THE RELATIONSHIP OF RETENTION AND FIRST-YEAR EXPERIENCE PROGRAMS IN
SOUTHEASTERN PUBLIC COMMUNITY COLLEGES

by

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ABSTