

In addition to economic significance, increasing the number of Americans with a college degree has a much broader value. Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008) describe a college degree as being linked to cognitive and social benefits that improve the lives of individuals, families, and communities and pass down to future generations. O’Banion (2013) discusses the importance of the liberal arts components of a college degree that provides students with essential skills to succeed in life. According to O’Banion (2013), “A sound liberal education is designed to liberate students from ignorance; in our current society, ignorance has many champions” (p. 21). He advocates for higher education not to focus solely on preparing students for employment but rather to provide a curriculum that also contributes to the general welfare of students and prepares them for life. In a report entitled A Crucible Moment: College Learning and Democracy’s Future, the National Task Force on Civic Learning and Democratic Engagement (2012) supports the need for a curriculum that does more than prepare students for a career by stating:

As a democracy the United States depends on a knowledgeable, public-spirited, and engaged population. Education plays a fundamental role in building civic vitality, and in the twenty-first century, higher education has a distinctive role to play in the renewal of US democracy. (p. 2)

Successful workers and responsible members of society must have the ability to make decisions, think critically, solve problems, analyze effectively, and work collaboratively with others—and a college education provides a strong foundation for developing these skills (O’Banion, 2013).
Researchers agree that higher education is paramount to societal progress. As Kuh et al. (2008) maintain, “A college degree has replaced the high school diploma as a mainstay for economic self-sufficiency and responsible citizenship” (p. 540). According to the Center for Community College Student Engagement (CCCSE, 2014), “America needs a highly educated population to strengthen our place in the world market, grow our economy, and engage in our democracy. But we cannot have an educated workforce and citizenry if our current reality persists” (p. 2). A nation built on the promise of opportunity and the hope for a better tomorrow must address the current gaps in education in order to remain as a vibrant and competitive society for generations to come. Carnevale and Rose (2011) declare that “The United States has been underproducing college-educated workers for decades” (p. 8). As a result, the United States has lost its global positioning as a nation with an educated workforce. Carnevale and Rose (2011) describe the United States as a country that “was the undisputed leader in educational expansion and had a significantly higher rate of college completion than any other country” (p. 12). Now, other countries are expanding their educational systems and, as a result, are surpassing the United States in the number of citizens with postsecondary credentials. According to Carnevale and Rose (2011), “Forty-two percent of U.S. 25- to 34-year olds have college degrees, far below the 55 percent college degree completion rate attained by young adults in Canada, Japan, and South Korea” (p. 13). These authors estimate that the United States will need to produce an additional 20 million college-educated workers by 2025 to meet the needs of the workforce and the society (Carnevale & Rose, 2011).

In order to address the substandard graduation rates, improve student completion, and help the United States regain its competitive edge, President Barack Obama spurred a
national Completion Agenda in 2009 that has been endorsed and supported by several foundations, such as the Lumina Foundation (2013) and the Bill and Melinda Gates Foundation (Gates, 2010). In his Address to a Joint Session of Congress on February 24, 2009, President Obama emphasized the national scope of the college Completion Agenda:

> Half of the students who begin college never finish. This is a prescription for economic decline, because we know the countries that out-teach us today will out-compete us tomorrow. That is why it will be the goal of this administration to ensure that every child has access to a complete and competitive education—from the day they are born to the day they begin a career…whatever the training may be, every American will need to get more than a high school diploma. And dropping out of high school is no longer an option. It’s not just quitting on yourself, it’s quitting on your country—and this country needs and values the talents of every American. That is why we will provide the support necessary for you to complete college and meet a new goal: by 2020, America will once again have the highest proportion of college graduates in the world. (Obama, 2009, paras. 62-63, 66)

President Obama’s message has been heard loud and clear. A high school credential is no longer viewed as being sufficient. The United States must increase the number of college graduates in order to establish a globally competitive workforce while meeting the needs of American society (O’Banion, 2013).

**Community Colleges**

Many researchers (e.g., Melguizo, Kienzl, & Kosiewicz, 2013; O’Banion, 2013) recognize the key role community colleges play in meeting the national Completion Agenda. Community colleges were built on the fundamental principle of access and are viewed as a
catalyst for educational attainment because they open the door to postsecondary education for so many citizens, especially those traditionally hard to serve in higher education. As O’Banion (2013) states, “For almost 100 years, the community college has championed the Access Agenda—opening the door to higher education for students who never dreamed of going to college” (p. 1). Because of their focus on accessibility, community colleges now enroll approximately 46% of undergraduate students in the United States (AACC, 2015). However, many of the students who enter the doors of community colleges are disadvantaged in some way that creates barriers to student success. O’Gara, Karp, and Hughes (2008) state, “Because of their convenient locations, open access admission policies, and relatively low costs, community colleges tend to enroll a greater proportion of students from groups that are socially, economically, and academically disadvantaged than do four-year colleges” (p. 1). O’Banion (2013) describes community colleges as institutions that often serve non-traditional students who are first-generation, unprepared, and from lower socioeconomic backgrounds. As a result of serving a vulnerable student population, community colleges have created a plethora of programs and services designed to meet students’ needs and help them succeed. Developmental education, tutoring, early-alert systems, intrusive advising, learning communities, supplemental instruction, and student success courses are among the many innovations employed in community colleges to promote student success. O’Banion (2013) acknowledges the dedication to student success in community colleges by stating, “No other institution of higher education is as committed to helping underprepared students to become college-ready students as the community college” (p. 1).
Problem Statement

As Karp (2011) indicates, “Despite their best efforts, community colleges continue to see low rates of student persistence and degree attainment, particularly among academically vulnerable students” (p. 1). The AACC (2012) recently published *Reclaiming the American Dream*, which confirmed these assertions by stating, “Fewer than half (46%) of students who enter community colleges with the goal of earning a degree or certificate have attained that goal, transferred to a baccalaureate institution, or are still enrolled 6 years later” (p. 9). In addition, Boerner (2014) reports a meager 18% of community college students graduate within three years. Citing a 50% attrition rate by students’ second year of enrollment, O’Banion (2013) calls for the redesign of community colleges to address the critical persistence and goal attainment difficulties facing these institutions. Community college leaders agree. Scott Ralls, President of the North Carolina Community College System, maintains, “Access plus success is fundamental to reclaiming the American dream” (as cited in Woods, 2014, p. 30). Cynthia Bioteau, President of Florida State College at Jacksonville, also calls for a fundamental shift by stating, “Community colleges have always been about access, but now we must consider access and success” (as cited in Joch, 2014, p. 57). Supporting the idea of changing how community colleges think about serving students, Mary Frances Archery, Vice President of Student Success and Completion at Community College of Allegheny County, states, “The whole focus has to move from access to success. It’s about ensuring the open door does not become a revolving door” (as cited in Boerner, 2014, p. 52). In order to address effectively the Completion Agenda and increase the number of college graduates, community colleges will need to reimagine and redesign their role from a system of access to one designed for success and completion.
Many of the success interventions employed by higher education institutions have focused on correcting academic deficiencies, especially in community colleges where the majority (60%) of students are academically vulnerable and have to take at least one developmental course upon enrollment (AACC, 2012). However, some researchers (Karp, 2011; Karp, Bickerstaff, Rucks-Ahidiana, Bork, Barragan, & Edgecombe, 2012; Tinto, 1987; Zeidenberg, Jenkins, & Calcagno, 2007) suggest that the inability to persist and graduate may be attributable to non-academic factors. In a recent report, American College Testing (2014) calls for a holistic approach to college readiness that includes addressing several non-academic elements, such as major selection and educational planning. Perhaps focusing solely on academic deficiencies is not the remedy for correcting the pervasive struggles related to attrition. According to Tinto (1987), only 20% of college attrition is attributable to academic deficiencies. Karp et al. (2012) articulate well the nonacademic issues creating barriers for students:

Successful college transitions require more than academic skills. New college students must learn to navigate a complex system of bureaucratic requirements, learn new study habits and time management strategies, and engage in new kinds of social relationships, among other things. Students who lack these nonacademic skills are unlikely to be successful in college, even if they have the required academic skills. (pp. 2-3)

Student success courses are one of the most prolific initiatives designed to provide students with the non-academic skills that pave the way for academic success. However, very little is known about these courses and how—or if—they contribute to student success.
Purpose Statement and Research Questions

The purpose of this study was to examine the relationship between taking a student success course and academic success. Specifically, the following research questions guided the study:

1. What is the relationship between taking a student success course and student persistence?
2. What is the relationship between taking a student success course and credential attainment?
3. What is the impact of taking a student success course on academic self-efficacy?
4. What are student perceptions of the impact of student success courses on academic success?

Methodology

This study employed a mixed methods embedded design, defined by Creswell and Plano Clark (2011) as an “approach where the researcher combines the collection and analysis of both quantitative and qualitative data within a traditional quantitative research design or qualitative research design” (p. 90). An embedded design is appropriate when examining different questions that require different types of data (Creswell & Plano Clark, 2011). According to Creswell (2012), embedded designs are one of the primary mixed methods designs utilized in educational research.

Significance of the Study

Despite years of research and exploration, knowledge about successful retention efforts is limited and needs further study (Tinto, 1993). In particular, it is unclear how or why certain initiatives work in different institutional settings and for different student populations.
(Tinto, 1993). This limited understanding also applies to student success courses and other similar programs, such as first-year seminars. Pascarella and Terenzini (2005) explain:

The persistence-related processes or dynamics underlying the apparent success of the FYS [First-Year Seminar] remain largely unexamined. It is unclear, for example, whether the effects of participation on persistence and degree completion are direct or indirect, providing early socialization, improved study and time management skills, higher grades, and stronger interrelationships with faculty, staff, and peers, all of which are known to promote retention and educational attainment. (p. 403)

This study addresses many of the gaps in prior retention research and expands the knowledge base related to student success courses.

First, Tinto (1993) faults prior research for being too general and descriptive, which he alleges has contributed to the lack of understanding about specific retention strategies. This study took a more in-depth approach to studying student retention by utilizing an embedded research design to explore multiple questions related to the impact of student success courses on student success. According to Morgan (2014), an embedded design allows for “additional coverage” (p. 73) by utilizing different methods to explore different questions. Morgan (2014) also adds, “Additional coverage assigns different methods to different purposes, allowing the overall project to pursue a wider range of research goals than would be possible with any single method” (p. 73). A more thorough understanding of if and how student success courses contribute to specific success measures will greatly contribute to the current body of research.

Second, this study filled another gap by examining retention in a community college setting, an environment that has been largely excluded from the majority of prior retention
research. Pascarella (1999) questions the paucity of research regarding community college retention since these institutions serve approximately 40% of college students nationally. As Wild and Ebbers (2002) indicate, much of what is known about student retention is based on traditional students in residential institutions. However, community colleges are largely commuter institutions serving non-traditional student populations that are often working part-time and have other commitments beyond education (Pascarella, 1999). Therefore, retention research from four-year college settings is of limited use to community colleges. Wild and Ebbers (2002) posit that a much deeper understanding of retention among community college students is needed and call for the undertaking of additional research initiatives in community college settings.

Third, this study expanded the limited research examining the impact of student success courses in community colleges in general and in the North Carolina Community College System (NCCCS) in particular. Derby (2007) and Ellis-O’Quinn (2012) indicate that, although student success courses in universities have received attention, few studies explore the impact of student success courses in community college settings. An even bigger deficit exists in the NCCCS. According to Gardner (2013), only one empirical study in North Carolina was available prior to his dissertation in 2013. Community colleges in North Carolina could greatly benefit from the results of this study. Gaining a deeper understanding of the impact of student success courses will assist institutional leaders, policy makers, and instructors in designing programs and services that more effectively facilitate student success.

Fourth, this study addressed additional shortcomings of prior research by including a longitudinal component that examines graduation over a six-year time frame. Researchers
(Astin, 1993; Schnell & Doetkott, 2003; Tinto, 1993) agree that one of the major flaws of prior retention research is the failure to examine longitudinal data. Institutions must study students over time to truly understand what happens to them from their point of entry to completion or departure. Prior research surrounding student success courses has also been criticized for lack of longitudinal exploration (Boudreau & Kromrey, 1994). The six-year period was also selected because community colleges in the NCCCS are evaluated based on specific performance measures, including the number of students who graduate within a six-year period of time.

Fifth, Tinto (2012) criticizes the majority of institutional retention efforts for being on the periphery of perhaps the most important aspect that helps students stay, the classroom. In community colleges, the classroom may be the only venue where students have the opportunity to interact and engage with faculty and other students. As a result, Tinto (2012) encourages researchers not to neglect what happens in the classroom when examining student success efforts. In Gardner’s (2013) examination of the relationship between first-year experience courses and student success, student perceptions were not considered. Gardner (2013) listed the exclusion of student perceptions as a primary limitation in his evaluation of first-year experience courses. This study addressed the flaw identified by Tinto (2012) by seeking student insights about the impact of a particular student success course to determine what works and what does not work for community college students.

Sixth, researchers (Astin, 1993; Astin, 1997; Kuh et al., 2008; Pascarella & Terenzini, 2005) highlight an additional gap existing in many retention studies resulting from failure to consider student background characteristics, which limits the generalizability of results. Astin (1997) describes the difficulty institutions face when examining retention rates as a way to
verify their ability to keep students. In fact, he states that “more than half of the variance in institutional retention rates can be attributed directly to differences in the kinds of students who initially enroll, rather than to any differential institutional effect” (p. 648). This study attempted to focus upon this shortcoming by addressing specific pre-entry student characteristics.

Finally, much of what is known about the retention of college students has developed from sociological theories and processes. Researchers (Bean & Eaton, 2000; Braxton, 2000; Wild & Ebbers, 2002) recognize the need to examine student departure from new viewpoints. This study provides a fresh perspective by examining student persistence through the lens of Bean and Eaton’s (2000) psychological model. Their model moves the psychological component of student departure from a peripheral role to a more primary role. Specifically, this study examines the psychological construct of self-efficacy within the Bean and Eaton (2000) model.

In sum, this study contributes to the body of knowledge in higher education by addressing many gaps in the literature related to persistence and degree attainment among community college students and offers benefits to educational leaders as they implement programs and services designed to improve student success measures.

**Definition of Terms**

The purpose of this section is to provide clarification and understanding of how several key terms are defined in this study.

**Academic self-efficacy.** For purposes of this study, academic self-efficacy is defined as students’ perceptions of confidence in performing various academic tasks (Bandura, 1997).
**Curriculum students.** College students enrolled in credit-bearing courses.

**Credential attainment.** Completion of a certificate, diploma, or associate degree; used interchangeably with graduation in this study.

**Graduation.** Completion of a certificate, diploma, or associate degree; used interchangeably with credential attainment in this study.

**Graduation rate.** The annual percentage of students completing a certificate, diploma, or associate degree.

**Non-traditional students.** This study utilized Choy’s (2002) definition of non-traditional students. According to Choy (2002):

A nontraditional student is one who has any of the following characteristics:

- Delays enrollment (does not enter postsecondary education in the same calendar year that he or she finished high school);
- Attends part time for at least part of the academic year;
- Works full time (35 hours or more per week) while enrolled;
- Is considered financially independent for purposes of determining eligibility for financial aid;
- Has dependents other than a spouse (usually children, but sometimes others);
- Is a single parent (either not married or married but separated and has dependents); or
- Does not have a high school diploma (completed high school with a GED or other high school completion certificate or did not finish high school). (pp. 2-3)
**Persistence.** For purposes of this study, persistence is defined as students continuing enrollment into the second fall semester.

**Retention.** For purposes of this study, retention is defined as “that which occurs when students complete, continue, or resume their studies” (Lenning, Beal, & Sauer, 1980, p. 10).

**Self-efficacy.** A psychological process where individuals develop a perception of their capability to carry out a task and achieve a particular outcome (Bandura, 1977).

**Student success.** For the purposes of this study, student success is defined as completion of a postsecondary credential (degree, diploma, or certificate) within six years following initial full-time enrollment in a community college or continuation of enrollment into the second fall semester.

**Organization of Study**

In the chapters that follow, I present a literature review, research methodology utilized, findings of the research, and a discussion of those findings. Chapter Two examines literature related to student success courses and academic self-efficacy and reviews classic retention research. The conceptual framework for the study is also introduced. Chapter Three provides an overview of the embedded design methodology that was employed, selection of participants, data collection, and methods that were utilized for data analysis. Chapter Four presents the research findings. Chapter Five includes a discussion of the findings, revisits the conceptual framework in relation to the findings, and presents limitations of the study, implications, recommendations for future research, and conclusions.
Chapter 2: Literature Review

The purpose of this review of related literature is to provide a foundational understanding of the impact of student success courses on student success measures in postsecondary education. This chapter begins with an overview of student success and discusses the importance the first year of college has on the subsequent success of college students. A detailed discussion of a specific success initiative often targeting the first year of college enrollment, student success courses, follows. An overview of the concept of self-efficacy in educational contexts is provided, and a summary of research related to self-efficacy and student success courses is also presented. The chapter concludes with a review of two commonly utilized retention theories before introducing the conceptual framework utilized in this study.

Student Success

O’Banion (2013) describes the complexities associated with defining student success and acknowledges there is no universally accepted definition in higher education. Defining student success in community colleges is compounded due to the multiple missions these institutions serve (Clotfelter, Ladd, Muschkin, & Vigdor, 2013; O’Banion, 2013). According to O’Banion (2013), community colleges are “at least five colleges cobbled together under one umbrella: transfer education, developmental studies, general education, community service, and career and technical education aimed primarily at workforce training” (p. 7). Clotfelter et al. (2013) describe student success in community colleges as “ambiguous” (p. 809) because of the wide variety of course offerings and educational programming designed to meet a multitude of students’ goals, including degree completion, transfer to four-year institutions, special interest courses, vocational courses, and specialized training.
Contributing to the complexity of defining student success in community colleges are the varied definitions of success “articulated by the federal and state governments, by business and industry, by foundations, and by policy analysts and researchers” (O’Banion, 2013, p. 3). As a system historically evaluated based on enrollment numbers, community colleges are now being asked by key stakeholders to meet various success measures beyond sheer enrollment statistics.

North Carolina community colleges are not excluded from having to meet multiple definitions of student success. As Clotfelter et al. (2013) explain, the North Carolina Community College System, the governing body for community colleges in North Carolina, began requiring quantitative measures of student success in 1999 when all 58 community colleges in the state were held accountable for 12 outcome measures known as the critical success factors. In 2007, the number of success criteria was reduced to eight core indicators of student success (Clotfelter et al., 2013). These specific success indicators were once again revised in 2012 and contain the current eight performance measures for student success upon which North Carolina community colleges are evaluated, including graduation rates (North Carolina Community Colleges, 2014a). Additionally, community colleges in North Carolina began receiving a portion of their state budgets in 2013 based on meeting or exceeding specific benchmarks associated with the eight performance measures.

Examining student success from the context in which institutions operate is important. As such, student success in this study is defined as completion of a postsecondary credential (degree, diploma, or certificate) within six years following initial full-time enrollment in a community college or continuation of enrollment into the second fall semester.
First Year of College

The critical nature of student success during the first year of college is salient in the literature (Braxton et al., 2014; Derby & Watson, 2006; Gardner, 1986; Pascarella & Terenzini, 2005; Reason, Terenzini, & Domingo, 2006; Tinto, 1993; Tinto 2012). According to O’Banion (2013), nearly 50% of community college students leave prior to their second year. As one would expect, low rates of persistence result in low rates of degree attainment. A recent report produced by the National Student Clearinghouse Research Center examining credential attainment rates for students who began postsecondary education in fall 2008 revealed that only 26% of community college students earned a credential from their initial institution over a six-year period (Shapiro, Dundar, Yuan, Harrell, & Wakhungu, 2014).

Why do so many students leave during their first year of enrollment and ultimately fail to earn a college credential? The ability to successfully transition to the college environment appears to be critical to persistence. Several researchers (Pascarella & Terenzini, 2005; Reason et al., 2006; Tinto, 1993; Tinto, 2012) agree that what happens early in the college experience can have a prevailing impact on subsequent academic success. In discussing the importance of the initial year of college enrollment, Pascarella and Terenzini (2005) state, “Academic achievement during a student’s first year of college may be a particularly powerful influence on subsequent retention and degree completion” (p. 397). Utilizing a simple approach to describing the critical nature of the first year of college, Tinto (2012) posits that early success determines future success. He attributes departure in the second year to what was lacking in the ever-important initial year of enrollment. Given the majority of student departure occurs during the first year of college, research examining the
impact of student success initiatives targeting students early on during college enrollment is warranted.

**Student Success Courses**

Because of the critical nature of the first year of college enrollment, institutions have long implemented various programs designed to help students successfully transition to college and lay the foundation for subsequent success. Many of these strategies are developed to address the non-academic needs described by Tinto and others that are typically not acquired through traditional developmental courses in reading, writing, and mathematics, which normally focus specifically on correcting academic deficiencies. As one such strategy, many institutions offer, and sometimes require, a course designed to correct the non-academic and social difficulties often associated with the transition to college. According to the Center of Community College Student Engagement (2013), student success courses are now offered by 84% of community colleges. These courses often have various titles, including College Student Success, The Freshman or First-Year Experience, Orientation, Freshman Seminar, College 101, and Student Life Skills. Course topics range from areas such as study skills, time management, goal setting, academic support services, career exploration, and campus social opportunities. Boudreau and Kromrey (1994) explain that these courses became popular in the 1970s and 1980s as a way to address retention concerns for nontraditional students. Student success courses are often part of what Tinto (1993) refers to as transition assistance programs, which are institutional strategies specifically designed to promote integration and curtail student attrition.

Even though course titles and topics may vary, these courses share a common objective. Gardner (1986), who is credited with introducing the concept of the first-year
experience, describes these courses as “a deliberately designed attempt to provide a rite of passage in which students are supported, welcomed, celebrated, and ultimately (hopefully), assimilated” (p. 266). O’Gara et al. (2008) label student success courses as the “gateway to integration into college life” (p. 14). These researchers also describe a student success course as one that is:

usually aimed at new students, provides participants with information about a given college, assistance in academic and career planning, and an introduction to techniques to improve study habits and other personal skills. The goal is to orient students to the various services offered at the college, help them acclimate to the college environment, and give them the tools they need to be successful in postsecondary education. (O’Gara et al., p. 2)

Other researchers (Cuseo, 1997; Derby & Smith, 2004; Pascarella & Terenzini, 2005) also support the positions of Gardner and O’Gara et al. that student success courses serve as a conduit to help students transition into the college environment and promote academic achievement, including persistence and credential attainment.

Research clearly indicates that the primary focus of these courses has remained consistent over time with the primary intent of helping students adjust to college and be successful. As Tinto (1993) emphasizes, “The goal of these programs are the same, namely to help young people acquire the social skills and adopt the social norms of behavior appropriate to membership in the diverse adult communities of the college” (pp. 164-165). Bradley and Blanco (2010) support this concept by referring to first-year experience courses as programs that engage students in the campus early on and promote degree completion. Despite commonalities often associated with student success courses, Pascarella and
Terenzini (2005) remind us of the limited knowledge that exists about the benefits of these courses. As a result, the impact of student success courses is worthy of further examination.

**Impact of Student Success Courses**

Many authors agree that student success courses are effective in promoting student success (Boudreau & Kromrey, 1994; Cho & Karp, 2013; Choate & Smith, 2003; Derby, 2007; Derby & Smith, 2004; Derby & Watson, 2006; Gardner, 1986; Kuh et al., 2008; O’Gara et al., 2008; Pascarella & Terenzini, 2005; Schnell & Doetkott, 2003; Wernersbach, Crowley, Bates, & Rosenthal, 2014; Zeidenberg et al., 2007). A review of the literature follows that explores the effectiveness of student success courses and the impact they have on academic achievement. The majority of the literature suggests that a positive association exists between student success courses and student outcomes, including persistence.

Boudreau and Kromrey (1994) and Schnell and Doetkott (2003) conducted multi-year longitudinal studies in the university setting investigating the effects of completing student success courses on specific student success outcomes, including retention. Each study utilized a matching process to compare course participants with non-participants. In the Boudreau and Kromrey (1994) study, students who took a University Experience course and students who did not take the course from four different fall semesters were examined. Retention was defined as remaining enrolled in the spring semester of the fourth year after the study began. Results indicated a higher retention rate for those who took the University Experience course in all four groups, with a significant difference found in two of those. However, no statistically significant differences were found in graduation rates when comparing students who took the course versus those who did not take the course (Boudreau & Kromrey, 1994). As the authors admitted, their study did not examine specific factors that
would indicate how participation in the University Experience course might have enhanced retention and other success measures (Boudreau & Kromrey, 1994). Schnell and Doetkott’s (2003) study defined retention as “continuous enrollment in fall and spring terms” (p. 386). Results revealed a significantly higher retention rate during all four years of the study for those enrolled in the first year seminar course versus those who were not enrolled. However, their study did not examine other success measures, such as graduation. Schnell and Doetkott (2003) advocated for future research that examines the impact of first-year seminar courses on non-traditional students. Additionally, these authors called for longitudinal studies that compare course participants and non-participants on the basis of “academic ability, gender, race, course load, and motivation” (Schnell & Doetkott, 2003, p. 388).

Limited research exists concerning the impact that completing a student success course has on student satisfaction. However, Hendel (2007) did conduct a study in the late 1990s to determine the effect course participation had on student satisfaction as well as retention in a university setting. Study results indicated that course participation “did not affect either overall satisfaction or their retention into the second year” (p. 419). Even though there were no positive correlations between course participation and retention, students who took the first year seminar course did indicate more of a sense of community than those who did not take the course. Tinto (1987) describes community membership and integration into the college as critical to student persistence. His theory emphasizes the need for students to connect academically and socially to the college in order to increase the likelihood of persistence.

Despite the commonalities included in student success courses, Choate and Smith (2003) maintain that there is one important element that is frequently omitted. They suggest
colleges should include a wellness component that focuses on students’ holistic development.
Exposure to wellness is designed to create a “balance between emotional, spiritual, physical, and intellectual realms” (p. 181) that promotes success individually and academically. In a study at a small, private four-year college, Choate and Smith (2003) collected quantitative and qualitative data to determine the effectiveness of including a wellness component in student success courses. Students reported an increase in self-awareness and understanding as an outcome of their participation in the course when wellness was incorporated. They also attributed a better understanding of self to helping ease the transition to college. The authors of the study concluded that, in addition to academic development, educators should focus on the holistic development of students as a way to enhance integration and promote student success (Choate & Smith, 2003).

Several researchers (Derby, 2007; Derby & Smith, 2004; Ellis-O’Quinn, 2012) acknowledge the frequent positive relationship found in the literature between student success courses and specific success measures, but insist that a significant gap remains. Ellis-O’Quinn (2012) draws attention to the lack of research examining orientation courses in community colleges, particularly those institutions in rural areas. Perhaps the limited research in community colleges is due to students’ various educational goals. Derby and Smith (2004) state that community college students have numerous goals, a reality which leads to retention monitoring difficulties. For example, many community college students may not have a goal of graduation whereas most students at four-year institutions intend to earn a degree. Tinto (1987) also discusses the frustration that prolonged goal uncertainty can cause, which ultimately may lead to attrition. Students often change their minds as to what they want to pursue academically, which may result in a departure that was not previously
planned. Derby and Smith (2004) suggest, for instance, that it is common for community college students to leave to pursue a four-year degree. These students may show up on a drop out report as a negative statistic when, in fact, their goal just changed, necessitating transfer to another college.

Despite the difficulties of tracking community college students’ goals and persistence, Derby participated in several community college studies related to student success courses in an effort to fill in the gaps of prior research. Derby and Smith (2004) examined three different cohorts for a three-year period against various success factors, including degree obtainment, drop outs, enrollment following breaks in enrollment, and student persistence at a Midwestern community college. The researchers utilized Astin’s (1997) model of student retention to categorize retention into four categories:

1. “Successful” students have completed the requirements of a transferable degree within a two-year period.

2. “Drop-outs” completed less than three semesters of coursework within a two-year period, had a three or more course load average, and had a GPA less than 2.0 (on a 4-point scale).

3. “Stop outs” completed three or more semesters of coursework, had a three or more course load average, had a GPA greater than 2.0 (on a 4-point scale), and also re-enrolled after an enrollment break of 1, 2, or 3 semesters.

4. “Persistent” students had a three or more course load average and completed four semesters of course work within the two-year period without completing the requirements for a transferable degree. (Derby & Smith, 2004, pp. 766-767)
For this study, student groups were separated by native and transfer students due to concerns that students who had already taken college courses at another institution may bias the results. When investigating the native group, researchers found significant relationships between course participation and each of the four retention criteria listed above. Students who took the orientation course were more likely to re-enroll, persist, and complete their degree than those students who did not take the course.

Part of Derby’s involvement in student success course research has involved examining the impact of student success courses on specific populations within community colleges. Derby and Watson (2006) used the same data set as Derby and Smith (2004) to examine the impact of taking an orientation course on the retention of African-American students. Astin’s (1997) retention definitions were also utilized in the study. Positive relationships were realized in the areas of retention and persistence. A significant relationship was found in Astin’s retention measure involving drop-outs, with higher percentages of African Americans taking the course being retained. In addition, significance in the area of persistence was also demonstrated for the African-American group who took the course. However, results did not reveal a positive relationship between course enrollment and degree completion.

To further investigate if participation in an orientation course was a predictor of success for African-American students, Derby (2007) conducted a quantitative study at a Midwestern rural community college to examine impact of course participation on degree completion. Results indicated a positive relationship between course participation and degree completion among all participants. It was revealed that “4:5 orientation course participants matriculated to degree completion, and that orientation course participants were 72 times
more likely to graduate” (Derby, 2007, p. 890). However, no significant relationship was found for course participation and degree completion for African-American students.

Other researchers have linked participation in student success courses to student success in community colleges. Zeidenberg et al. (2007) examined the results of a Florida study designed to determine the effectiveness of a student life skills course. Results of the study indicated that students who successfully completed the student life skills course were more likely to be retained, graduate, or successfully transfer than those students who did not complete the course. After examining these data, Zeidenberg et al. (2007) decided to conduct their own study that looked at the impact of enrolling in a student life skills course rather than successful completion of the course. Their study revealed a positive correlation between enrollment in a student life skills course and retention, graduation, and transferring. In regards to retention, Zeidenberg et al. (2007) found that students who took a student life skills course were 8% more likely to be retained than those who did not take the course. These researchers credit higher retention rates among course participants to the emphasis of critical non-academic skills, such as educational and career goal setting, study skills, and knowledge of college resources, which are key topics in the course.

Similar results associated with student success course enrollment were found at Durham Technical Community College (DTCC) in North Carolina. In recent years, DTCC has begun requiring all new students with fewer than 12 credit hours to enroll in a student success course as a way to promote persistence (Jaynes, 2011). An examination of this initiative showed that students who completed the student success course in their first semester of enrollment were retained the following semester at substantially higher rates than those who did not take the course during their initial term of enrollment. In addition, students
who enrolled in the course and withdrew also persisted at higher rates than those who did not enroll in the course (Jaynes, 2011). However, this study did not examine the impact of student success course participation on credential completion.

In 2007, the community college system in Houston, Texas, began requiring student success courses for all new students and transfer students who had accumulated fewer than 12 credit hours. In order to assess the effectiveness of this initiative, cohort comparisons examining student persistence were conducted. Developmental and non-developmental students from Houston Community College who took a student success course were compared to a 2003 Achieving the Dream cohort comprised of developmental students who did not take a student success course. In each of the comparisons, those who took the student success course reported significantly higher persistence rates than Achieving the Dream students (CCSSE, 2013). Like several other studies examining the impact of student success courses, this study failed to examine credential completion as a measure of student success.

In an attempt to ensure the open door did not become a revolving door, Guilford Technical Community College (GTCC) in North Carolina began having students enrolled in specific associate degree programs, including office systems technology and paralegal technology, take a student success course entitled “College Study Skills” along with gateway courses in the programs (Roueche & Roueche, 2012). Course topics ranged from “learning styles, time management skills, college resources, goal setting, and other items specific to each student’s selected program of study” (Roueche & Roueche, 2012, p. 53). Students who took the study skills course simultaneously with the gateway course were more likely to complete successfully the gateway course than in semesters prior when students did not take the courses in tandem with each other (Roueche & Roueche, 2012). The impact was even
greater for African-American male students who took the courses as corequisites. First-term persistence rates for African-American males who took the study skills course were 85% compared to 65% for those who did not take the course (Roueche & Roueche, 2012). Consequently, GTCC expanded the requirement of enrolling in a study skills course to multiple programs within the institution.

Ellis-O’Quinn (2012) conducted an ex post facto study at Southwest Virginia Community College to examine the retention of students who enrolled in an orientation course during their first semester of attendance. All students are required to enroll in the course, but they are not required to take the course during their first semester. Results from this study contradict much of what is reported in the literature. Students who enrolled in an orientation course their first semester were no more likely to reenroll in the spring semester than those students who did not take the course (Ellis-O’Quinn, 2012). The author emphasized the limited scope of the study since student progression was only examined over two semesters and indicates that longitudinal studies examining the impact of student success courses are warranted (Ellis-O’Quinn, 2012).

Cho and Karp (2013) led a larger scale study in Virginia where they examined over 23,000 student records from the Virginia Community College System to determine the impact of participation in a student success course on short-term student outcomes including persistence into the second year of enrollment and the impact of credit hour accumulation on persistence. All students in associate degree programs are required to take a student success course to meet graduation requirements. However, graduation rates were not examined as part of the research. Contrary to the Ellis-O’Quinn (2012) study, Cho and Karp (2013) found that students who enrolled in a student success course early on in their college experience
were more likely to persist. Students who took a student success course during the first semester of enrollment were six percent more likely to persist into the next year than those students who did not take the course. In addition, students who took the course within their first 15 credit hours earned were 10% more likely to persist than those not enrolling in the course. The researchers attribute the higher persistence rates within the first 15 credit hours to the possibility that students may have taken the course after their first semester, which would indicate they had already successfully transitioned to college and persisted into at least the second semester.

Very little research involving student success courses contains a qualitative component. As O’Gara et al. (2008) indicate, “What is lacking…is a qualitative exploration of these courses through the eyes of students themselves” (p. 3). In an attempt to begin addressing this gap and gain insight from the student perspective as to the benefits of participating in a student success course, O’Gara et al. (2008) led an exploratory study at two urban community colleges in the Northeast. The student success course was required for all students at one institution and highly recommended at the other. Both courses had similar learning outcomes, such as increasing knowledge about time management, study skills, communication, and institutional support services. Students were interviewed on two separate occasions, during their first semester of enrollment and six months later, to ascertain their perceptions concerning the effectiveness of student success courses. Participants reported tremendous value in the student success courses and viewed them as an efficient avenue to deliver important information about the college. Students in this study indicated that college resources and course selection are the two primary areas where community colleges are lacking in getting timely and accurate information to students. O’Gara et al.
(2008) found that students participating in college success courses had a better understanding of course selection, graduation requirements, and support services provided by the institution. Students credited this understanding to the more deliberate way this information is made available as part of the student success courses. The study revealed that students participating in a student success course were much more comfortable with and much more likely to access campus support services than those students who did not take a student success course. Nearly every student participating in the study thought the course was beneficial. For those not taking the student success courses, knowledge of college resources, course selection, and graduation requirements were contingent upon their interaction with others at the institution. Student perceptions were somewhat negative about the reliability and accuracy of information obtained outside of student success courses. Students credited participation in student success courses with the development of time management skills, study skills, and relationships with faculty, staff, and peers that proved beneficial in their academic success. In addition, relationships with others were seen as the catalyst for integration and connection to the institution that ultimately lead to retention and persistence.

Karp, Hughes, and O’Gara (2008) expanded on the study by O’Gara et al. (2008) by using interview data to test Tinto’s (1993) theory of integration in a community college setting. According to Karp et al. (2008), some researchers have criticized the use of Tinto’s model in community colleges, claiming community college students have fewer opportunities to become involved or integrated than students in four-year college settings. In order to test Tinto’s model, the researchers relied on interview responses to determine if students had effectively acclimated to the community college environment and how feelings of inclusion and belonging influenced persistence. Findings revealed that 70% of those
interviewed felt a sense of comfort and belonging on campus. In addition, a persistence rate of approximately 90% was realized for students who were categorized as integrated into the institution. According to Karp et al. (2008), “These findings support Tinto’s theory that integration is related to persistence. They also refute the notion that integration is unimportant for community college students” (p. 75). These results further support that student success courses encourage student persistence and progress toward degree attainment.

Of the studies examining the effectiveness of student success courses, the literature generally indicates a positive association between taking these courses and various student success measures, especially when taken early on in the college experience. However, few researchers have examined self-efficacy in relation to student success courses (Boysen & McGuire, 2005; Cambridge-Williams, Winsler, Kitsantas, & Bernard, 2013; Wernersbach et al., 2014). This study addressed gaps in the literature by examining retention, credential attainment, and self-efficacy within the same study. Results will help broaden the knowledge base and provide a deeper understanding of student success courses as a mechanism designed to ease adjustment, promote integration, and facilitate success.

**Self-Efficacy**

Bandura (1977) defines self-efficacy as a psychological process where individuals develop a perception of their capability to carry out a task and achieve a particular outcome. Zimmerman and Cleary (2006) describe self-efficacy as an individual’s perceived capability to perform a specific task in a specific context to reach a goal. As Bandura (2006) mentions, self-efficacy perceptions can either be positive or negative, with each resulting in very different outcomes. According to Bandura (2006), “Efficacy beliefs affect whether
individuals think optimistically or pessimistically, in self-enhancing or self-debilitating ways” (p. 4). When individuals have a strong self-efficacy, they will exert more effort on tasks and will display more resiliency and perseverance when confronted with difficult situations (Bandura, 1977). Low self-efficacy has been linked to failure to achieve desired outcomes (Bandura, 1977; Bandura, 2006; Bandura, Pastorelli, Barbaranelli, & Caprara, 1999). Regular unsuccessful experiences tend to lower self-efficacy and generate negative expectations. As Bandura et al. (1999) postulate, failure reduces motivation, creating a low self-efficacy and feelings of futility. Individuals with low self-efficacy tend to give up quickly when facing adversity (Bandura, 2006).

Researchers (Bandura, 1997; Bandura, 2006; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Schunk & Meece, 2006; Tinto, 2012; Zimmerman & Cleary, 2006) have also related self-efficacy to educational contexts. Bandura (2006) describes self-efficacy in educational development as “students’ beliefs in their efficacy to regulate their learning activities and to master academic subjects” (p. 10). For purposes of this study, academic self-efficacy is defined as students’ perceptions of confidence in performing various academic tasks (Bandura, 1997).

Researchers have noted the positive association between self-efficacy and educational outcomes. For example, Schunk and Meece (2006) indicate that there is a positive correlation between self-efficacy and academic motivation and achievement. Zimmerman and Cleary (2006) support this position by stating, “Even when the effects of general cognitive ability are controlled, adolescents’ perceptions of efficacy are able to account for unique variance in an academic outcome” (p. 54). More recently, Putwain, Sander, and Larkin (2013) tout
academic self-efficacy as a “robust predictor of academic performance in school, college, and undergraduate students” (p. 634).

As stated earlier, the first year of college is a critical time period in the lives of college students. Early college experiences appear to have a tremendous impact on students’ academic self-efficacy and subsequent success. Gerdes and Mallinckrodt (1994) describe the transition period to college as one that can create anxiety and feelings of insufficient self-worth among students. The initial introduction to college carries with it the need to adjust effectively both psychologically and emotionally. Failure to integrate successfully into the college environment can cause psychological difficulties, depression, and low self-efficacy, which could lead to student departure (Gerdes & Mallinckrodt, 1994). Schunk and Meece (2006) also suggest that transition periods in education can have a negative influence on academic self-efficacy. As a result, many institutions implement strategies early on in the college experience as a way to ease adjustment, boost students’ confidence, and facilitate success.

As Tinto (2012) mentions, those support initiatives targeting the first semester of enrollment, such as student success courses, enhance students’ self-efficacy and increase the likelihood for future success. Topics commonly found in student success courses, including time management skills, study skills, and anxiety management, are strategies that help build students’ confidence and foster academic success (Gerdes & Mallinckrodt, 1994). According to Bean and Eaton (2001), a student success course “helps students build confidence, esteem, and social and academic self-efficacy in their new environment” (p. 83). Despite this assertion, some researchers (Boysen & McGuire, 2005; Cambridge-Williams et al., 2013;
Wernersbach et al., 2014) admit that previous studies have failed to investigate the impact of student success courses on self-efficacy.

**Research on Self-Efficacy and Student Success Courses**

Even though research investigating the effect of student success courses on self-efficacy is scant, a few studies conducted within a university context were located in the literature. Boysen and McGuire (2005) led a study that examined study skills course participation in relation to self-efficacy and grade point average during the first three years of university enrollment. No statistically significant difference was found between the grade point averages of students who were enrolled in the study skills course and those students who were not taking the study skills course. The study also explored changes in self-efficacy from the beginning to the end of the semester for student success course participants and non-participants. Boysen and McGuire (2005) utilized the Study Skills Self-Efficacy Scale and the General Academic Self-Efficacy Measure to assess self-efficacy changes. Results revealed no significant changes in general academic self-efficacy for students enrolled in the study skills course, but this group did have a significant increase in study skills self-efficacy scores. Students who were not enrolled in the study skills course saw a significant decrease in general academic self-efficacy and no significant change in study skills self-efficacy (Boysen & McGuire, 2005). These authors assert that enrollment in the study skills course helped students maintain and increase academic self-efficacy (Boysen & McGuire, 2005).

Several years later, Cambridge-Williams et al. (2013) conducted another university study that explored the impact of University 100, an orientation course, on self-efficacy and academic success as measured by retention, graduation rates, and grade point averages. Fall-to-fall retention was measured for five consecutive fall semesters. Significant differences
were found in each retention analysis, with University 100 students persisting at higher rates than the comparison group that did not take the course. Results also revealed a significant difference in graduation rates for University 100 participants versus non-participants with University 100 students having a 14% higher graduation rate over seven years than non-participants. Grade point average comparisons revealed no significant differences between University 100 students and those who did not take the course. To assess self-efficacy, the researchers administered the Motivated Strategies for Learning Questionnaire (MSLQ) at three different points during the semester to University 100 students and a control group of students who did not take the course. Significant group differences were found in the academic self-efficacy, metacognition, effort regulation, help-seeking, and peer-learning scales on the MSLQ at the end of the first year of college, with University 100 students receiving higher scores in each of the previously mentioned categories. The results of their study lead Cambridge-Williams et al. (2013) to conclude that taking University 100 increases academic self-efficacy and, as a result, improves persistence and graduation.

Most recently, Wernersbach et al. (2014) conducted a university study that investigated the relationship of taking a student success course entitled Strategies for Academic Success (SAS) and self-efficacy. Students who were enrolled in the SAS course were considered academically unprepared. A group of students who were enrolled in a General Psychology and not considered academically underprepared were utilized as a comparison group in the study. The researchers relied on the College Self-Efficacy Inventory (CSEI), the Motivated Strategies for Learning Questionnaire (MSLQ), and the Learning and Study Strategies Inventory (LASSI) to assess self-efficacy levels. In order to have pre- and post-test comparisons, the self-efficacy instruments were administered at the beginning and
end of the SAS and General Psychology courses. Results revealed significant differences between SAS participants and the control group at the pre- and post-test periods. According to Wernersbach et al. (2014), SAS students had lower initial levels of self-efficacy on several scales than their General Psychology counterparts. Additionally, the SAS group demonstrated significantly greater increases in self-efficacy during the term than the comparison group.

Of these few studies that have investigated the relationship of student success courses and self-efficacy, results lend support, at least within university settings, that taking a student success course has a positive impact on self-efficacy. Additionally, certain academic outcomes, such as persistence and graduation, have shown to be positively associated with increases in self-efficacy. Boysen and McGuire (2005) advocate for researchers to investigate further the relationship of student success courses and self-efficacy by stating, “Students who enroll in study skills courses are looking for ways to improve their academic abilities, or, in other words, they are looking to boost their academic self-efficacy. Therefore, determining if increases in academic self-efficacy actually occurred is a logical topic of research” (pp. 6-7). Moreover, scholars (Boysen & McGuire, 2005; Cambridge-Williams et al., 2013; Hendel, 2007) support the need to include self-efficacy when examining the impact student success courses have on retention and graduation. The current study exploring the impact of student success courses on persistence, credential completion, and self-efficacy addressed these recommendations. Additionally, this study filled another gap in the literature by examining the impact of a student success course on academic self-efficacy in a community college setting, an educational environment that has, thus far, been largely excluded from prior research.
Conceptual Framework

Thus far in this chapter, I have discussed the concept of student success, the importance of the first year of college, the purpose of student success courses, and the impact of student success courses. The psychological construct of self-efficacy has also been presented along with research on self-efficacy related to student success courses. In the sections that follow, two of the commonly utilized models of student persistence are reviewed and examined for their appropriateness of use in community college settings. Deficiencies in these models for studying student persistence in community colleges are highlighted and an alternative model is introduced.

Background. Student departure has been a topic of major concern in higher education for many years. According to Bean (1979), “Student attrition is widespread, and the rate of student attrition in most institutions of higher education (IHEs) is high and has remained high for more than 60 years” (p. 4). Bean (1979) cites studies dating back to the early 1900s that attempted to explain why students leave higher education. By the early 1990’s, Tinto (1993) bemoaned the fact that, despite years of persistence research and the development of multiple retention models, “We are not yet able to tell administrators how and why different actions work on different campuses for different types of students” (p. 3). In addition, researchers (Derby & Smith, 2004; Pascarella, 1999; Pascarella & Terenzini, 2005) indicate that community college retention models, in particular, are scarce. Global models developed by Astin and Tinto have often been relied upon by researchers when analyzing retention in community colleges, and as seen below, have often been found lacking when addressing the unique characteristics of their student populations.
Astin’s student involvement model. Astin’s (1999) theory of student involvement posits that retention occurs when students get involved with others and the institution. According to Astin (1999), “Student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience” (p. 518). Astin (1999) describes involvement as an active and a behavioral process that can occur in various ways such as interacting with others within the campus community and participating in campus activities or organizations. According to Astin (1999), “It’s not so much what the individual thinks or feels, but what the individual does, how he or she behaves, that defines and identifies involvement” (p. 519). The essence of the model is that involvement leads to persistence. Students who are actively involved within the college campus in some way feel like they are a part of the institution and are much more likely to remain enrolled.

Astin (1999) makes the analogy of involvement and motivation and utilizes these two constructs somewhat interchangeably. However, he denotes a significant difference by describing motivation as an abstract psychological process that is difficult to measure. Involvement, on the other hand, is more concrete and can be observed (Astin, 1999). Researchers and practitioners can see and measure student participation in various college activities. Commitment level is a direct reflection of the amount of time a student invests in a particular activity. The more a student is engaged in the institution, the more committed he or she is and the more likely he or she is to remain enrolled. The less involved students are, the greater the likelihood of dropping out.

Living in residence halls, working part-time on campus, and participating in sports are all described as specific involvement activities that promote student persistence (Astin, 1999). However, students in community college settings have fewer opportunities to become
involved in these types of activities than students at four-year institutions. According to Astin (1999):

Community colleges are places where the involvement of both faculty and students seems to be minimal. Most (if not all) students are commuters, and a large portion attend college on a part-time basis (thus, they presumably manifest less involvement simply because of their part-time status). (p. 524)

Given the limited opportunities for involvement in community colleges, perhaps Astin’s retention model is insufficient or incomplete for use in those institutional settings.

**Tinto’s theory of student departure.** Whereas Astin’s model focuses on student involvement, Tinto’s model of student persistence focuses on social integration and is one of the most commonly utilized frameworks in examining student success. Braxton (2000) speaks to the popularity of Tinto’s model by describing it as nearly paradigmatic. According to Karp (2011), Tinto’s model is also the most relied upon when studying student success measures at community colleges. Tinto (1993) focuses on the importance of social adjustment as a key indicator of persistence. In this theory, the key component to promoting student persistence and academic success is the ability to effectively integrate students into the college environment. Effectively engaging students into higher education may be even more difficult at community colleges where students commute and have fewer opportunities for campus involvement.

According to Tinto (1993), integration and commitment occur when individuals develop “competent membership” (p. 208) within the institution. Tinto (1993) describes how membership and persistence are linked: “Persistence arises from the social and intellectual rewards accruing to competent membership in the communities of the college and from the
impact that membership has upon individual goals and commitments” (p. 208). If students are unable to successfully transition and develop a sense of belonging, the chances of them remaining committed to their educational endeavors are significantly decreased.

Tinto (1993) also maintains that students are most vulnerable to leaving college during the first year of enrollment. In an examination of first-year attrition rates, Tinto (1993) reported a departure rate of nearly 50% for public two-year colleges. He attributes this early departure to students’ inability to integrate socially and academically into the institution. If students are unable to overcome the social issues associated with transitioning to college, they are much more unlikely to persist and succeed (Tinto, 1993). In that regard, institutions should commit to helping students integrate into the social fabric of the institution early on in their college experience as a way to promote retention and degree attainment.

Derby and Watson (2006) support Tinto’s theory by stating “the initial introduction to the college environment plays a major role in determining if students become involved, committed, and persist” (p. 378). Students must connect to the college in order to create a sense of membership that results in a level of commitment that promotes success. It is the connection accomplished through early integration into the college environment that promotes retention because it enhances “individual commitments to both the goal of education and to the institution” (Tinto, 1987, p. 7).

Even though Tinto’s framework has been heavily relied upon in community college retention studies, many researchers have questioned the appropriateness of one of its primary constructs—social integration—in community college settings (Karp et al., 2008). Since community college students typically commute, attend part-time, are older, are working, and are likely from an underrepresented or disadvantaged group, they have fewer opportunities to
become involved socially within the institution. Even though social integration may be important for community college students (Karp et al., 2008), the complex nature of the community college suggests that even Tinto’s paradigmatic model may not be the most appropriate model when investigating community college student retention. Other aspects influencing successful integration and student persistence may carry more weight for community college students and are worthy of consideration and exploration.

**Call to redesign models of persistence.** While Wild and Ebbers (2002) recommend not losing sight of historically utilized retention models such as those of Tinto and Astin, these researchers advocate for considering new theoretical constructs of student retention when studying community college settings. Braxton (2000) also suggests either revising or abandoning existing models of student persistence in exchange for new theoretical ways of thinking about student departure. These researchers describe Tinto’s and Astin’s frameworks as traditional university retention models that have been generalized to nonresidential community college settings inappropriately. These models fail to consider typical community college students who are often non-traditional in terms of age and frequently have wide-ranging educational goals (Wild & Ebbers, 2002). Given this information, there is a need to examine theories that focus specifically on the idiosyncrasies of community college students in order to develop a more complete understanding of retention in community college settings.

**Bean and Eaton’s psychological model of student retention.** Bean and Eaton’s (2000) model seems to fill the void that earlier retention models did not address. Whereas earlier scholars focused on sociological explanations of student departure, Bean and Eaton (2000) introduce a retention model in which psychological variables play the primary role
and sociological variables play a secondary role in student persistence (Appendix A). As Bean and Eaton (2001) posit, “Individual psychological processes form the foundation for retention decisions” (p. 73).

Building on the prior work of Bentler and Speckart (1979) and Fishbein and Ajzen (1975), Bean and Eaton’s (2000) psychological approach to student retention incorporates four psychological theories, including attitude-behavior theory, coping behavioral theory, attribution theory, and self-efficacy theory, to show how students interact within the institutional environment. The attitude-behavior component of their model borrows from Fishbein and Ajzen’s (1975) behavior theory, which suggests that an individual’s actions are best determined by behavioral intentions. Moreover, behavioral intentions are indirectly influenced by attitude and interaction within the social environment. In summarizing the Fishbein and Ajzen (1975) model, Bean and Eaton (2000) explain, “Over time, beliefs lead to attitudes, which lead to intentions, which lead to behavior” (p. 50). Expanding on Fishbein and Ajzen’s (1975) model, Bentler and Speckart (1979) later proposed a theory that suggested “previous behavior may have a direct impact on intentions and subsequent behavior” (p. 454).

Coping behavioral theory is another component of the Bean and Eaton (2000) model. According to Bean and Eaton (2001), “Coping behaviors allow a student to adapt to school, and adaptation is the process by which a student becomes integrated into the new school environment” (p. 77). Adjustment is described by Bean and Eaton (2000) in a process similar to one described by Tinto’s (1993) theory of social integration, whereby a student strives to fit in to a new educational setting. Students who are able to effectively deal with the stresses
of college and adjust to a new educational environment are much more likely to remain enrolled and experience positive outcomes (Bean & Eaton, 2000).

In describing how attribution theory influences their retention model, Bean and Eaton (2000) focus on the concept of locus of control. As Bean and Eaton (2000) indicate, locus of control refers to the extent to which a person believes he or she is responsible for life’s outcomes. According to Bean and Eaton (2001):

An individual with an internal locus of control believes she or he is instrumental in her or his own successes or failures, whereas a person with an external locus of control believes past successes or failures are due to fate or chance. (p. 77)

As Bean and Eaton (2001) postulate, locus of control is a psychological process that greatly influences educational outcomes. A student with an internal locus of control is more likely to be motivated and effectively integrate academically and socially within the institution because he or she feels responsible for the outcome. In contrast, a student with an external locus of control will likely not seek opportunities to integrate into the institution because he or she feels that outside influences are in control (Bean & Eaton, 2001).

Lastly, Bean and Eaton’s (2000) psychological model also draws heavily from Bandura’s (1977) work, which suggests that the psychological processes associated with the college experience, such as self-efficacy, are constantly evolving. In accordance to Bandura’s (1977) social cognitive theory, success early in the college experience impacts future success. Repeated academic successes strengthen students’ self-efficacy and increase the likelihood that students will overcome occasional academic setbacks. In the Bean and Eaton (2000) model, self-efficacy assessments are continuously occurring. As students’ self-confidence levels increase, so do integration, persistence, and goal achievement (Bean & Eaton, 2001).
The Bean and Eaton (2000) framework is predicated on students’ entry characteristics, including locus of control, coping skills, self-efficacy, and motivation. Students enter postsecondary education with these specific psychological attributes created from past experiences that determine how the individual interacts with the college environment and ultimately influences goal attainment. For example, a student’s academic self-efficacy upon college enrollment is based on perceptions of past academic experiences and influences how the student will fit in to the environment and how motivated he or she will be to perform well academically (Bean & Eaton, 2000). The Bean and Eaton (2000) model suggests that “as the individual recognizes his/her competence and gains self-confidence, that individual will demonstrate higher aspirations for persistence, task achievement, and personal goals” (p. 52). The more internally motivated a student is to attend and the more positive a student is psychologically, the greater the likelihood he or she will be able to cope effectively and adapt socially and academically to the college setting. In turn, the more integrated a student is into the institutional environment, the more likely he or she is to have a positive attitude toward the educational experience and is, therefore, more likely to persist (Bean & Eaton, 2000). Braxton et al. (2014) support the value of this concept in community college settings by stating, “The stronger a student’s belief that they can achieve a desired outcome through their own efforts, the greater the student’s likelihood of persistence in a commuter college” (p. 114).

Bean and Eaton (2000) suggest that researchers isolate specific psychological components of their model within community college settings to determine which psychological processes are most important for community college students. For example, they advocate for determining what factors contribute to a student’s sense of self-efficacy.
This study then relied upon the conceptual framework of Bean and Eaton (2000) to explore the impact student success courses have on student self-efficacy, in particular. Isolating the psychological variable of self-efficacy allowed the researcher to explore the strength of self-efficacy within the model in promoting persistence and credential attainment among community college students.

**Summary**

This chapter has presented a review of the literature from multiple fields: the context of student success relevant to the current study; the importance of the first year of college; the purpose of student success courses; the impact of student success courses; the psychological construct of self-efficacy; self-efficacy related to student success courses; commonly utilized retention theories; and the conceptual framework of Bean and Eaton utilized in this study. To build upon the work of scholars reviewed in this chapter, the current study explored answers to the following research questions in a community college setting:

1. What is the relationship between taking a student success course and student persistence?

2. What is the relationship between taking a student success course and credential attainment?

3. What is the impact of taking a student success course on academic self-efficacy?

4. What are student perceptions of the impact of student success courses on academic success?

Chapter Three provides an explanation of embedded design methodology that was utilized to carry out the study.
Chapter 3: Methodology

The purpose of the current study was to examine the relationship between taking a student success course and academic success. The following research questions guided the study:

1. What is the relationship between taking a student success course and student persistence?
2. What is the relationship between taking a student success course and credential attainment?
3. What is the impact of taking a student success course on academic self-efficacy?
4. What are student perceptions of the impact of student success courses on student success?

The preceding review of relevant literature on student success courses and persistence provided the framework for the study. In this section, I discuss the appropriateness of the study, the research paradigm, the research design, the role of the researcher and ethical considerations, the research setting, the student success course being studied, data collection methods, participant selection protocols, data analyses, and validity and trustworthiness.

Appropriateness of Study

The study employed a mixed methods embedded design, which according to Creswell (2012), is a methodology where the researcher can combine the strengths of quantitative and qualitative methods into one study. Typically, emphasis is placed on quantitative approaches, but the collection of qualitative data helps legitimize and provide explanatory power to the quantitative data (Creswell, 2012).
A mixed methods embedded design is an appropriate methodology for examining persistence and credential attainment in postsecondary education. Tinto (1993) criticizes prior retention studies for being too general and advocates for more in-depth approaches to examining student departure. According to Yin (2014), “Mixed methods research can permit researchers to address more complicated research questions and collect a richer and stronger array of evidence than can be accomplished by any single method alone” (p. 66). Creswell (2012) advocates for a mixed methods design when one approach is not sufficient to address the problem. This study extends prior research by mixing quantitative and qualitative components to examine the impact of student success courses. These courses have typically been studied from a one-dimensional, quantitative perspective. According to Creswell (2012), one of the advantages of mixed methods embedded designs is the ability to add a qualitative component to traditional quantitative studies, allowing for the exploration of participant experiences and results in deeper understanding.

**Research Paradigm**

Embedded designs primarily reside within the post-positivist research paradigm due to the importance placed on quantitative procedures (Creswell & Plano Clark, 2011). According to Guba and Lincoln (2005), the post-positivist paradigm places emphasis on statistical procedures; however, qualitative approaches are introduced as appropriate mechanisms for creating knowledge (Guba & Lincoln, 2005). According to Creswell and Plano Clark (2011), the qualitative component of embedded designs ventures into the constructivist paradigm because results can be used to explain and enhance understanding of the quantitative data. Guba and Lincoln (2005) describe constructivism as a form of inquiry that focuses on understanding and produces a well-informed and sophisticated knowledge
base. As Glesne (2011) indicates, constructivism is also known as interpretivism and carries the central purpose of understanding “how people interpret and make meaning of some object, event, action, perception, etc.” (p. 8). Glesne (2011) continues by describing the interpretivist paradigm as one where reality is socially constructed by those who are participating in a particular social domain. In order to begin to understand a particular phenomenon, researchers must “include interacting with people in their social contexts and talking with them about their perceptions” (Glesne, 2011, p. 8).

**Research Design**

This study utilized a mixed methods embedded design to examine the relationship of taking a student success course on academic success. As Creswell and Plano Clark (2011) state, “The premises of this design are that a single data set is not sufficient, that different questions need to be answered, and that each type of question requires different types of data” (p. 91). In this study, the larger, quantitative components attempted to answer questions related to the impact of student success course participation on persistence, graduation, and self-efficacy while the smaller, supportive qualitative strand sought student perceptions of the benefits of taking a student success course.

Creswell and Plano Clark (2011) describe an embedded design as one where the inclusion of a qualitative component can enhance the overall research design. As Morgan (2014) explains, researchers often use qualitative components in embedded designs as a way to provide broader coverage when examining a particular intervention. In this case, a focus group was held to allow students to elaborate on their perceptions of how the intervention of a student success course affects academic success and self-efficacy.
Role of the Researcher and Ethical Considerations

Creswell (2012) insists that ethics should be a primary concern in all research projects. Glesne (2011) agrees and encourages researchers to remember their two primary roles when conducting research. First, the one conducting the study serves as a researcher and, therefore, should develop a sense of self-consciousness that promotes continuous awareness of purpose and reflection on his or her behavior. According to Glesne (2011), the second role the researcher holds is that of learner. Glesne (2011) reminds researchers that maintaining “the learner’s perspective will lead you to reflect on all aspects of research procedures and findings” (p. 60) while creating a sense of curiosity that will promote learning throughout the research process.

My curiosity stems primarily from a professional standpoint. As an educational leader at a community college in North Carolina, I am interested in creating a learning environment that is conducive to student success. Through this process, I hope to ascertain whether student success courses truly serve as a conduit through which educational success is achieved. And if so, why are these courses beneficial to students? Once I have this knowledge, I can implement strategies grounded in theory and research that work for the betterment of students.

As a researcher, I have taken seriously the obligation to conduct every aspect of this research and report the findings in the most ethical manner possible (Creswell, 2012; Maxwell, 2013). Somekh, Burman, Delamont, Payne, and Thorpe (2011) remind us that since research in the social sciences focuses on people, ethical considerations are of utmost importance. Creswell (2012) lists three ethical practices that should be observed in all research: respecting the rights of participants, honoring research sites, and reporting research
fully and honestly. Piper and Simons (2011) advocate for conducting research “that benefits participants in positive ways” (p. 25). These researchers cite confidentiality and anonymity as key components of ethical practice. Including methods that explore student perceptions, such as focus groups, allows the researcher to interpret what the subjects are saying. As such, the researcher has a responsibility to accurately represent what the participants are communicating while protecting confidentiality and maintaining anonymity.

In order to preserve confidentiality and anonymity, all student information used in this study has been maintained in a locked file cabinet and will be destroyed after one year of the study.

Setting

The setting for this study was Catawba Valley Community College (CVCC), a comprehensive community college located in western North Carolina offering associate degree, diploma, and certificate curriculum programs. CVCC has a two-county service area comprising Catawba and Alexander counties and serving an approximate headcount of 4,500 curriculum students. The student population is 59% female and 41% male and has an average age of 25.6. The student ethnic breakdown includes: 73% White, Non-Hispanic; 9% Black, Non-Hispanic; 8% Hispanic; 7% percent Asian or Pacific Islander; 3% other (CVCC, 2014a).

Student Success Course

CVCC currently offers two versions of student success courses, ACA 111 (College Student Success) and ACA 122 (College Transfer Success). However, ACA 122 has been offered at CVCC on a very limited basis and was, therefore, excluded from this study. ACA 111 has been offered for many years at CVCC and is required in 11 professional or pre-professional academic programs. Therefore, it was the focus of this study. The following
course description for ACA 111 is included in North Carolina Community College’s (2014b) Combined Course Library:

This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

All of CVCC’s ACA 111 sections utilize a common syllabus that reflects the course description listed above (Appendix B). In addition, the following student learning outcomes are listed in all ACA 111 syllabi:

- Identify and access people and resources at CVCC.
- Monitor and adopt tools for time management.
- Plan effectively and efficiently.
- Manage one’s stress better.
- Learn skills for academic success, study skills, critical thinking and sound decision-making.
- Better understand the value of education.
- Address diversity and goodwill.
- Foster good communication skills.
- Look at gender issues.
- Exhibit responsible and gentle behavior.
- Have a better idea of career choice. (CVCC, 2014b)
ACA 111 sections at CVCC are taught in traditional seated and on-line formats over a 16-week semester. Attendance is monitored, and students are allowed to miss a maximum of two class hours (CVCC, 2014b). Students who are absent more than two class hours are typically withdrawn from the course (CVCC, 2014b). ACA 111 courses are subject to the same 10-point grading scale as other classes at the college (CVCC, 2014b).

**Data Collection/Participant Selection/Analysis**

Data collection for the current study involved the use of quantitative and qualitative methods to answer the research questions as indicated in Table 1 below.

Table 1

*Research Questions and Data Collection Methods*

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Data Collection Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the relationship between taking a student success course and student</td>
<td>Obtained fall-to-fall persistence data from CVCC database for new students entering in</td>
</tr>
<tr>
<td>persistence?</td>
<td>fall semester 2008.</td>
</tr>
<tr>
<td>What is the relationship between taking a student success course and credential</td>
<td>Obtained six years of credential attainment data from CVCC database for new students</td>
</tr>
<tr>
<td>attainment?</td>
<td>entering in fall semester 2008.</td>
</tr>
<tr>
<td>What is the impact of taking a student success course on academic self-efficacy?</td>
<td>Obtained pre-test and post-test data from the Academic Self-Efficacy Questionnaire (ASEQ)</td>
</tr>
<tr>
<td></td>
<td>for students in fall semester 2014.</td>
</tr>
<tr>
<td>What are student perceptions of the impact of student success courses on student</td>
<td>Conducted a focus group near the end of the fall 2014 semester.</td>
</tr>
<tr>
<td>success?</td>
<td></td>
</tr>
</tbody>
</table>

Permission from Appalachian State University’s Institutional Review Board for use of Human Subjects in Research was obtained prior to data collection (Appendix C).

Additionally, permission to obtain data and conduct a focus group with students was acquired from the president of CVCC (Appendix D).
The data collection method, participant selection, and data analysis for each data set is discussed in turn.

**Persistence and credential attainment.** The first data set included persistence data into the second fall semester of college enrollment and credential attainment data within six years of initial college enrollment and was utilized to answer the first two research questions:

- What is the relationship between taking a student success course and student persistence?
- What is the relationship between taking a student success course and credential attainment?

Boudreau and Kromrey (1994) and Schnell and Doetkott (2003) support the need for longitudinal studies that examine the impact of student success courses. Credential attainment within a six-year time frame is one of the current performance indicators utilized in the North Carolina Community College System and, therefore, served as a specific student success measure for this study. Clotfelter et al. (2013) describe the difficulty often associated with using graduation rates as a measure of success in community colleges because of the diverse population they serve. Students are more likely to attend part-time and have other obligations such as family and work that contribute to the longer period of time often necessary to complete a credential. According to Kuh, Kinzie, Schuh, and Whitt (2010), the standard way now to examine graduation rates is over a six-year time frame in order to reflect accurately attendance patterns of many students who attend part-time.

**Data collection.** I met with the CVCC Systems Administrator prior to the data collection process to discuss data elements of interest in relation to data availability. As a
result of that discussion, the CVCC Systems Administrator was able to provide the following information from the CVCC database:

- Data on persistence into the second fall semester of college enrollment
- Credential attainment data over a six-year time period
- Demographic information including age, gender, ethnicity, and race
- Additional participant information including full-time or part-time enrollment status and enrollment status in developmental courses

**Participant selection.** New students who entered CVCC in the fall semester 2008 (N=1476) served as the cohort examined in relation to persistence into the second fall semester and credential attainment within six years. Students who took ACA 111 during their first year of enrollment (N=553) were compared to those students who took ACA 111 at some point other than the first year of enrollment (N=100) and a group of students who did not take ACA 111 (N=823).

**Data analysis.** Statistical procedures included Pearson chi-square, logistic regression, and t-test to examine the relationship between taking ACA 111 and persistence and credential attainment to determine if course participation increased the probability of continued enrollment and graduation. SPSS (Statistical Package for the Social Sciences) version 22 was utilized to run the data analysis.

Initially, Pearson chi-square tests were run to determine if there was any association between taking ACA 111 and persistence into the second fall semester or credential attainment within six years. Barnes and Lewin (2011) describe chi-square as an appropriate test to determine association but not causation. The chi-square tests were also utilized to analyze and compare the expected and observed number of students who persisted into the
second fall semester or completed a credential within six years of initial enrollment for each of the following groups: students who took ACA 111 within the first year of enrollment; students who took ACA 111 at some point other than the first year of enrollment; students who did not take ACA 111.

Once it had been determined that an association did exist between the variables, logistic regression was utilized as a way to predict which students were more likely to take the student success course. Burns (2009) describes logistic regression as a statistical method commonly used when there are two categories of a dependent variable and the research purpose is to predict group membership or examine the relationship among multiple variables. During the regression analysis, the course (ACA 111) was treated as the dependent variable and all of the other variables (age, gender, ethnicity, race, full-time or part-time enrollment status, developmental class enrollment or not, persistence, and credential attainment) were treated as predictor variables. As Creswell (2012) states, regression analysis is an appropriate statistical method to utilize when examining the impact of multiple variables on an outcome.

According to Pascarella and Terenzini (2005), few studies comparing persistence of student success course participants and non-participants address precollege differences. In this study, a backward stepwise logistic regression approach was utilized, which allowed student background characteristics (age, gender, ethnicity, and race) to be considered simultaneously with other identified variables (full-time or part-time enrollment status, developmental class enrollment or not, persistence, and credential attainment) as a way to predict who did and did not take the course. As Burns (2009) reminds us, one of the main objectives of logistic regression is to provide information about the relationships among the
variables being examined. During the backward stepwise process, covariates that were less statistically significant (higher p values) were eliminated resulting in a model that included only variables that were statistically significant, and therefore, were predictive of the dependent variable.

An independent t-test was also performed to test the variance of age among those students who took ACA 111 compared to those who did not take the course. As Barnes and Lewin (2011) remind us, “We use the t-test when we wish to test and see if there is a significant difference between two sample means” (p. 233).

**Academic self-efficacy questionnaire.** The second set of data was obtained by administering the Academic Self-Efficacy Questionnaire (ASEQ) developed by Wood and Locke (1987) to a separate set of students than the 2008 cohort studied in relation to persistence and credential attainment. The purpose of this administration was to answer the third research question: “What is the impact of taking a student success course on academic self-efficacy?”

**Data collection.** The ASEQ was purchased from Educational Testing Service for use in this study to examine self-efficacy levels (Appendix E). The ASEQ was chosen due to its accessibility, minimal cost, and permission to reproduce as needed. The ASEQ is a 33-item instrument measuring perceived competence across eight subscales: class concentration, memorization, exam concentration, understanding, explaining concepts, discriminating between concepts, note-taking, and grades. Each question on the ASEQ has two parts. First, students are asked to respond (yes or no) if they can perform specific academic tasks at the level described. This response is defined as self-efficacy magnitude. Then, students are asked
to indicate their confidence level on a scale of 0-10 to perform the task at the level described. The mean confidence rating is defined as self-efficacy strength (Wood & Locke, 1987).

In an attempt to develop the most reliable self-efficacy scale for academic performance as possible, Wood and Locke (1987) conducted four validation studies on the ASEQ. These researchers discussed the difficulty of developing such a scale because “academic performance is actually not one task, but a complex sequence of interrelated tasks” (Wood & Locke, 1987, p. 1014). Throughout the four studies, modifications were made to the ASEQ, and items with low correlations and significance levels were removed (Wood & Locke, 1987). As a result, six subscales containing 17 items were identified as the subscale of choice when examining self-efficacy levels with the ASEQ. Those six subscales include class concentration, memorization, exam concentration, understanding, explaining concepts, discriminating between concepts, and note-taking. In describing the benefits of the recommended subscale, Wood and Locke (1987) state, “It has a relatively good reliability coefficient, with the highest mean inter-item correlation ($r_{xx} = .84$) of all the scales and lowest standard error of measurement ($S_e = 6.284$)” (p.1019). Additionally, Wood and Locke (1987) describe the subscale as one that “contains quite a reasonable coverage of the different academic tasks about which an individual may have feelings of self-efficacy” (p. 1019).

In addition, the ASEQ has been determined to have good content validity for the current study. In discussing the concept of content validity, Creswell (2012) suggests that researchers consult those with appropriate expertise to determine whether instrument questions are valid. As a further check on content validity, the CVCC writing center and student success course coordinator compared the 33-item instrument with ACA 111 student
learning outcomes and determined that the survey questions accurately assessed curricular topics and desired learning outcomes (Jerry Sain, personal communication, August 7, 2014).

**Participant selection.** During the fall 2014 semester, the ASEQ was made available on a voluntary basis to ACA 111 students during the first few weeks of the term and again near the end of the course to determine if there were changes in self-efficacy scores. In addition, the self-efficacy instrument was also made available on a voluntary basis to a control group of students who did not take ACA 111. Students enrolled in the first college-level English course (ENG 111) were selected as the control group. ENG 111 was chosen based on faculty interest in the project and the likelihood that duplication of students enrolled in ACA 111 and ENG 111 simultaneously was minimal (Jerry Sain, personal communication, August 14, 2014). The ASEQ was made available in a paper format and online as part of the CVCC Learning Management System.

During the initial administration, 69 students enrolled in ACA 111 and 22 students enrolled in ENG 111 took the ASEQ pre-test. None of the students who took the ASEQ were enrolled in ACA 111 and ENG 111 simultaneously, which avoided any duplication of students tested. In the second administration period near the end of the term, 33 (48%) of the original 69 students tested in ACA 111 also took the post-test, and 13 (59%) of the original 22 students who took the ASEQ in ENG 111 took the post-test.

Students were also asked to complete a short demographic questionnaire prior to each administration of the ASEQ. The following participant information was collected: age, gender, and ethnicity.

**Data analysis.** As mentioned previously, students taking the ASEQ were not included in the cohort examining persistence and credential attainment because such data were not
available for them. As a result, separate data analysis was necessary. As Creswell (2012) acknowledges, embedded designs ask different research questions that result in different data sets requiring separate analysis. Even though persistence and credential attainment data were not available for students taking the self-efficacy instrument, ASEQ pre-test and post-test score comparisons may begin to explain why participation in ACA 111 is beneficial. In embedded designs, researchers can use one form of data analysis to inform the other and produce combined, interpretive results (Creswell, 2012).

Analysis of Variance (ANOVA) was run in SPSS to examine the mean differences between ASEQ pre-test and post-test scores for the six subscales among students who took ACA 111 (experimental group) and those students who took ENG 111 (control group). As Barnes and Lewin (2011) state, “In the ANOVA we are looking to see if the difference between the groups is greater than the difference within the groups” (p. 234). Morgan (2014) describes the comparison of pre-test and post-test scores as a classic quantitative approach used to assess change resulting from a particular intervention.

**Focus group.** The third data set was obtained by talking with students about their experiences in a student success course and was used to answer the fourth research question: “What are student perceptions of the impact of student success courses on student success?” Tinto (1993) advocates for seeking student insights when exploring the impact of particular student success initiatives. Students who participated in the focus group were not part of the 2008 cohort examined in relation to persistence and credential attainment. Some of the focus group students reported taking the ASEQ while others indicated they had not participated.

**Data collection.** A focus group session was held toward the end of the fall 2014 semester on the CVCC campus to obtain student perceptions of ACA 111. The focus group
was conducted according to focus group protocols outlined by Krueger (2002) and Krueger and Casey (2001) (Appendix F), with open-ended questions constructed in such a way as to promote engaging discussion among the participants about their experiences in ACA 111.

The purpose of this qualitative strand of the research design was to understand from the student perspective the benefits of participating in ACA 111. As Morgan (2014) mentions, embedded designs often include a qualitative component to supplement a larger quantitative intervention. Creswell (2012) describes the role of qualitative data in embedded designs as supportive to quantitative findings with the purpose of obtaining participant experiences and developing a more complete understanding of the intervention. Obtaining student perceptions about student success course participation provides fresh insights and viewpoints that have not been thoroughly considered in prior research.

**Participant selection.** Faculty members at CVCC were asked to make announcements in all classes in which the Academic Self-Efficacy Questionnaire was administered, inviting students to participate in the focus group. Notices were provided in ACA 111 and ENG 111 classes; thus, ACA 111 participants and non-participants were included in the focus group. Even though students who were not enrolled in ACA 111 showed up for the focus group meeting, I invited them to participate in the session in hopes of gaining their insights about what they thought a student success course was all about and how it might impact student success.

Six students participated in the focus group. Krueger and Casey (2001) suggest limiting the size of the group in such a way that there is sufficient diversity among participants and people have ample opportunity to share ideas; the composition and the size of the group met these criteria. All students were at least 18 years of age and signed an
informed consent (Appendix G) prior to participating in the focus group session. Of the six participants, three were enrolled in ACA 111 and three had never taken ACA 111; four were female; two were male; five were White; one was Asian; five were first-generation college students. All six students were employed—three full-time and three part-time. Of the ACA 111 participants, all were enrolled in their first semester of college and were taking full-semester, seated ACA 111 sections.

The focus group was held on December 2, 2014, in a private conference room in the CVCC library. The session lasted approximately 75 minutes. Tables were arranged in a rectangular fashion, which allowed all participants to face each other and created a relaxed environment that fostered interaction and involvement. Participants were led through a total of seven questions (Appendix F), and their responses were audio recorded. Some of the questions were slightly modified to accommodate students who had not taken the student success course. The session proved to be extremely robust and powerful with ACA participants talking to non-participants about their experiences in the student success course.

**Data analysis.** The focus group session was audio recorded, and I took notes while listening to student comments about the impact of ACA 111. Krueger and Casey (2001) suggest audio recording focus group sessions and taking field notes when conducting focus group discussions. Student names were not used in any materials associated with this study to protect the confidentiality and anonymity of participants.

The focus group recording was initially transcribed line by line and put into a Microsoft Excel spreadsheet with each participant’s comments as well as the researcher’s comments included. Glesne (2011) suggests transcribing field work line by line as a way to become immersed in the data and begin the coding process. Once the focus group recording
had been transcribed, a thematic analysis was conducted and data were coded into common themes and patterns. Glesne (2011) states, “By putting pieces that exemplify the same theoretical or descriptive idea together into data clumps, you begin to create a thematic organizational framework” (p. 194). Miles and Huberman (1994) refer to the process of coding data from transcripts as data reduction. These authors describe data reduction as a necessary component in the analysis process (Miles & Huberman, 1994). In the data reduction process, data were clumped together into major codes and sub-codes based on frequency of occurrence during the focus group session.

Once the data had been coded, recurring themes were entered into conceptually clustered matrix (Appendix H) to provide a visual representation of the data and assist with data interpretation (Glesne, 2011; Miles & Huberman, 1994). Miles and Huberman (1994) describe a data display as an “organized, compressed assembly of information that permits conclusion drawing and action” (p. 11).

**Validity and Trustworthiness**

As Creswell (2012) states, the primary strength of the embedded design is “that it combines the advantages of both quantitative and qualitative data” (p. 545). Quantitative data collection allows for effective reporting of outcomes while qualitative components provide an avenue to explore individuals’ experiences (Creswell, 2012). According to Maxwell (2013), the use of multiple methods “reduces the risk of chance association and of systematic biases due to a specific method, and allows a better assessment of the generality of the explanations that one develops” (p. 128). This study utilized multiple sources for information to explore the same phenomenon and improve the generalizability of results (Creswell, 2012).
Despite the benefits of embedded designs, Creswell (2012) highlights a primary drawback. As Creswell (2012) indicates, the quantitative and qualitative components address different questions making it difficult to compare results from the data sets. To counter any criticisms related to embedded designs, researchers should “be clear about the intent of the secondary database” (p. 545). The purpose of the focus group in this study has been stated. Obtaining student perceptions enhance the overall project by explaining, from the student perspective, the impacts of ACA 111 on student success, impacts that may not be captured just by persistence and completion data.

Through the mixed methods embedded design employed in this study, the combined strengths of quantitative and qualitative components were realized. As mentioned earlier, Morgan (2014) uses the phrase “additional coverage” when discussing the benefits of using quantitative and qualitative data collection methods such as those found in embedded designs. According to Morgan (2014), “Additional coverage promotes the goal of integrating the findings from different methods into a more holistic understanding” (p. 4). Thoroughly examining the impact of student success courses at CVCC from quantitative and qualitative perspectives contributes to a more complete understanding of a complex educational issue that has plague researchers and practitioners for years—attrition.

Summary

This chapter has reviewed the methodological approach utilized in the current study to explore answers to the research questions. Also included were data collection methods, participant selection protocols, and data analyses. Chapter Four presents a detailed overview of the quantitative and qualitative findings.
Chapter 4: Findings

The purpose of this study was to explore the relationship between taking a student success course and academic achievement as measured by student persistence, credential attainment, and academic self-efficacy. The study addressed the following four research questions:

1. What is the relationship between taking a student success course and student persistence?
2. What is the relationship between taking a student success course and credential attainment?
3. What is the impact of taking a student success course on academic self-efficacy?
4. What are student perceptions of the impact of student success courses on student success?

The first two questions were answered using the following statistical procedures: Pearson chi-square, logistic regression, and t-test. The third question was answered utilizing Analysis of Variance (ANOVA). The fourth research question was explored through a student focus group. The study followed an embedded design described by Morgan (2014) as an approach allowing the use of different methods to explore different questions. As Creswell (2012) indicates, embedded designs allow for the incorporation of a qualitative component to supplement quantitative findings. In this study, the qualitative strand comprised a focus group session to gain a better understanding from the student perspective as to the impact of student success courses. This chapter presents the quantitative findings while also introducing the voices of student success course participants, a component of previous
research that has traditionally been overlooked (O’Gara et al., 2008; Wernersbach et al., 2014).

**Persistence and Credential Attainment**

New students who entered CVCC in the fall semester 2008 (N=1476) served as the cohort to be examined in relation to persistence and credential attainment. Utilizing the 2008 cohort allowed for six years of completion data to be examined. The demographic breakdown for students in the 2008 cohort is outlined in Tables 2-5. When students completed an admissions application at CVCC, they were prompted to answer ethnicity and race questions. First, students were asked to choose between ethnicity categories of Hispanic and Non-Hispanic. Students could also leave this item blank, which resulted in ethnicities that are unknown. Second, students were asked to select from the following race options: American/Alaska Native, Asian, Black/African American, Hawaiian/Pacific Islander, or White. Students could choose more than one option if they considered themselves to be multi-racial. Students could also leave this item blank, which resulted in unknown races for students.

Table 2

*Age of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1476</td>
<td>20</td>
<td>79</td>
<td>29.62</td>
<td>10.524</td>
</tr>
</tbody>
</table>
Table 3

*Gender of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>818</td>
<td>55.4</td>
</tr>
<tr>
<td>Male</td>
<td>658</td>
<td>44.6</td>
</tr>
<tr>
<td>Total</td>
<td>1476</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4

*Ethnicity of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$N$</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>30</td>
<td>2.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>64</td>
<td>4.3</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>1382</td>
<td>93.6</td>
</tr>
<tr>
<td>Total</td>
<td>1476</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 5

Race of Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>117</td>
<td>7.9</td>
</tr>
<tr>
<td>American/Alaska Native</td>
<td>5</td>
<td>.3</td>
</tr>
<tr>
<td>Asian</td>
<td>75</td>
<td>5.1</td>
</tr>
<tr>
<td>Black/African American</td>
<td>150</td>
<td>10.2</td>
</tr>
<tr>
<td>Hawaiian/Pacific Islander</td>
<td>9</td>
<td>.6</td>
</tr>
<tr>
<td>White</td>
<td>1118</td>
<td>75.7</td>
</tr>
<tr>
<td>White/Asian</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>White/Black</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>Total</td>
<td>1476</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Pearson chi-square analyses were conducted to determine if relationships existed between the independent variable, taking ACA 111, and the variables of interest (persistence into the second fall semester and credential attainment within six years). Students who took ACA 111 during their first year of enrollment (N=553) were compared with those students who took ACA 111 at some point other than the first year of enrollment (N=100) and a group of students who did not take ACA 111 (N=823). Table 6 gives a breakdown of students who took ACA 111 during the first year of enrollment, students who took ACA 111 at some point other than the first year, and students who did not take ACA 111.
Table 6

Participants Taking ACA 111

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Took Course Other Than First Year</td>
<td>100</td>
<td>6.8</td>
</tr>
<tr>
<td>Took Course First Year</td>
<td>553</td>
<td>37.5</td>
</tr>
<tr>
<td>Did Not Take Course</td>
<td>823</td>
<td>55.8</td>
</tr>
<tr>
<td>Total</td>
<td>1476</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The Pearson chi-square statistic determines whether the difference between observed and expected values are significant or if they could have occurred by chance alone. Pearson chi-square results were statistically significant ($p < .000$) in each analysis indicating a significant relationship between taking the course and persistence and credential attainment (Tables 7-8).

Table 7

Pearson Chi-Square Analysis Examining Relationship Between Taking ACA 111 and Persistence

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>351.111a</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>367.779</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>293.619</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1476</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 47.90.
Table 8

**Pearson Chi-Square Analysis Examining Relationship Between Taking ACA 111 and Credential Attainment**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>50.875a</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>50.226</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>50.827</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>1476</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.47.

Of the 553 students who took ACA 111 during their first year of enrollment, there was an expected number of 264.9 (48%) students who would persist into the second fall semester of college purely by chance. However, results indicated an actual count of 430 (78%) students who persisted, indicating that far more students persisted than expected. For students who took ACA 111 at some point other than their first year (N=100), an observed number of 58 (58%) students persisted, which was only slightly higher than an expected number of 47.9 (48%). This result is not surprising given that taking the course at some point other than the first year cannot impact directly persistence into the second fall semester of enrollment. There were 823 students in the 2008 cohort who did not take ACA 111 within the six years covered in this study. Pearson chi-square results revealed that 394.2 (48%) of those students were expected to persist into their second fall semester of enrollment strictly by chance. However, only 219 (27%) of the students who did not take the course were re-enrolled during the second fall semester. This statistic suggests that not taking ACA 111 has a negative relationship with persistence rates.
In regards to credential attainment, Pearson chi-square results showed that of the 553 students who took ACA 111 during their first year of enrollment, there was an expected number of 140.9 (25%) students who would complete a credential within six years of enrollment strictly by chance. However, results indicated an actual count of 183 (33%) students who graduated, indicating that more students earned a credential than expected. For students who took ACA 111 at some point other than their first year (N=100), an observed credential attainment number of 41 (41%) was realized compared to an expected number of 25.5 (26%). Results also revealed that 209 (25%) of the 823 students who did not take ACA 111 were expected to earn a degree, diploma, or certificate purely by chance alone. Nonetheless, only 152 (18%) students who did not take the course attained a credential within the six years covered in this study. These statistics suggest that taking ACA 111 has a positive relationship with credential attainment.

As Barnes and Lewin (2011) state, “In and of itself chi-square only tells us if there is an association between two things or if there is independence” (p. 238). Other statistical measures are necessary to examine the strength of the relationship (Barnes & Lewin, 2011). Therefore, logistic regression was utilized to further examine the relationship of several variables among students who did and did not take ACA 111. According to Burns (2009), logistic regression is described as a robust statistical method commonly used when there are two categories of a dependent variable and the research purpose is to predict group membership or examine the relationship among multiple variables. When used for prediction purposes, regression analysis can consider all predictor variables under examination (Burns, 2009). During the regression analysis, the course (ACA 111) was treated as the dependent variable, and all of the other variables (age, gender, ethnicity, race, full-time or part-time
enrollment status, developmental class enrollment or not, persistence, and credential attainment) were treated as predictor variables. Table 9 presents the full-time or part-time enrollment status of students in the 2008 cohort while Table 10 provides numerical and frequency comparisons for students who did and did not enroll in at least one developmental education course.

Table 9

*Enrollment Status of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>547</td>
<td>37.1</td>
</tr>
<tr>
<td>Part-time</td>
<td>929</td>
<td>62.9</td>
</tr>
<tr>
<td>Total</td>
<td>1476</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 10

*Participants Taking Developmental Courses*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Developmental</td>
<td>670</td>
<td>45.4</td>
</tr>
<tr>
<td>Took Developmental</td>
<td>806</td>
<td>64.6</td>
</tr>
<tr>
<td>Total</td>
<td>1476</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Step 1 of the backward stepwise regression analysis began with all predictor variables under consideration. In each step, variables that were less significant (ethnicity, race, and gender) were removed until no more variables could be removed without negatively impacting the model. Five predictor variables (age, full-time or part-time enrollment status, developmental class enrollment or not, persistence, and credential attainment) were
determined to be significant in the model. All predictor variables were significant at the < .001 alpha level. Table 11 presents the backward stepwise regression analysis. Step 3 represents the maximum explanatory model.

Table 11

*Backward Stepwise Regression Analysis Predicting Enrollment in ACA 111*

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable(s) Entered</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Age, Gender, Ethnicity, Developmental, Credential Attainment, Persistence, Full-Time/Part-Time</td>
<td>-.066</td>
<td>.008</td>
<td>63.436</td>
<td>1</td>
<td>.000</td>
<td>.936</td>
</tr>
<tr>
<td></td>
<td>Gender(1)</td>
<td>-.062</td>
<td>.132</td>
<td>.219</td>
<td>1</td>
<td>.640</td>
<td>.940</td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td>.475</td>
<td>.165</td>
<td>10.450</td>
<td>1</td>
<td>.001</td>
<td>.586</td>
</tr>
<tr>
<td></td>
<td>Ethnicity(1)</td>
<td>.118</td>
<td>.445</td>
<td>.070</td>
<td>1</td>
<td>.791</td>
<td>1.125</td>
</tr>
<tr>
<td></td>
<td>Ethnicity(2)</td>
<td>.208</td>
<td>.323</td>
<td>.416</td>
<td>1</td>
<td>.519</td>
<td>1.231</td>
</tr>
<tr>
<td></td>
<td>Developmental(1)</td>
<td>-1.327</td>
<td>.139</td>
<td>90.586</td>
<td>1</td>
<td>.000</td>
<td>.265</td>
</tr>
<tr>
<td></td>
<td>Credential Attainment(1)</td>
<td>-.534</td>
<td>.165</td>
<td>10.580</td>
<td>1</td>
<td>.001</td>
<td>.585</td>
</tr>
<tr>
<td></td>
<td>Persistence</td>
<td>1.705</td>
<td>.139</td>
<td>150.124</td>
<td>1</td>
<td>.000</td>
<td>5.502</td>
</tr>
<tr>
<td></td>
<td>Full-Time/Part-Time</td>
<td>-.497</td>
<td>.138</td>
<td>13.026</td>
<td>1</td>
<td>.000</td>
<td>.608</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>2.087</td>
<td>.325</td>
<td>41.284</td>
<td>1</td>
<td>.000</td>
<td>8.060</td>
</tr>
<tr>
<td>2a</td>
<td>Age, Gender, Developmental, Credential Attainment, Persistence, Full-Time/Part-Time</td>
<td>-.067</td>
<td>.008</td>
<td>64.292</td>
<td>1</td>
<td>.000</td>
<td>.935</td>
</tr>
<tr>
<td></td>
<td>Gender(1)</td>
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<td>.132</td>
<td>.206</td>
<td>1</td>
<td>.650</td>
<td>.942</td>
</tr>
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<td></td>
<td>Developmental(1)</td>
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<td>.139</td>
<td>90.606</td>
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<td>.000</td>
<td>.265</td>
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<td>.001</td>
<td>.585</td>
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<td>.000</td>
<td>5.506</td>
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<td>.000</td>
<td>.611</td>
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<td>Constant</td>
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<td>.000</td>
<td>8.209</td>
</tr>
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<td>.008</td>
<td>64.250</td>
<td>1</td>
<td>.000</td>
<td>.935</td>
</tr>
<tr>
<td></td>
<td>Developmental(1)</td>
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<td>.139</td>
<td>90.489</td>
<td>1</td>
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<td>10.466</td>
<td>1</td>
<td>.001</td>
<td>.587</td>
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<tr>
<td></td>
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<td>.139</td>
<td>150.474</td>
<td>1</td>
<td>.000</td>
<td>5.508</td>
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<td></td>
<td>Full-Time/Part-Time</td>
<td>-.497</td>
<td>.137</td>
<td>13.141</td>
<td>1</td>
<td>.000</td>
<td>.609</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
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<td>.315</td>
<td>43.254</td>
<td>1</td>
<td>.000</td>
<td>7.938</td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: Age, Gender, Ethnicity, Developmental, Credential Attainment, Persistence, Full-Time/Part-Time.
In logistic regression analysis, an odds ratio is produced and is presented as \( \text{Exp}(B) \). As Burns (2009) states, “Since logistic regression calculates the probability of success over the probability of failure, the results of the analysis are in the form of an odds ratio. In this analysis, the odds ratio begins to explain the differences between those students who took the course and those who did not take the course. Of the five predictor variables found to be significant, persistence into the second fall semester of enrollment had the most predictive value. Students who persisted were 5.5 times more likely to have taken ACA 111 than those students who did not take the course. The other four variables (age, full-time or part-time enrollment status, developmental class enrollment or not, and credential attainment) were all predictors of enrollment in ACA 111, but not at the same level as persistence.

As a follow up, an independent samples \( t \)-test was also run to compare mean ages of participants and non-participants and to determine if there was a significant age difference among students who did and did not take ACA 111. Tables 12-14 present the results.

Table 12

*Mean Ages of Participants and Non-Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>( N )</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Took Course</td>
<td>653</td>
<td>25.99</td>
<td>7.706</td>
<td>.302</td>
</tr>
<tr>
<td>Age Did Not Take Course</td>
<td>823</td>
<td>32.50</td>
<td>11.526</td>
<td>.402</td>
</tr>
</tbody>
</table>
A Levene’s test for equality of variances showed that equal variances could not be assumed. Therefore, an independent samples $t$-test for unequal variance was performed. The results showed a significant difference between groups; students who took ACA 111 were significantly younger ($M = 25.99, SD = 7.706$) than their non-participant counterparts ($M = 32.50, SD = 11.526$); $t(1434.86) = 12.96, p < .001$.

**Academic Self-Efficacy Questionnaire (ASEQ)**

During the initial administration of the ASEQ, 69 students enrolled in ACA 111 (experimental group) and 22 students enrolled in ENG 111 (control group) took the pre-test. No students who took the ASEQ were enrolled in ACA 111 and ENG 111 simultaneously, which avoided any duplication of students tested. In the second administration period near the end of the term, 33 (48%) of the original 69 students tested in ACA 111 also took the post-test. And, 13 (59%) of the original 22 students who took the ASEQ in ENG 111 also

---

**Table 13**

*Levene’s Test for Equality of Variances*

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
</tr>
<tr>
<td>Age</td>
<td>Equal variances assumed</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>

**Table 14**

*Independent Samples T-test*

<table>
<thead>
<tr>
<th></th>
<th>$t$-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$t$</td>
</tr>
<tr>
<td>Age</td>
<td>Equal variances assumed</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>
took the post-test. Participants who did not complete pre- and post-tests were removed prior to analysis.

Students were also asked to answer demographic questions pertaining to age, gender, and ethnicity prior to taking the ASEQ. The demographic breakdown for the 46 students who took the ASEQ pre- and post-test is outlined in Tables 15-17.

Table 15

*Age of ASEQ Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>46</td>
<td>18</td>
<td>58</td>
<td>24.20</td>
<td>9.045</td>
</tr>
</tbody>
</table>

Table 16

*Gender of ASEQ Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>27</td>
<td>58.7</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>41.3</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 17

*Ethnicity of ASEQ Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>Black/African American</td>
<td>7</td>
<td>15.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td>White</td>
<td>31</td>
<td>67.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46</td>
<td>100.0</td>
</tr>
</tbody>
</table>

ASEQ pre-test and post-test self-efficacy scores were calculated for each of the 17 items in the six subscales recommended by Wood and Locke (1987) for students in ACA 111 and ENG 111. Scores were obtained by multiplying student responses (yes or no) to his or her ability to perform specific academic tasks at various levels by his or her confidence level (0-10) to perform the task at the level described. Yes responses were coded as 1’s and no responses were coded as 0’s. The mean confidence level was calculated to determine self-efficacy strength for each subscale. Mean change scores were then computed for each of the six subscales. Then, ANOVA was run to examine the mean differences between ASEQ pre-test and post-test change scores for the six subscales among students who took ACA 111 and those students who took ENG 111. ANOVA results are presented in Tables 18-19.
### Table 18

**Descriptives for ASEQ Subscales**

<table>
<thead>
<tr>
<th></th>
<th>ENG111</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class Concentration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG111</td>
<td></td>
<td>13</td>
<td>1.1282</td>
<td>2.01172</td>
<td>.55795</td>
</tr>
<tr>
<td>ACA111</td>
<td></td>
<td>33</td>
<td>1.3030</td>
<td>3.23647</td>
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<td><strong>Total</strong></td>
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<td>46</td>
<td>1.2536</td>
<td>2.92134</td>
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<td><strong>Memorization</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ENG111</td>
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<td>ACA111</td>
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<td>33</td>
<td>1.9091</td>
<td>3.20728</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td>46</td>
<td>1.6812</td>
<td>2.99626</td>
<td>.44177</td>
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<tr>
<td><strong>Understanding</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>ENG111</td>
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<td>13</td>
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<td>33</td>
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<td>3.16018</td>
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<tr>
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<td>46</td>
<td>.5145</td>
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<td></td>
</tr>
<tr>
<td>ENG111</td>
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<td>2.88848</td>
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<td>.8768</td>
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<td><strong>Discriminating Between Concepts</strong></td>
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<tr>
<td><strong>Note Taking</strong></td>
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<td>.53034</td>
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<td><strong>Total</strong></td>
<td></td>
<td>46</td>
<td>.5435</td>
<td>2.89411</td>
<td>.42671</td>
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</tbody>
</table>
### Table 19

**ANOVA Results for ASEQ Subscales**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Class Concentration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.285</td>
<td>1</td>
<td>.285</td>
<td>.033</td>
<td>.857</td>
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<tr>
<td>Within Groups</td>
<td>383.756</td>
<td>44</td>
<td>8.722</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>384.041</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>6.066</td>
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<td>6.066</td>
<td>.671</td>
<td>.417</td>
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<tr>
<td>Within Groups</td>
<td>397.924</td>
<td>44</td>
<td>9.044</td>
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<tr>
<td>Total</td>
<td>403.990</td>
<td>45</td>
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<td></td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>52.000</td>
<td>1</td>
<td>52.000</td>
<td>5.391</td>
<td>.025</td>
</tr>
<tr>
<td>Within Groups</td>
<td>424.379</td>
<td>44</td>
<td>9.645</td>
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<td>Total</td>
<td>476.379</td>
<td>45</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Explaining Concepts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>18.303</td>
<td>1</td>
<td>18.303</td>
<td>1.907</td>
<td>.174</td>
</tr>
<tr>
<td>Within Groups</td>
<td>422.221</td>
<td>44</td>
<td>9.596</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>440.524</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discriminating Between</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concepts</td>
<td>3.382</td>
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<td>3.382</td>
<td>.448</td>
<td>.507</td>
</tr>
<tr>
<td>Between Groups</td>
<td>332.041</td>
<td>44</td>
<td>7.546</td>
<td></td>
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<tr>
<td>Within Groups</td>
<td>335.423</td>
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<td></td>
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<tr>
<td>Note Taking</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>13.129</td>
<td>1</td>
<td>13.129</td>
<td>1.588</td>
<td>.214</td>
</tr>
<tr>
<td>Within Groups</td>
<td>363.784</td>
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<td>8.268</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>376.913</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the ANOVA revealed a significant difference on the Understanding Subscale for ACA 111 participants ($M = 1.18, SD = 3.16$) as compared to ENG 111 participants ($M = -1.17, SD = 2.95$), $F (1, 44) = 5.39, p = .025$. No other self-efficacy dimensions were significant, $p$’s > .10. Even though they did not reach a level of significance, it is worth mentioning that mean confidence levels increased between pre- and post-test scores on each of the other five subscales for ACA 111 participants.
Focus Group

The purpose of the focus group was to hear directly from students about how the intervention of a student success course affected their academic success and self-efficacy. Morgan (2014) explains that researchers often use a qualitative component, such as a focus group, in embedded designs as a way to supplement findings from a particular intervention.

Five overarching themes emerged from the focus group data (Appendix H).

- “Tips and Tricks”
- Balance/Time Management
- Confidence Booster
- Take Early in College Experience
- Course Should be Required

“Tips and tricks.” The first theme that surfaced was that ACA 111 provided students with “tips and tricks” to be successful in college. The label of “tips and tricks” remained throughout the focus group session as a primary course benefit and was referred to numerous times by students. Initially in the discussion concerning benefits of ACA 111, two of the students who had not taken the course seemed to question its relevance and value. One student stated:

I've had friends who have taken it and a lot of them did say it was kinda like a required thing for their transfer degree and that it really wasted their time and things like that, but there were other people that said it benefited them a lot but then there are other people who told me that it’s just something you have to do and it’s kinda stupid. (S4.1)
Another student said, “Most of these things I have already experienced. I feel like critical thinking, things of that nature, that are discussed in ACA are things that I’ve already had to learn myself, but I can see how it can be beneficial” (S5.1). Then, those students who were currently enrolled in ACA 111 began to point out the benefits they had experienced in the course. Test taking skills, study skills, learning skills, goal-setting, and grade improvement were all mentioned as benefits gleaned from taking the student success course. One ACA 111 participant stated, “I figured out a lot of little tricks like, to just be on top of my homework” (S1.1). Speaking about how it helped with goal setting, another student said that the course “kinda helps to plan out what I really want to achieve” (S3.8). Recognizing how a course of this nature may be of value, one non-participant acknowledged, “But there’s certain tricks to like, how to study and all this stuff you can go through and learn how to do though” (S6.17).

**Balance/time management.** The second theme that emerged was the course helped students manage their time and balance the demands of school, work, and life. As mentioned in Chapter Three, all of these students were employed at least part-time. Several students met Choy’s (2002) definition of non-traditional students by working at least 35 hours per week. One student declared:

> It kinda helped me balance cause I go to school full time and work most of the evening and throughout the day, so I learned to balance my time wisely and stay on top of all my classes at the same time. (S3.1)

Another student emphasized, “The time management helps a lot, especially working and having four classes, going to school full time, working full time, gets kinda hard to manage your time and have time to do homework and everything” (S2.1). Expressing his enthusiasm about what he was hearing, one student who had not taken ACA 111 stated:
The way you guys are talking how the class is basically telling me how to be an adult, you know, like, you know you manage your time, learn how to study, do things an adult does, how an adult does stuff. (S6.20)

That same student later announced:

No, there’s no free time. It's work, school, study, sleep… that's it. That's the schedule… I'm gonna actually go register for some classes after this, and I might register for this class right after this, and actually go check it out cause, you know like, if it's beneficial, if it's gonna help me down the road, I might as well just take it now and learn whatever tricks, you know, that I can apply next semester and the following semesters after that. (S6.36)

Like so many community college students, these focus group participants are juggling the many demands of work, school, and life. These competing priorities led non-participants to emphasize the need for student success courses to include “real world” information. For example, one student emphasized, “There are probably tips for time management and studying and everything, but what about tips for succeeding in more real world things” (S4.2). The same student elaborated more about the need for the course to have everyday relevancy when she suggested having course content that taught students to “be able to manage time based off real world application, jobs, bills, or things like that, or like managing important stuff” (S4.10). These comments suggest that students not enrolled in ACA 111 would support the inclusion of a student success course as part of the curriculum if course topics focused on helping students learn to juggle the numerous demands of college and life. For those students included in this focus group who were enrolled in ACA 111, the course
seems to be providing them the requisite skills to effectively manage their time and promote balance in their busy lives.

**Confidence booster.** The third theme vividly emerged as all three ACA 111 participants credited the course with giving them the confidence to tackle the college experience. One student indicated:

College was always something that was really scary, I don't know why, it just was, Umm… so I was terrified but going into the class, it showed me that my instructors are people, they’re humans, umm. So it took away that scare factor for me, a lot, and it has changed myself as a human, it just kind of showed myself that I can do it. It showed me that school doesn’t have to get the best of me, that I can be in charge.

(S1.12)

The second ACA 111 student simply stated, “It just helped me get over the anxiety” (S2.4).

Finally, the third student success course participant described the course as a “confidence booster” (S3.9). Each of the ACA 111 participants felt strongly that participating in the course helped them gain the self-confidence necessary to succeed in a college environment.

**Take early in the college experience.** The fourth theme that surfaced from the focus group was the need to take the student success course early on in the college experience, preferably during the first semester. As one student suggested:

I think it’s a class that first semester people should take because it gives them that outlook cause they’re stepping into a whole new place that they’ve never experienced before and it just gives them the confidence boost that’s gonna help get them through the rest of the semesters that they’re gonna be there. (S2.6)
That same student later spoke to the personal benefits she had realized by taking the course during her first semester of college:

I had the choice to either take this course this semester or next semester and I chose to take it this semester because I thought it would actually help me and I am actually really glad that I did take it this semester cause it has helped me a lot in my four classes that I take. (S2.12)

Another student described the benefits she had gleaned from the course by stating, “I am so thankful that I took my first semester, and I got the time management and tips and tricks” (S1.1). After hearing these two students speak about the positive influence ACA 111 had on them by taking it during their first semester, those students who had not taken the course began to reveal why. All three non-participants attributed not taking the course to the lack of emphasis from his or her advisor. For example, one student indicated:

Yeah, well, what my advisor said the first semester I was here… she said, do you want to take ACA on top of the five classes I was already taking and I thought about it for a second and she said aww, maybe just take it next semester. And she kind of disregarded it as that important. (S5.9)

Another student said, “She [advisor] was like well you can take it whenever, like next semester or the next semester” (S4.11). One of the students who had not taken the course asked:

Since her and I haven’t taken it and we're not first semester, it would be beneficial and smart to take it probably the next semester then right, cause then it'll teach you how to manage time and all this other stuff. (S6.13)
Later, that same student insisted, “I wish they would have recommend it, you know, to take it early on before I’ve taken the four classes that I’ve taken already” (S6.29). In spite of not taking the course based on what she described as “the neutrality of the advisor” (S4.13), one non-participant acknowledged the benefits of ACA 111 described by course participants by stating, “I can see how it has helped those in their first semester” (S5.3). As communicated through the voices of these students, taking a student success course during the first semester of college enrollment seems to provide the foundation for future academic success. And, the benefits of taking the course early in the college experience appear to be recognized by some of those students who have not taken the course.

**Course should be required.** The final theme that emerged from ACA 111 course participants during the focus group was the need to require the student success course for all students. However, this idea did not go without debate from those students who had not taken ACA 111. For example, one student stated, “For it to be required class is kinda silly to me because I feel like you can learn these things on your own” (S5.3). Speaking in agreement, another student who had not taken ACA 111 emphasized, “I don't feel like it should be required” (S4.3). A student who was currently enrolled in ACA 111 spoke in support of requiring the course and said:

I would just tell them it’s required because it’s really gonna help you in the long run, even if it just helps you a little bit, it’s still gonna still help you. You're still gonna get something out of it, you’re still gonna get a trick, a tip, anything. You're still gonna get something. (S1.18)

Following this statement, a student who had not taken ACA 111 countered by saying that she had acquired many of the skills taught in the course through job experience and should,
Therefore, not be required to take the course. Then, another student who was not enrolled in ACA 111 commented:

But what about people who…don't have the experience. It could be beneficial for them, I guess. Not having the leadership skills and they’re, you know, coming into unknown territory, knowing how to do time management, umm, whatever else you learn in that class that’s beneficial for excelling in a college environment, you know. (S6.23)

Clearly, those who were taking ACA 111 felt strongly that the course should be a requirement. Feelings among non-participants were mixed. Two students in this group favored not requiring the course but acknowledged potential benefits associated with taking the course. The third student from the non-participant group was very much in support of requiring the course.

Through student voices, five major themes developed from the focus group: “tips and tricks,” balance/time management, confidence booster, student success courses should be taken early in the college experience, and student success courses should be required. ACA 111 participants emphatically touted these five benefits and credited the student success course with providing them with the foundation and skills to promote academic success. Even though the non-participants seemed to initially question the value and relevance of the course, their perceptions definitely shifted as the conversation progressed. As they listened to their colleagues speak about how ACA 111 had benefited them, students who had not taken the course appeared enlightened about the course and began to acknowledge the academic strategies, life skills, and other benefits that could be acquired from taking such a course.
Summary

For the 2008 cohort of entering students at CVCC, the findings from the present study confirmed a significant relationship between taking ACA 111 and the outcomes of persistence into the second fall semester of college enrollment and credential attainment within six years. A strong predictive relationship between taking the student success course and persistence into the second fall semester of college enrollment was also realized. Although not nearly as powerful, a predictive relationship was observed between taking the student success course and credential attainment.

ASEQ results revealed a significant difference on the Understanding Subscale for student success course participants compared to control group participants. Pre- and post-test results showed that ACA 111 students also experienced gains in mean confidence levels from the beginning to the end of the semester on each of the ASEQ subscales examined.

Focus group findings revealed five overarching themes from ACA 111 students: “tips and tricks,” balance/time management, confidence booster, take early in the college experience, and the course should be required. These were the categories students identified as the most beneficial aspects of the student success course.

Chapter Four has presented the findings from each of the data sets: persistence and credential attainment, ASEQ, and the focus group. Chapter Five discusses these findings and provides links to the literature. Gaps in the literature previously presented are also revisited in relation to the study findings. In addition, Chapter Five includes limitations to the current study and provides implications of the research for educators while presenting considerations for future study.
Chapter 5: Discussion and Conclusions

The purpose of this study was to examine the influence a student success course had on persistence, credential attainment, and academic self-efficacy at one particular community college in North Carolina. The following research questions guided the study:

1. What is the relationship between taking a student success course and student persistence?
2. What is the relationship between taking a student success course and credential attainment?
3. What is the impact of taking a student success course on academic self-efficacy?
4. What are student perceptions of the impact of student success courses on student success?

This chapter discusses the findings from Chapter Four and provides connections to the literature. Study limitations, implications, recommendations for future research, and conclusions are also presented.

Introduction

College completion continues to be a focal point in the modern landscape of higher education. Despite an increased emphasis on college credential completion, a significant gap remains. According to Carnevale and Rose (2011), an additional 20 million Americans will need to earn a college degree by 2025 to meet workforce and societal needs. As institutions that enroll nearly half of America’s undergraduate students (AACC, 2015), community colleges are being called upon to help address the graduation shortfall. However, community colleges have struggled with keeping students enrolled long enough to make it across the graduation stage. O’Banion (2013) reminds us that nearly half of community college students
never make it to their second year of college enrollment. Furthermore, Boerner (2014) reports that only 18% of community college students graduate within three years. Perhaps the low completion rates are somewhat a byproduct of the community college open access philosophy. According to O’Gara et al. (2008), the open access policies of community colleges result in a high percentage of students enrolling who are disadvantaged in some way—social, economically, or academically. Regardless of the reason, a significant question still remains unanswered: How do community colleges help students complete college programs and fulfill the national imperative of having an educated populace with postsecondary credentials? This study sought answers to this question by utilizing an embedded research design to explore the impact of one initiative, a student success course, designed to facilitate student success and promote persistence and credential attainment. A discussion of the findings from each research question is presented in the sections that follow as well as an analysis that considers all findings collectively. Gaps in the literature addressed by this study are also discussed.

**Persistence and Credential Attainment**

This study addressed a gap in much of the prior literature by examining persistence (i.e., enrollment into the second fall semester) and credential attainment simultaneously. Additionally, a shortcoming of prior research (Boudreau & Kromrey, 1994; Schnell & Doetkott, 2003) was addressed by including a longitudinal component that explored graduation over a six-year time frame. This study examined a cohort of new students who entered Catawba Valley Community College (CVCC) in the fall semester 2008 ($N=1476$) in relation to persistence and credential attainment. Similar to previous studies (Boudreau & Kromrey, 1994; Cambridge-Williams et al., 2013; Derby & Smith, 2004; Derby & Watson,
2006; Schnell & Doetkott, 2003; Zeidenberg et al., 2007), a significant relationship was found between taking the student success course and persistence. Findings were also consistent with previous studies (Cambridge-Williams et al., 2013; Derby, 2007; Derby & Smith, 2004; Zeidenberg et al., 2007) that found taking a student success course positively influenced credential attainment. Additionally, the observed number of 430 (78%) students who took ACA 111 during the first year of college and persisted into the second fall semester far surpassed the expected number of 264.9 (48%) that would have occurred by chance alone. Jaynes (2011) and Cho and Karp (2013) also found that taking a student success course early in the college experience had positive results on retention.

The backward stepwise logistic regression approach utilized in this study filled an additional gap in prior research by considering multiple variables simultaneously (age, gender, ethnicity, race, full-time or part-time enrollment status, developmental class enrollment or not, persistence, and credential attainment). The logistic regression results produced a model that predicts which students were more likely to take the student success course based on the variables listed above. In this study, students who took ACA 111 were more apt to persist, graduate, be part-time, be younger than non-participants, and enroll in a developmental course. Perhaps the most interesting and substantial finding from the regression analysis was the predictive relationship exhibited between persistence into the second fall semester of college and taking the student success course. Students who took ACA 111 were 5.5 times more likely to persist than those students who did not take the course. This finding suggests that taking a student success course has a powerful impact on the educational outcome of persistence.
Relationship of Student Success Course to Academic Self-Efficacy

This study addressed another gap in the literature by investigating the impact of ACA 111 on academic self-efficacy as measured by pre- and post-test scores on the Academic Self-Efficacy Questionnaire (ASEQ). According to Wernersbach et al. (2014), the impact of student success courses on academic self-efficacy has not been adequately studied. As suggested by Wood and Locke (1987), findings were analyzed for the 17 items from the six ASEQ subscales found to be most reliable. As was mentioned in Chapter Four, ANOVA results revealed a significant difference ($p = .025$) on the Understanding Subscale for ACA 111 students as compared to the control group of ENG 111 students. The Understanding Subscale incorporates items that assess students’ perception of their ability to understand information covered in a course from lectures and other information sources. In a similar study examining self-efficacy among university students, Cambridge-Williams et al. (2013) found that students enrolled in an orientation course entitled University 100 had significantly higher scores than non-participants on several scales of the Motivated Strategies for Learning Questionnaire (MSLQ), including metacognition. The Understanding Subscale on the ASEQ and the Metacognition Scale on the MSLQ are similar in that they assess a student’s perceived ability to understand and comprehend course material. These findings suggest that academic self-efficacy may be enhanced through student success courses in such a way that gives students the confidence to better comprehend information that is being presented in college courses.

In another study examining the impact of student success courses on academic self-efficacy, Wernersbach et al. (2014) found similar results with study skills course participants demonstrating greater academic self-efficacy increases than comparison students on a variety
of scales including the College Self-Efficacy Inventory, the Motivated Strategies for Learning Questionnaire, and the Learning and Study Strategies Inventory. Boysen and McGuire’s (2005) study also revealed significant increases in pre- and post-test scores on the Study Skills Self-Efficacy Scale for study skills course participants when compared to non-participants. The studies reviewed here provide evidence that student success courses can have a positive impact on academic self-efficacy.

**Students’ Perceptions**

Students’ perceptions of the role a student success course may play in promoting the academic success and self-efficacy of community college students were also obtained in this study. As O’Gara et al. (2008) remind us, student perceptions are often absent from studies exploring the impact of student success courses. These researchers advocate for seeking input from students as a way to better understand how specific course components support student success. In this study, a focus group of 6 students (three ACA 111 participants and three ENG 111 participants) was conducted to gain students’ insights and complement quantitative findings. Consistent with the O’Gara et al. (2008) study, each of the ACA 111 participants found the course to be beneficial. Five major themes emerged from the focus group discussion: “tips and tricks,” balance/time management, confidence booster, student success courses should be taken early in the college experience, and student success courses should be required.

The prevailing themes from the focus group were consistent with findings from prior research. For example, students in the O’Gara et al. (2008) study reported that the student success course “developed skills and techniques that could help them in their academic endeavors” (p. 9). Students in the current study utilized the phrase “tips and tricks” when
referring to the skills acquired from participating in the course. One of the “tips and tricks” focus group students credited the student success course with providing was that of goal setting. In the Zeidenberg et al. (2007) study, greater persistence rates among students who took a student success course were associated with the non-academic skills such as career goal setting taught as part of the student success course. As discussed previously, Karp et al. (2012) list time management and study habits as issues that often create barriers for students and inhibit college success. Students in the O’Gara et al. (2008) study credited the student success course with teaching them to manage more effectively their time and improve study habits. These skills also emanated from focus group findings in the current study. Similar to findings in the O’Gara et al. (2008) study, focus group participants with competing time commitments, such as work and family, found the student success course to be especially beneficial to learning how to balance academic requirements with life’s other demands.

In regards to the confidence theme that surfaced from the focus group, two prior studies had outcomes similar to those found in this study. In the Karp et al. (2008) study, the student success course was viewed as the venue that allowed for relationships to be developed with others, which helped students integrate into the institution. Participants in the O’Gara et al. (2008) study credited the student success course with helping them adjust to college life, making them feel comfortable and confident to participate in class discussions, and promoting relationships among other students. Findings revealed that 70% of those interviewed felt a sense of comfort and belonging on campus. In addition, a persistence rate of approximately 90% was realized for students who were categorized as integrated into the institution. As Tinto (1993) reminds us, the ability to integrate successfully into the college environment has a direct impact on the academic goals of persistence and graduation.
The most powerful part of the focus group session came at a time when students were asked to assume the role of an advisor and discuss what they would tell students about taking the student success course. What happened next was truly an amazing scenario to witness. I was able to watch a peer-to-peer advising session take place as part of the focus group discussion. Students who were not enrolled in ACA 111 began to express their skepticism about the benefits of the course. In the beginning of the discussion, non-participants questioned the relevance and value of the course and seemed to think that taking the course was a waste of time with little practical value. Then, students enrolled in ACA 111 spoke up and began to cite the numerous benefits they had received by taking the course. The passion in their voices and their body language was more convincing than any advisor could hope to be. Those students who were not enrolled in ACA 111 began to change their perceptions. Their language became less negative, and they began to point out potential benefits they could have garnered from taking the course. One student in particular gave the ACA 111 students perhaps the greatest compliment he could have when he stated, “I'm gonna actually go register for some classes after this, and I might register for this class.” (S6.36)

**Revisiting the Conceptual Framework through Collective Analysis**

Analyzing the findings collectively from the different areas mentioned above and through the lens of the conceptual framework utilized in this study provides a unique and fresh perspective that has yet to be considered. As Creswell (2012) reminds us, embedded research designs allow the use of one form of data analysis to inform the other and produce combined, interpretive results (Creswell, 2012). As presented in Chapter Two, much of the research speaks to the positive association between taking a student success course and the educational outcomes of persistence and credential attainment, especially when the course is
taken early in the college experience. Results from this study support previous findings in this regard. However, through the administration of a self-efficacy instrument and by talking to students about their experiences, this study took further steps to examine the impact such a course has on the academic self-efficacy of students. Although the sample populations examined in these parts of the study are small, the results lend support to the Bean and Eaton (2000) model, which suggests that there is a psychological component to college success that has traditionally been overlooked and excluded from other models. Investigating a student success course through the conceptual lens of Bean and Eaton (2000) creates an awareness that student departure from higher education could be psychologically motivated.

The Bean and Eaton (2000) model incorporates four psychological components including attitude-behavior theory, coping behavioral theory, attribution theory, and self-efficacy theory that influence how students adapt to college and ultimately impact their decision to remain enrolled. According to Bean and Eaton (2000), each of the four components of their model is complex and, therefore, they suggest that researchers may find it beneficial to investigate certain aspects of the model individually. In addition, Bean and Eaton (2001) posit that “Among the most important of these psychological factors are self-efficacy assessments” (p. 75). As a result, this study focused on examining the psychological construct of self-efficacy in relation to student success courses.

A student success course is one initiative that “helps students build confidence, esteem, and social and academic self-efficacy in their new environment” (Bean & Eaton, 2001, p. 83). Results from this study support Bean and Eaton’s (2001) assertion. For ACA 111 participants, self-efficacy assessments on the ASEQ results revealed a statistically significant difference ($p = .025$) on the Understanding Subscale when compared to ENG 111.
students, which suggests that academic self-efficacy is enhanced in such a way that gives students the confidence to better understand information that is being presented in college courses. Self-efficacy improvements were also reflected in comments obtained from ACA 111 participants in the focus group. For example, one student stated, “It was a confidence booster, and it just more like enhanced…learning skills, I guess, in general” (S3.9). Students continually spoke of “tips and tricks” they acquired from the student success course which not only provided them with specific skills such as time management, study skills, and test taking skills, but also taught them how to “do college” and gave them the confidence to succeed. What they learned in the course helped them better understand what was expected from them as a college student. As one student declared, “Just coming in, not knowing what to expect in college, going into a really relaxed classroom… it just, it was kind of just a confidence booster” (S1.16). For ACA 111 students involved in the focus group, the student success course was viewed as a contributor to their self-confidence and their ability to navigate the complexities of higher education.

The collective analysis of data suggests that student success courses may help shift academic self-efficacy in a positive direction. If these types of courses do indeed have a positive impact on academic self-efficacy, then they could be used as a strategy to combat attrition. As Wernersbach et al. (2014) posit, academic self-efficacy is a powerful predictor of academic success. According to Wernersbach et al. (2014), “Individuals who are doubtful about their capabilities are easily discouraged by struggles and failures, whereas individuals with more confidence in their abilities persist despite obstacles until they find success” (p. 15). This current viewpoint aligns with Bandura’s (1977) philosophy from nearly 40 years prior which proposed that the stronger a person’s self-efficacy, the more likely they are to
persist and persevere when facing difficulties. In talking about how ACA 111 has helped her overcome and persevere, one focus group student stated:

It took away that scared factor for me, a lot, and it has changed myself as a human, it just kind of showed myself that I can do it. It showed me that school doesn’t have to get the best of me, that I can be in charge. (S1.12)

The students examined in this study face many obstacles common to community college students. However, these students reported an increase in self-confidence as a result of taking a student success course and, as a result, will likely improve their chances of overcoming those obstacles and remaining in college until they achieve their academic goals. As Bean and Eaton (2000) emphasize, “A student with a positive assessment of self-efficacy feels a sense of integration in the environment and returns to the environment to reinvest in her/his success in the academic and social milieu of the higher-education environment” (p. 58).

This study lends support to self-efficacy as a viable component of Bean and Eaton’s overall model. Even though this study did not specifically examine other aspects of the model, student comments during the focus group point to other pieces of the model that are worth mentioning. For example, ACA 111 participants often cited that participating in the course helped them effectively deal with the anxiety of college, which aligns with the coping behavioral component of the Bean and Eaton model (2001). These authors suggest offering programs that target freshmen college students as a way to improve coping strategies and reduce the anxiety of college. Student comments in this study suggest that student success courses reduce the stressors of transitioning to college and enhance their ability to adapt and integrate into the college environment.
Student comments in the focus group also provided support to the attribution theory aspect of the model. Bean and Eaton (2001) describe attribution theory as locus of control. A student with an internal locus of control tends to be more motivated and take more responsibility for his or her own learning (Bean & Eaton, 2001). As one student in the focus group commented about taking the student success course, “It showed me that school doesn’t have to get the best of me, that I can be in charge” (S1.12). This statement suggested that this particular student has changed her perspective on the role she plays in her academic success as a result of taking ACA 111. Future research should expand on the current study by exploring the impact of student success courses on other aspects of the Bean and Eaton model, including locus of control and coping behaviors, and how the different pieces of the model interact with each other.

**Limitations**

As is the case in all studies, this study had limitations that should be mentioned. First and foremost, this study occurred at a single institution in Western North Carolina. Therefore, caution should be utilized when generalizing the findings. The study also had sampling limitations as the sample populations were not random. Limitations were also present in each of the three components of the study, which will be discussed in turn.

**Persistence and credential attainment.** One of the weaknesses of the study was the inability to obtain transfer data for the 2008 cohort. Students who transferred during the first year of enrollment were treated as non-returners for persistence purposes, and those who transferred prior to completing a credential were considered as non-completers regarding credential attainment. Several researchers (Clotfelter et al., 2013; Derby & Smith, 2004; O’Banion, 2013) remind us that the role of community colleges is multi-faceted with helping
students transfer to senior institutions as one of their primary purposes. Since many community college students drop out to enroll in four-year colleges (Derby & Smith, 2004), transfer students should be considered and tracked when examining persistence and credential attainment.

Another limitation in this study was the inability to identify students who may have needed developmental coursework but did not enroll in those courses. Because remedial or developmental courses have historically been a marker of academic under-preparedness, this study originally sought to examine the impact of ACA 111 on students needing developmental coursework in regards to persistence and credential attainment. However, limitations within the CVCC database resulted in categorizing students as developmental education students only if they actually enrolled in a developmental education course. Study results did reveal that students who enrolled in developmental education courses were more likely to enroll in the student success course. Results also revealed that student success course participation was positively associated with persistence and credential attainment. However, the inability to examine the impact of a student success course on all academically unprepared students was a limitation in the study.

**Self-efficacy instrument.** The length of the Academic Self-Efficacy Questionnaire (ASEQ) and the time commitment required from students was underestimated. Each item on the ASEQ requires two responses—the first part of the question asks students to indicate if they can perform the task and the second part asks students to indicate their confidence level with the original response. Thus, a total of 66 questions make up the ASEQ. Students reportedly became tired during the questionnaire, creating the likelihood that students did not take items as seriously as hoped toward the end of the administration period and possibly
affected their willingness to take the post-test. Additionally, the administration of the ASEQ was irregular. The questionnaire was listed as optional and was offered in different modalities, which likely resulted in lower participation. A total of 46 students took the ASEQ pre- and post-test, which further limits the generalizability of the results.

**Focus group.** Findings from the focus group were based on six volunteer participants (three ACA 111 participants and three non-participants). Therefore, caution should be utilized when generalizing their perceptions to others. Students from ACA 111 who participated in the focus group were still enrolled in the course at the time of the focus group session and presumably were doing well in the course and, therefore, had positive experiences. Focus group participants were not students who withdrew from the course or had other difficulties; thus their positive comments could be expected.

**Implications**

The present study has several practical implications for community colleges and community college leaders. Perhaps the most important implication is for CVCC personnel and administrators. These individuals should know that ACA 111 is making a positive difference for students on their campus and should continue to be included as a curricular offering. The course is helping students progress and complete their intended program of study and is also contributing to students’ self-confidence. The success of this initiative should be communicated throughout the institution as a way to further emphasize its importance and impact on students. CVCC is to be commended for their commitment to offering programs that promote student success.

This study also has implications for a broader audience. Findings contribute to the growing body of literature that confirm student success courses provide students with certain
skillsets and greater confidence to succeed in college. Therefore, community colleges should consider offering (and perhaps requiring) student success courses as a mechanism to promote persistence and help meet the national agenda of graduating more students. Tinto (1993) acknowledges the financial difficulty institutions face when attempting to implement student success initiatives in times of limited resources. Requiring student success courses would have financial implications for institutions as additional course sections and instructors would be needed. However, Schnell and Doetkott (2003) argue that student success courses are a “worthwhile investment on the part of the institution” (p. 388) given their significant positive impact on student retention. In addition to requiring student success courses, community college leaders should consider implementing policies and practices that promote taking student success courses early in the college experience. As Tinto (2012) reminds us, support initiatives targeting the first semester of enrollment, such as student success courses, increase the likelihood of future success.

Community colleges should also consider incorporating academic self-efficacy components within the curriculum of student success courses. Parjares (2006) encourages educators to offer academic experiences that incorporate skill development, peer mentoring, self-reflection, short-term goals, and frequent feedback as specific strategies to boost self-efficacy. Instruction should be tailored to students’ capabilities in such a way that tasks are challenging, yet accomplishable (Pajares, 2006). As Wernersbach et al. (2014) state, “Mindfully and programmatically incorporating supports for self-efficacy may provide additional potency for these courses. The down-stream outcomes, like retention and completion, may be positively impacted” (p. 23). As such, it is important for educators to assess the impact of these courses on self-efficacy and educational outcomes, such as
retention and graduation. Wernersbach et al. (2014) advocate for assessing these courses beyond the academic realm to fully understand their influence on student success.

**Recommendations for Future Research**

First and foremost, researchers should continue to combine quantitative and qualitative approaches to examine the complex phenomenon of attrition at the community college level in order to develop a deeper understanding of why students leave and what interventions promote student success. Several researchers (Berliner, 2002; Creswell, 2012; Creswell & Plano Clark, 2011; Morgan, 2014; Tinto, 1993; Yin, 2014) advocate for mixed methods approaches when examining complex educational issues. In the current study, focus group students had a lot to say about how participating in the student success course benefited them. By including student voices, the study was better informed and the quantitative findings were contextualized. Future studies should continue to let students tell their stories in order to develop better programming that meets students’ needs.

Transfer students should also be considered in future studies examining persistence at community colleges. As Tinto (1993) reminds us, two-year colleges provide coursework designed to transfer to senior institutions and, as a result, often experience high rates of student departure. Currently, 25% of community college students transfer to four-year institutions within five years of enrolling in a community college, and 62% of those students graduate with a bachelor’s degree (Jenkins & Fink, 2015). As such, students who leave community colleges to pursue a four-year degree should not be labeled as a dropout (Tinto, 1993). In addition, the future examination of transfer students from community colleges in the North Carolina Community College System should be conducted in conjunction with studying the impact of ACA 122 (College Transfer Success). ACA 122 is a newly developed
course designed to assist students with successfully transitioning to senior institutions. Future studies should examine the impact this course has on the success of transfer students.

Student entry characteristics, including parents’ educational level and self-efficacy play a critical role in persistence decisions among community college students (Braxton et al., 2014). First-generation status information is not collected by the college where the current study was conducted, and therefore, was unavailable for use in this study. However, the impact of student success courses on the academic success of first-generation community college students should be investigated given that 36% of community college students are considered first-generation (AACC, 2015). Additionally, examining how student success courses impact academic self-efficacy among first-generation community college students should be explored.

Academic ability is another entry characteristic identified by Braxton et al. (2014) that can impact a student’s decision to leave higher education. As such, future studies should consider exploring the impact of student success courses on students who need remediation. In the current study, students who enrolled in developmental education courses were more likely to enroll in the student success course. However, this study did not investigate why developmental education students enrolled in the student success course at higher rates than students who did not require remediation, nor did the study examine the impact of the student success course on the academic self-efficacy of developmental education students. Wernersbach et al. (2014) found that academic self-efficacy increased for academically unprepared students while taking a student success course. Although the current study did not specifically look at self-efficacy relative to students enrolled in developmental education courses, it is a topic worthy of future research given that 60% of community college students
are academically vulnerable and have to take at least one developmental course upon enrollment (AACC, 2012).

In addition to first-generation and developmental education students, community colleges enroll over half of the African American, Native American, and Hispanic student population in all of higher education. Furthermore, 17% of students in community colleges are single parents and 12% have some diagnosed disability (AACC, 2015). Wernersbach et al. (2014) stress the importance of background characteristics by emphasizing, “Students’ engagement with higher education is impacted by the context from which they come and in which they live” (p. 33). Given the diversity of the community college student population, future studies should consider examining how student success courses affect certain subgroups of students. In order to more effectively examine the impact of student success courses on particular groups, as in causal-comparative models, larger sample sizes are necessary. Future studies should include multiple institutions or possibly system-level exploration as a way to increase sample sizes and reduce selection bias.

Investigating the impact of student success courses on various age groups may also be worth considering. Similar to Cho and Karp’s (2013) findings, students from the 2008 cohort examined in this study who took the student success course were younger. The mean age for ACA 111 participants was 25.99, whereas the average age for students who did not take the course was 32.50. One of the findings from the focus group revealed that older students with more real-world experience felt that taking the course was unnecessary. While discussing particular course topics ACA 111 students found beneficial, one non-participant who was in his fourth semester of college interjected, “Most of these things I’ve already experienced” (S5.1). The student further elaborated by stating, “I feel like critical thinking, things of that
nature, that are discussed in ACA are things that I’ve already had to learn myself” (S5.1). These comments coupled with the age difference of course participants compared to non-participants may suggest that a student success course could be more meaningful and have more of an impact for younger students. Future studies could help clarify if student success courses have benefits based on age.

Further examination of the impact of student success courses on the psychological component of academic self-efficacy is important. One of the trends in this study I found particularly interesting as a researcher was the change in mean confidence levels for ACA 111 participants and non-participants from pre- to post-test periods on the ASEQ. Although the mean confidence level changes did not reach the level of significance, ACA 111 students experienced gains in confidence levels from the beginning of the course to the end of the course in the areas of class concentration, memorization, explaining concepts, discriminating between concepts, and note taking. Bean and Eaton (2001) postulate that as students’ academic skills are enhanced, so are their cognitive abilities, which gives them the confidence to better cope and adjust to difficult academic situations. In contrast, ENG 111 students experienced decreases in mean confidence levels on three of the subscales between pre- and post-test scores. Boysen and McGuire (2005) also found that students who were not enrolled in the study skills course demonstrated a decrease in academic self-efficacy when pre- and post-test scores were compared. More robust studies are needed to further explore trends seen in this study. However, given the difficulties students experienced with taking the academic self-efficacy instrument utilized in this study, a new tool that is more appropriate for community college students should be considered for use in future studies. Additionally, a more standard administration of an academic self-efficacy instrument should be highly
considered. It is recommended that future studies include self-efficacy assessments as a course requirement in one modality to provide consistency and larger sample sizes.

Lastly, future research should expand on the current study by continuing to seek student perceptions about their experiences in student success courses. Input from students about specific components of student success courses they find beneficial should be obtained and utilized to develop course content. Further studies should also gather student perceptions on student success courses based on various modes of delivery to determine if opinions about the impact of the course differ based on how the course content is delivered.

Conclusions

As the AACC (2012) states, “American community colleges have served as the people’s college…They have been the platform from which millions of low- and middle-income Americans have launched their dreams” (p.1). These institutions have made significant contributions to making higher education accessible to students from all walks of life. Now, it is time that these institutions also focus on the success of students and help build a nation of college graduates and reclaim the American dream.

This study was conducted within the context of the current discourse in higher education—college completion—and explored the impact of taking a student success course on the outcomes of persistence, credential attainment, and academic self-efficacy at one particular community college. Overall, this study demonstrated that the student success course under investigation had a positive impact on the variables of interest: persistence, credential attainment, and academic self-efficacy. As institutions that enroll 46% of America’s undergraduate student population (AACC, 2015), it is imperative for community colleges to engage in continuous evaluation of student success initiatives, including student
success courses, as a way to expand the existing body of knowledge, promote student success, meet the national imperative of developing more college graduates, and prepare individuals to be contributing members of society and to reach their full potential in all aspects of their lives.
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Appendix A

Bean and Eaton's (2000) Psychological Model of College Student Retention
COURSE NAME and TITLE
ACA 111: COLLEGE STUDENT SUCCESS

COURSE DESCRIPTION
This course introduces the college’s physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

Prerequisites: None

Corequisites: None

Class Hours: 1

Lab Hours: 0

Clinical/Work Exp.: 0

Credit Hours: 1

STUDENT LEARNING OUTCOMES

#1 Identify and access people and resources at CVCC.
#2 Monitor and adopt tools for time management.
#3 Plan effectively and efficiently.
#4 Manage one’s stress better
#5 Learn skills for academic success, study skills, critical thinking and sound decision-making.
#6 Better understand the value of education.
#7 Address diversity and goodwill.
#8 Foster good communication skills.
#9 Look at gender issues.
#10 Exhibit responsible and gentle behavior.
#11 Have a better idea of career choice.

GRADING SCALE

<table>
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<th>Grade</th>
<th>Points</th>
<th>Grade Points</th>
<th>Numerical grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
<td>90 - 100</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3</td>
<td>80 - 89</td>
</tr>
<tr>
<td>Letter</td>
<td>Grade</td>
<td>Points</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
<td>Numerical grade of 70 - 79</td>
</tr>
<tr>
<td>D</td>
<td>Below Average</td>
<td>1</td>
<td>Numerical grade of 60 - 69</td>
</tr>
<tr>
<td>F</td>
<td>Failed</td>
<td>0</td>
<td>Numerical below 60</td>
</tr>
<tr>
<td>WP</td>
<td>Withdraw Pass</td>
<td>0</td>
<td>Issued if the course is dropped after the census date and on or before the 50% point of the course unless the instructor issues a WF based on extenuating circumstances</td>
</tr>
<tr>
<td>WF</td>
<td>Withdraw Failing</td>
<td>0</td>
<td>Issued if the course is dropped after the 50% point of the course or the instructor chooses based on extenuating circumstances</td>
</tr>
</tbody>
</table>

ATTENDANCE REQUIREMENT
SCHOOL OF ACADEMICS, EDUCATION, AND FINE ARTS
Regular, prompt attendance is essential for academic success. Students should strive for perfect attendance. A student may not miss more than 10% of the total contact hours required for this 16 contact hour class. Thus, the maximum number of class hours that can be missed is 2. Upon the 3rd class hour missed, the student may be dropped from the course. The instructor is responsible for enforcing the attendance requirement. Once an instructor drops a student from the class, the department head must approve any exceptions to the requirement. Note: this requirement refers to the number of class hours missed rather than the number of class meetings missed. Students who come in after the scheduled starting time or students who leave before the scheduled ending time will be counted as tardy. Three (3) tardy arrivals or early departures will count as one absence.

DISABILITY STATEMENT
If you have a documented disability and wish to discuss academic accommodations, please contact Wanda Horvath, Counselor for Students with Disabilities, at extension 4222, in the Learning Assistance Center (LAC) located on the first floor of the Cuyler A. Dunbar Building (CAD).

RELIGIOUS OBSERVANCE STATEMENT
Students shall be permitted excused absences from all classes two days per academic year for religious observances required by their faith. The absences requested in accordance with this policy are "one of" and not "in addition to" any absences otherwise permitted by the faculty for a class. The excused absence request must be submitted by the second class meeting and a minimum of two (2) weeks in advance of the absence. Please contact your instructor for the required forms.

ACADEMIC HONESTY POLICY
Students at CVCC are expected to be honest in all academic pursuits, whether class, lab, shop, or clinical. Acts of academic dishonesty are considered unethical and subject to behavior sanctions.
Examples of academic dishonesty include, but are not limited to the following:

1. Sharing information about the content of quizzes, exams, classroom/lab/shop/clinical assignments (scheduled or make-up) without approval of the instructor including but not limited to unauthorized copying, collaboration, or use of notes, books, or other materials when preparing for or completing examinations or other academic assignments (scheduled or make-up).

2. Buying, selling, or otherwise obtaining a copy of a quiz, exams, project, term paper, or like document, without approval of the instructor.

3. Plagiarism, which is defined as the intentional representation of another person's work, words, thoughts, or ideas (from any source) as one's own.

4. Failing to follow approved test taking procedures by performing such acts as:
   - Looking on another student's test
   - Use of unauthorized notes; written, electronic, or otherwise
   - Changing answers after exam is scored
   - Verbal, non-verbal, or electronic communication with another student during an exam

Instructors have the authority to impose either a warning, probation, or dismissal from the class for acts of academic dishonesty relative to classes under their supervision.

Students have an obligation to report any acts of academic dishonesty to the instructor or appropriate campus authority when reasonable grounds exist for such a report. Students also have a responsibility to cooperate in the investigation of any alleged acts of academic dishonesty. Failure to report acts of academic dishonesty could result in a behavior sanction as outlined in the Student Conduct Policy, Policy 3.18

**CVCC EMERGENCY PROCEDURES**
To Report a Serious Emergency Dial 9-911 from any campus phone or 911 from mobile phones; then dial 711 (Campus Safety & Security) from a campus phone.

**Lockdown**
Quickly get all persons behind a locked door, close blinds, lock all windows/doors, and turn off lights. Sit against an interior wall away from windows and doors (hide). Keep cell phones ON in silent mode or vibrate. Do not leave the locked area until notified by a known CVCC administrator or by law enforcement that the emergency is over.

**Seek Shelter** (tornados, hurricanes, etc.)
Move to hallways and/or other inner rooms. Stay away from windows and doors. Sit on floor facing the inner wall and shield head with hands. Remain in shelter until notified by CVCC administration or by emergency personnel that the danger is over.
Building Evacuation
Leave the building immediately and proceed to a parking lot location at least 100 feet from the building. Do not delay to retrieve books or other personal items. Do not use elevators. Do not touch suspicious objects. Stay clear of the building once outside. Faculty should take class rosters if possible and account for all students at evacuation locations. Report any special assistance needed to CVCC faculty/staff or to emergency personnel. If you are aware or suspect someone is trapped in a threatened building, notify CVCC faculty/staff or emergency personnel. Remain at your building evacuation location until further instructions are provided by CVCC administration or by emergency personnel. In case of bomb threat, avoid using cell phones and wireless devices; this may detonate the bomb.

Smoke, Fire or Hazardous Materials
Activate the nearest fire alarm. Before attempting to fight a fire, notify someone nearby. Never attempt to fight a fire larger than wastebasket size. Close doors and windows to isolate the problem if the situation permits. If trapped in a building during a fire, use wet towels or cloths to protect you from flames and smoke. Stop/drop/roll if your clothes catch on fire. Do not open doors that feel hot. Always stay between the fire and an exit. Stay low to the floor as you try to exit.

Personal Emergencies
Unless you feel threatened, stay with the victim until emergency personnel arrive. Avoid contact with bodily fluids. Stay calm and try to minimize panic. If the person is conscious, ask if he/she is a High School student (if so, include this information in your 911 call).

Emergency Procedures Revised: April 4, 2012

Cell phone backup to 711 Campus Safety & Security: 828-514-7025
Appendix C

To: Mark Poarch

CAMPUS MAIL

From: Dr. Lisa Grizzard, Institutional Review Board Chairperson
Date: 10/27/2014
RE: Notice of IRB Exemption
Study #: 15-0094

Study Title: An Examination of the Relationship Between Student Success Courses and Persistence, Credential Attainment, and Academic Self-Efficacy Among Community College Students.

Exemption Category: (1) Normal Educational Practices and Settings,(2) Anonymous Educational Tests; Surveys, Interviews or Observations This study involves minimal risk and meets the exemption category cited above. In accordance with 45 CFR 46.101(b) and University policy and procedures, the research activities described in the study materials are exempt from further IRB review.

Study Change: Proposed changes to the study require further IRB review when the change involves:

- an external funding source,
- the potential for a conflict of interest,
- a change in location of the research (i.e., country, school system, off site location),
- the contact information for the Principal Investigator,
- the addition of non-Appalachian State University faculty, staff, or students to the research team, or
- the basis for the determination of exemption. Standard Operating Procedure #9 cites examples of changes which affect the basis of the determination of exemption on page 3.

Investigator Responsibilities: All individuals engaged in research with human participants are responsible for compliance with University policies and procedures, and IRB determinations. The Principal Investigator (PI), or Faculty Advisor if the PI is a student, is ultimately responsible for ensuring the protection of research participants; conducting sound ethical research that complies with federal regulations, University policy and procedures; and maintaining study records. The PI should review the IRB's list of PI responsibilities.

To Close the Study: When research procedures with human participants are completed, please send the Request for Closure of IRB Review form to irb@appstate.edu.

If you have any questions, please contact the Research Protections Office at (828) 262-2692 (Robin).
Best wishes with your research.

**Websites for Information Cited Above**

Note: If the link does not work, please copy and paste into your browser, or visit https://researchprotections.appstate.edu/human-subjects.

1. Standard Operating Procedure

2. PI responsibilities:  [http://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/PI20Responsibilities.pdf](http://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/PI20Responsibilities.pdf)


CC:
Amy Trawick, College Of Education
Leslie Bolt, Leadership And Edu Studies
Hunter Boylan, National Ctr For Develop Edu

Email correspondence to and from this address may be subject to the North Carolina Public Records law and may be disclosed to third parties by an authorized state official. (NCGS. ch. 132)
Appendix D

September 15, 2014

RE: Letter of Agreement

To the Appalachian Institutional Review Board (IRB):

I am familiar with Mark Poarch’s dissertation project entitled An Examination of the Relationship of Student Success Courses and Persistence, Credential Attainment, and Academic Self-Efficacy among Community College Students. I understand Catawba Valley Community College’s involvement will include: allowing employees to be interviewed; providing archival data related to student persistence and credential attainment; providing archival pre-test and post-test data from the administration of the Academic Self-Efficacy Questionnaire; allowing students to participate in focus groups.

As this research project is conducted, I understand and agree that:

- This research will be carried out following sound ethical principles and that it has been approved by the IRB at Appalachian State University.
- Employee participation in this project is strictly voluntary and not a condition of employment at Catawba Valley Community College. There are no contingencies for employees who choose to participate or decline to participate in this project. There will be no adverse employment consequences as a result of an employee’s participation in this study.
- To the extent confidentiality may be protected under State or Federal law, the data collected will remain confidential, as described in the protocol. The name of our agency or institution will be reported in the results of the study.

Therefore, as a representative of Catawba Valley Community College, I agree that Mark Poarch’s research project may be conducted at our institution, and that Mark Poarch may assure participants that they may participate in interviews or focus groups and provide responsive information without adverse consequences.

Sincerely,

Garrett D. Hinshaw
President
Appendix E

NOTICE

The ETS Test Collection provides microfiche copies of certain unpublished tests as a service to educators and psychologists. It is hoped that these materials will provide users with creative ideas for the development of their own instruments, or, in some instances, with measures of attributes for which no published tests are available.

The materials included on the microfiche may be reproduced by the purchasers for their own use unless otherwise notified by the author. Permission to use these materials in any other manner must be obtained directly from the author. This includes modifying or adapting the materials, and selling or distributing them to others. Any copyright notice or credit lines must be reproduced exactly as provided on the original.

Typically, the tests included in this service have not been subjected to the intensive investigation usually associated with commercially published tests. As a consequence, inclusion of a test does not imply any judgment by ETS of the quality or usefulness of the instrument. The purchaser must assume full responsibility for controlling access to these materials, the manner in which they are used, and the interpretation of data derived from their application.

It is recommended that access to these microfiche be limited to staff members of professionally recognized educational and psychological institutions or organizations, and individuals who are members of the American Educational Research Association, the American Psychological Association, the National Council on Measurement in Education, or the Association for Measurement and Evaluation in Guidance. The qualifications of others not in these categories should receive careful consideration.

Finally purchasers are urged to provide information about their use of these materials directly to the authors. Many cooperating authors are interested in collecting data on their instruments which will make them more useful to others. Therefore, it is to the advantage of everyone concerned -authors, present users, and users in the future - that purchasers recognize their professional responsibility to initiate such communication. The address of the author of this instrument as of the date on which this series was released:

Professor Robert Wood
Department of Organisational and Labour Studies
University of Western Australia
Nedland, WA 6009
Australia

DESCRIPTION: The Academic Self-Efficacy (ASE) measures the examinee's perceptions of one's ability to perform various academic tasks, such as reading, note taking and memorization. The questionnaire has seven subscales: class concentration, memorization, exam concentration, understanding, explaining concepts, discriminating concepts, and note-taking. It has been used to explore the relationship between self-efficacy, goals and performance. It has 32 questions each having 2 parts. Each task is rated yes or no and the confidence levels are measured on a Likert Scale.

ADMINISTRATION: It can be group administered.

SCORING AND INTERPRETATION: Scoring instructions are available in the articles cited below under "References".

TECHNICAL INFORMATION: Technical Information is provided in the articles cited below under "References".

MATERIALS: Questionnaire, Subscale Description


ASE QUESTIONNAIRE

Read this page carefully. Do not turn over the page until you are instructed to do so.

The questions in this booklet ask about your perceptions of your ability to perform various academic tasks, such as reading, note-taking, and memorization. For each of the tasks you are asked to make two judgments about your ability to perform at varying levels of difficulty.

(1) Could you perform the task at the level of difficulty described if you wanted to? If your answer to this question is yes, then enter a "Y" in the CAN DO column. If it is no, enter an "N" in that column.

(2) How confident are you about your ability to perform at that task level? If in the next few days you were given a test of your ability to perform the task, how confident are you that you could perform at the level described?

Indicate your degree of confidence by entering 0 to 10 in the CONFIDENCE column, based on the following confidence scale.

<table>
<thead>
<tr>
<th>Level of Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Totally Unconfident</td>
</tr>
</tbody>
</table>
SAMPLE ITEMS

Now consider some sample items. The first asks about assigned reading in the main text for this course. For this item we have filled in a hypothetical student's answers for you to illustrate the use of the scale.

READING ASSIGNED PAGES IN TEXTBOOK

1. Read at least \( \frac{1}{3} \) of assigned material
2. Read all of assigned material once
3. Read all of assigned material twice
4. Read all of assigned material five times

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>10</td>
</tr>
<tr>
<td>Y</td>
<td>7</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
</tr>
</tbody>
</table>

Note that this student is sure s/he can read all the material at least once, but is less confident she can read it twice (7 vs 10). S/He does not think s/he could read it five times (no time? boredom?).

Now answer the next item on your own.

LIFTING - ability to lift weights from a floor

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
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</tbody>
</table>

REMEMBER THE COURSE IN WHICH THIS QUESTIONNAIRE IS BEING ADMINISTERED IS THE ONE YOU SHOULD THINK OF WHEN ANSWERING THE FOLLOWING QUESTIONS
<table>
<thead>
<tr>
<th>Level of Confidence</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</tbody>
</table>

**CLASS CONCENTRATION**

The proportion of class periods for which you feel you are able to concentrate and stay fully focused on the materials being presented.

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

1. Concentrate for at least 50% of a class period
2. Concentrate for at least 70% of a class period
3. Concentrate for at least 90% of a class period
4. Concentrate for 100% of a class period

**MEMORIZATION**

The proportion of facts and concepts covered in the course that you feel you are able to memorize and recall on demand (e.g. exam time, in response to questions),

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

1. Memorize 60% of the facts and concepts
2. Memorize 70% of the facts and concepts
3. Memorize 80% of the facts and concepts
4. Memorize 90% of the facts and concepts
5. Memorize 100% of the facts and concepts
EXAM CONCENTRATION

The proportion of time during exams for which you feel you are able to focus exclusively on understanding and answering questions and avoid breaks in your concentration,

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stay focused on the exam for 50% of the time</td>
<td>______</td>
</tr>
<tr>
<td>2. Stay focused on the exam for 70% of the time</td>
<td>______</td>
</tr>
<tr>
<td>3. Stay focused on the exam for 90% of the time</td>
<td>______</td>
</tr>
<tr>
<td>4. Stay focused on the exam for 100% of the time</td>
<td>______</td>
</tr>
</tbody>
</table>

UNDERSTANDING

The proportion of facts, concepts and arguments covered in the course that you feel you understand as they are presented in lectures, tutorials or course materials (e.g. textbooks, assigned articles).

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand 50% of concepts as presented</td>
<td>______</td>
</tr>
<tr>
<td>2. Understand 70% of concepts as presented</td>
<td>______</td>
</tr>
<tr>
<td>3. Understand 90% of concepts as presented</td>
<td>______</td>
</tr>
<tr>
<td>4. Understand 100% of concepts as presented</td>
<td>______</td>
</tr>
</tbody>
</table>
EXPLAINING CONCEPTS

The proportion of facts, concepts and arguments covered in the course (i.e. in lectures, tutorials or course materials) that you feel you are able to explain clearly to others in your own words.

1. Explain 40% of the concepts, etc. in my own words
   CAN DO    CONFIDENCE
   ______    ______

2. Explain 60% of the concepts, etc. in my own words
   CAN DO    CONFIDENCE
   ______    ______

3. Explain 80% of the concepts, etc. in my own words
   CAN DO    CONFIDENCE
   ______    ______

4. Explain 100% of the concepts, etc. in my own words
   CAN DO    CONFIDENCE
   ______    ______

DISCRIMINATING BETWEEN CONCEPTS

The degree to which you feel you are able to discriminate between the more important and less important facts, concepts and arguments covered in the course (i.e. in lectures, tutorials and course materials).

1. Able to identify the most important concepts, points, etc. 50% of the time
   CAN DO    CONFIDENCE
   ______    ______

2. Able to identify the most important concepts, points, etc., 70% of the time
   CAN DO    CONFIDENCE
   ______    ______

3. Able to identify the most important concepts, points, etc., 90% of the time
   CAN DO    CONFIDENCE
   ______    ______

4. Able to identify the most important concepts, points, etc. 100% of the time
   CAN DO    CONFIDENCE
   ______    ______
NOTE-TAKING

The proportion of the time that you feel you are able to make understandable course notes which emphasize, clarify and relate key facts, concepts and arguments as they are presented in lectures, tutorials or course materials.

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make understandable notes for 50% of the material</td>
<td></td>
</tr>
<tr>
<td>2. Make understandable notes for 70% of the material</td>
<td></td>
</tr>
<tr>
<td>3. Make understandable notes for 90% of the material</td>
<td></td>
</tr>
<tr>
<td>4. Make understandable notes for 100% of the material</td>
<td></td>
</tr>
</tbody>
</table>

GRADES

The degree to which you feel you have the necessary skills to get various grades in this course, assuming that you try.

<table>
<thead>
<tr>
<th>CAN DO</th>
<th>CONFIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Get an A in this course</td>
<td></td>
</tr>
<tr>
<td>2. Get at least a high B in this course</td>
<td></td>
</tr>
<tr>
<td>3. Get at least a low B in this course</td>
<td></td>
</tr>
<tr>
<td>4. Get at least a C in this course</td>
<td></td>
</tr>
</tbody>
</table>
SUBSCALE DESCRIPTION
ITEMS SELECTED FOR INCLUSION IN THE REFINED ASE SCALE IN STUDIES 2 & 3 OF WOOD & LOCKE*

Subscale                          Items
1. Class concentration          2,3,4
2. Memorization                  1,2,3
3. Exam Concentration           ----
4. Understanding                2,3,4
5. Explaining concepts          2,3,4
6. Discriminating concepts      2,3,4
7. Note-taking                  2,3

Notes
1. The inclusion of these items in the refined scale was based on their common variance and predictive validity in Study 4.
2. The validity of these items will vary from course to course and comparisons between results for the whole scale may be appropriate.
3. For many of the subscales, Item No. 1 (i.e. the 50%) had little or no variance, i.e. close to all respondents answered "can do" and rated their confidence at 10. The exceptions were the Memorization and Note-Taking Subscales.

Appendix F

Focus Group Session Protocol

The following focus group protocol recommended by Krueger (2002) was utilized:

- Welcome
- Topic Overview
- Sign Consent Forms
- Focus Group Ground Rules
- Introductions
- Questions

1. I would like to hear about your experience in ACA 111 this semester. Let’s start with each person sharing what you found to be most beneficial about the course, or one thing you liked.

2. Could you please now share one thing you would change to make the course more meaningful?

3. I would like to hear you talk about your academic goals and if you think taking ACA 111 will influence reaching your goals. Has participating in ACA 111 changed how you feel about college? If so, how?

4. Part of my project is going to examine the changes in scores on the Academic Self-Efficacy Questionnaire (ASEQ) that was administered in ACA 111 classes this fall? How many of you took the ASEQ? How do you think participating in ACA 111 has changed how you feel about yourself and your ability to succeed in college?

5. Suppose you were an advisor at Catawba Valley Community College. What advice would you give students about taking ACA 111?

6. Summary Question- provide participants with a short summary of what was discussed in the session and ask if the summary is accurate.

7. Final Question- recap the purpose of the study and of the focus group session. Ask participants if there was anything I left out that should have been discussed.
Appendix G

An Examination of the Relationship Between Student Success Courses and Persistence, Credential Attainment, and Academic Self-Efficacy Among Community College Students

Principal Investigator: Mark Poarch  
Department: College of Education  
Email: mpoarch@cccti.edu  
Phone: 828-726-2214  
Faculty Advisor: Dr. Amy Trawick  
Email: trawickar@appstate.edu  
Phone: 828-262-2137

Consent to Participate in Research

I agree to participate in a focus group(s) for this research about student success courses. The focus group(s) will take place at Catawba Valley Community College in a single setting lasting no more than two hours. I understand that the focus group will include questions about my experiences and perceptions in taking a student success course (ACA 111).

I understand that there are no foreseeable risks associated with my participation. I also realize that this study may not provide direct benefits to me individually. However, my participation may provide insights that help develop the body of knowledge about the benefits of taking a student success course for community college students.

During the course of the focus group discussions, I will not mention any personal or private, identifiable information (such as names) of individuals who are not participating in the focus group. In addition, I agree that all conversations which take place in the focus group should not be discussed with anyone outside of the focus group and its participants.

I understand that the focus group(s) will be audio recorded and my responses may be published. I understand that the audio recordings of my comments will be stored in a locked file cabinet and may be maintained for a period of one year following the study prior to being destroyed.

By signing the authorization below, I give Mark Poarch ownership of the tapes, transcripts, and recordings from the focus group he conducts with me and understand that tapes and transcripts will be kept in his possession as indicated above. I understand that information or quotations from tapes and notes may be published. I understand I will not receive compensation for the participating in the focus group.

I understand that my participation is voluntary and I can end it at any time without consequence. I also understand that I do not have to answer any questions and can end the interview at any time with no consequences. I confirm I am at least 18 years of age.
If I have questions about this research project, I can contact Mark Poarch at mpoarch@cccti.edu or 828-726-2214 or Dr. Amy Trawick at trawickar@appstate.edu or 828-262-2137. Questions may also be addressed to the Appalachian Institutional Review Board Administrator at 828-262-2692, through email at irb@appstate.edu or at Appalachian State University, Office of Research Protections, IRB Administrator, Boone, NC 28608.

Appalachian State University's Institutional Review Board has determined this study to be exempt from IRB oversight.

If you have read this form, had the opportunity to ask questions about the research and received satisfactory answers, and want to participate, then sign the consent form and keep a copy for your records.

---

Participant’s Name (PRINT)  Signature  Date
## Appendix H

<table>
<thead>
<tr>
<th>Student 1*</th>
<th>Student 2*</th>
<th>Student 3*</th>
<th>Student 4</th>
<th>Student 5</th>
<th>Student 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THEME 1: Tips and Tricks</strong></td>
<td><strong>THEME 1: Tips and Tricks</strong></td>
<td><strong>THEME 1: Tips and Tricks</strong></td>
<td><strong>THEME 1: Tips and Tricks</strong></td>
<td><strong>THEME 1: Tips and Tricks</strong></td>
<td><strong>THEME 1: Tips and Tricks</strong></td>
</tr>
<tr>
<td>“I’ve just found that I figured out a lot of little tricks like, to just be on top of my homework and to really stay ahead of the game and just get things done on time and just time management… I’m thankful I took it in my first semester and I got the time management and the tips and tricks.” (S1.1)</td>
<td>“I’ve learned you know, like they said, tips and tricks too I guess that kinda help you cause without them I’d probably be a little bit behind and slacking off at the same time.” (S3.1)</td>
<td>“Maybe in like, transferring in the ACA class, they can give us some tips on maybe how to maintain a higher GPA or kind of community club things that you can do that’s geared toward your specific degree or what college you want to go to… There are probably tips for time management and studying and everything, but what about tips for succeeding in more real world things outside of you know personally studying and just like how you can reach out to like communities and clubs and the colleges that you want to go to. Help you fill out applications, if they don’t teach that, and help you get recommendations.” (S4.2)</td>
<td>“Maybe you can actually end up getting, or at least some free time, learning some of these tools.” (S5.13)</td>
<td>“But there’s certain tricks to like, how to study and all this stuff you can go through and learn how to do though, right, so there’s at least one thing you should be able to grab from it right?” (S6.17)</td>
<td>“If it’s gonna help me down the road, I might as well just take it now and learn whatever tricks, you know, that I can apply next semester and the following semesters after that.” (S6.36)</td>
</tr>
</tbody>
</table>

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### Academic Skills (Study Skills/Learning Skills/Test Taking Skills/Critical Thinking)

<table>
<thead>
<tr>
<th>Student 1*</th>
<th>Student 2*</th>
<th>Student 3*</th>
<th>Student 4</th>
<th>Student 5</th>
<th>Student 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I’ve just found that I figured out a lot of little”</td>
<td>“It has just changed my way of…”</td>
<td>“There are probably tips for time management”</td>
<td>I feel like critical thinking.</td>
<td>“But there’s certain tricks to like, how to”</td>
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</tr>
</tbody>
</table>
tricks like, to just be on top of my homework and to really stay ahead of the game and just get things done on time and just time management.” (S1.1)

“And studying for tests, I know how to do it better.” (S1.3)

“They taught you the tools that you need in order to study for the test” (S1.4)

and give me test taking skills and...it has really helped me improve my grades.” (S2.4)

habits of doing my study works.” (S3.1)

“It just more like enhanced...learning skills, I guess, in general.” (S3.9)

and studying and everything” (S4.2)

“Like how to study and stuff” (S4.8)

things of that nature, that are discussed in ACA are things that I’ve already had to learn myself” (S5.1)

study and all this stuff you can go through and learn how to do though, right?” (S6.17)

“The way you guys are talking how the class is basically telling me how to be an adult, you know, like, you know your time, learn how to study” (S6.20)

“I haven't been in school in like 6 years so just jumping back into it that could be beneficial like, ok, well, huh, well knowing how to take notes and highlight.” (S6.22)

Goal-Setting

“Umm... Its helped me with my goals cause my goals are to graduate from CVCC in two years and transfer to Johnson and Wales in Charlotte.” (S2.4)

“It just kinda helped me balancing and kinda helps to plan out what I really want to achieve and throwing away the things I don't need in my goals ... I guess, you know, you have specific goals but there are some goals that you shouldn’t really waste your time on ...I plan to graduate in two years and...
transfer also so it kinda helped me to see, I guess, just see a different way to achieve it faster” (S3.8)

<table>
<thead>
<tr>
<th>Grade Improvement</th>
<th>“It has really helped me improve my grades.” (S2.4)</th>
<th>“Maybe in like, transferring in the ACA class, they can give us some tips on maybe how to maintain a higher GPA.” (S4.2)</th>
</tr>
</thead>
</table>

<table>
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<tr>
<th>How to be an Adult/Real World</th>
<th>“There are probably tips for time management and studying and everything, but what about tips for succeeding in more real world things.” (S4.2)</th>
<th>“The way you guys are talking how the class is basically telling me how to be an adult, you know, like, you know you manage your time, learn how to study, do things an adult does, how an adult does stuff.” (S6.20)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Especially if there aren't any aspects of applicable skills in the real world such as transfer to a university, how to get into a certain university, filling out applications and things like that.” (S4.3)</td>
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<tr>
<td></td>
<td>“Or maybe be able to manage time based off real world application, jobs, bills, or things like that, or like managing important stuff…” (S4.10)</td>
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</tr>
</tbody>
</table>

| “Do College” | | “I don't even know what to expect you know down the road.” (S6.2) |
**THEME 2: Balance/Time Management**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I figured out a lot of little tricks like, to just <strong>be on top of my homework and to really stay ahead of the game and just get things done on time and just time management</strong>. That was my biggest thing, that was the biggest thing I learned in the whole class was <strong>time management</strong>... I'm thankful I took it in my first semester and I got the”</td>
<td>(S2.1)</td>
</tr>
<tr>
<td>“The <strong>time management</strong> helps a lot, especially working and having four classes, going to school full time, working full time, gets kinda hard to manage your time and have time to do homework and everything, and it has really helped me out a lot to do that.”</td>
<td>(S2.1)</td>
</tr>
<tr>
<td>“Whenever you go to school full time and you “It kinda helped me <strong>balance</strong> cause I go to school full time and work most of the evening and throughout the days so I <strong>learned to balance my time wisely and stay on top of all my classes at the same time</strong>. And like, taking that class, I've learned you know, like they said, tips and tricks too I guess that kinda help you cause without them I'd probably be a <strong>time management</strong> and studying” (S4.2)</td>
<td>(S4.10)</td>
</tr>
<tr>
<td>“There are probably tips for <strong>time management</strong> and studying” (S4.2)</td>
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<tr>
<td>“Or maybe be able to <strong>manage time</strong> based off real world application, jobs, bills, or things like that, or like managing important stuff…” (S4.10)</td>
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</tr>
<tr>
<td>“I can't really say if I, if I'll get anything from it or not. Most of these things I've already experienced, I've already <strong>had to do time management</strong>”</td>
<td>(S5.1)</td>
</tr>
<tr>
<td>“Since her and I haven’t taken it and we’re not first semester, it would be beneficial and smart to take it probably the next semester then right, cause then it'll teach you how to <strong>manage time</strong> and all this other stuff.” (S6.13)</td>
<td>(S6.13)</td>
</tr>
<tr>
<td>“Maybe you can actually end up getting, or at least some <strong>free time</strong>, learning some of these tools, so yeah, definitely.” (S5.13)</td>
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<tr>
<td><strong>“teaches you how to do college.”</strong> (S6.16)</td>
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<tr>
<td>“But what about people who aren't and don't have the experience. It could be beneficial for them I guess. Not having the leadership skills and they're you know coming into <strong>unknown territory</strong>, knowing how to do time management, umm, **whatever else you learn in that class that's beneficial for excelling in a college environment.”” (S6.23)</td>
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<td>“There are probably tips for <strong>time management</strong> and studying” (S4.2)</td>
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<td>“Maybe you can actually end up getting, or at least some <strong>free time</strong>, learning some of these tools, so yeah, definitely.” (S5.13)</td>
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time management and the tips and tricks. (S1.1)

"It really… it taught me that time management, it taught me that I don’t have to extend that five semesters to 6 or 7 because if I can manage it all and I can just stay on top it then I can do it" (S1.11)

work 40 to 50 hours a week and then you have all four of your classes on top of that plus projects and papers and stuff you have to write outside of class... it helps you manage that time so that you can actually do all that plus work the hours.” (S2.13)

“When I took this class, I actually started noticing that free time that you had.” (S2.18)

Yeah and I’ve noticed, I get out of school at 3, I have to be at work at 4:30, there’s that hour and half right there that there’s nothing going on, you can study, you can do whatever… Taking this class, I kind of noticed my free time more than I did whenever, before I took this class. (S2.20)

little bit behind and slacking off at the same time.” (S3.1)

“It just kinda helped me balancing” (S3.8)

“Yeah, that may cut down some study time or something like that…” (S5.14)

class before you even start your thing, you know, to teach you how to manage your time and mature. The way you guys are talking how the class is basically telling me how to be an adult, you know, like, you know you manage your time.” (S6.20)

“I haven't been in school in like 6 years so just jumping back into it that could be beneficial like, ok, well, huh, well knowing how to take notes and highlight and make sure you are managing your time properly.” (S6.22)

“But what about people who aren't and don’t have the experience. It could be beneficial for them I guess. Not having the leadership skills and they’re you know coming into unknown territory, knowing how to do time management, umm, whatever else you learn
in that class that’s beneficial for excelling in a college environment, you know.” (S6.23)

“No, there’s no free time. It’s work, school, study, sleep… that’s it. That’s the schedule… I’m gonna actually go register for some classes after this, and I might register for this class.” (S6.36)

### THEME 3: Confidence Booster

| “I’ve had awful anxiety in the past testing wise and since I’ve taken this class I just, I feel more relaxed in my other classes taking my tests and other kinds of things like that. And studying for tests, I know how to do it better” | “It, well, we talked about anxiety and stuff like that too and we talked about how to help ourselves not have that, like, whenever we’re taking tests and stuff like that. Cause I didn’t have really bad anxiety but I had some and it helped me overlook that whenever I’m in a classroom.” | “It was a confidence booster” |
|——|——|——|
| “College was always something that was really scary, I don’t know why, it just was. Umm… so I was terrified but going into the class, it showed me that my instructors are people, they’re humans, umm. So it took away that scare” | “There’s a lot of tests that you have to take throughout your classes, and it has just helped me get over the anxiety” | (S3.9) |
| (S1.3) | (S2.2) | (S2.4) |
factor for me, a lot, and it has changed myself as a human, it just kind of showed myself that I can do it. It showed me that school doesn’t have to get the best of me, that I can be in charge.” (S1.12)

“It just kind of was that confidence booster.” (S1.15)

“Just coming in, not knowing what to expect in college, going into a really relaxed classroom... it just, it was kind of just a confidence booster.” (S2.6)

**THEME 4: Take Early in the College Experience**

“I’m thankful I took it in my first semester, and I got the time management and the tips and tricks.” (S1.1)

“I think it’s a class that first semester people should take.” (S2.6)

“I had the choice to either take this course this semester or next semester and I chose to take it this semester because I thought it would actually help me and I am actually really glad that I did take it this semester.”

“Since her and I haven’t taken it and we’re not first semester, it would be beneficial and smart to take it probably the next semester then right, cause then it’ll teach you how to manage time and all this other stuff.” (S6.13)

“She [advisor] was like well you can take it whenever, like next semester or the next semester.” (S4.11)

“And I mean, also based on my other half of my friends who said it was a waste of time to them or a waste of money or something versus what people say, it’s so beneficial and then the neutrality of the advisor, you know, so of course I just put it off.” (S4.13)

“I can see how it has helped those who are in their first semester.” (S5.3)

“Yeah, well, what my advisor said the first semester I was here... she said, do you want to take ACA on top of the five classes I was already taking and I thought about it for a second and...” (S6.13)

“I wish they [advisors] would have recommended it, you know, to..."
cause it has helped me a lot in my four classes that I take.” (S2.12) and she said aww, **maybe just take it next semester.** And she kind of **disregarded it as that important.** So I went back to my advisor again to sign up for the classes for spring semester the following year and she said have you taken ACA yet and I said no and she said aww, alright, **you can probably take it just next semester, maybe just before you go,** and maybe that’s why I ended up with my mindset because these are accounts from two or three advisors who kind of labelled it as that one class that you gotta take for that credit to transfer, **you can take it anytime.**” (S5.9) **take it early on before I’ve taken the four classes that I’ve taken already.”** (S6.29) “They're [advisors] not putting a high priority on it.” (S6.30) “They're [advisors] not selling it.” (S6.31)

<table>
<thead>
<tr>
<th>THEME 5: Course Should be Required</th>
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<tbody>
<tr>
<td>“I would tell them, like what you guys said, you don’t understand why it’s required. I would just tell them, if you didn’t require” (S2.7)</td>
<td>“For me, I would say it’s required.” (S2.7)</td>
<td>“Something that the administrative office should be saying, like, ok well prereq you have to take this class before you”</td>
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</tbody>
</table>
the class and you had it as an option, who would take the class because they don't need it, it's just an extra class, I don't really wanna be here...” (S1.17)

“So I would just tell them it's **required** because it’s really gonna help you in the long run, even if it just helps you a little bit, it’s still gonna still help you.” (S1.18)

<table>
<thead>
<tr>
<th>Course Should not be Required</th>
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</thead>
<tbody>
<tr>
<td>“I've had friends who have taken it and a lot of them did say it was kinda like a <strong>required</strong> thing for their transfer degree and that it really <strong>wasted their time</strong> and things like that but there were <strong>other people that said it benefited them a lot</strong> but then there are other people who told me that it’s just something you have to do and it’s kinda stupid.” (S4.1)</td>
</tr>
<tr>
<td>“And especially if there aren't any aspects of applicable skills in the real world such as transfer to a university, how to get into a certain university, filling out applications...”</td>
</tr>
<tr>
<td>“I would question why it's <strong>required</strong> because I feel...my goals haven't changed. My goals have been the same since my junior year of high school. And even when I was in ENG 111 they were preparing me on how to write for, and how to prepare, and in all of basic core classes that I've taken, they've been giving me the same advice that I've been hearing from you guys in ACA, in time management, especially in...” (S6.20)</td>
</tr>
<tr>
<td>“I really think that the administration ought to say it is a prereq before you take other classes.” (S6.23)</td>
</tr>
</tbody>
</table>
and things like that, I don't feel like it should be required.” (S4.3) critical thinking, so for it to be required class is kinda silly to me because I feel like you can learn these things on your own and if you do find it helpful it is available, but I certainly don't think it should be required.” (S5.3)

*ACA 111 Participant*
Vita

Mark Jeffrey Poarch was born in Lenoir, North Carolina, on August 24, 1968 to Jim and Shirley Poarch. He grew up in Caldwell County and graduated from West Caldwell High School in 1986. He enrolled at Western Carolina University in the fall semester of 1986 and graduated cum laude in 1990 with a Bachelor of Science in Business Administration. Mr. Poarch later continued his education and earned a Master of Arts in Education from Western Carolina University in 2005 and completed an Educational Specialist in Higher Education from Appalachian State University in 2011. In 2012, he enrolled in the doctoral program at Appalachian State University, and in August 2015 he earned his Doctorate of Education in Educational Leadership.

Mr. Poarch began his career in higher education in 1990 as an admissions counselor at Brevard College in North Carolina. He joined the North Carolina Community College System in 1991 when he accepted the position of Testing Technician at Catawba Valley Community College in Hickory, North Carolina. He spent 14 years at Catawba Valley Community College in various positions of increasing responsibility culminating in the Director of Student Records and Testing Services. In 2006, he joined Caldwell Community College and Technical Institute as Associate Vice President of Student Services. A few months later, Mr. Poarch was promoted to Vice President of Student Services, a position held for five years. In 2012, he accepted his current position as Executive Vice President where he serves as Chief Academic Officer and provides oversight for all internal operations of the college. Mr. Poarch is married to Tracy Poarch and has three children, Dylan, Bailey, and Carly.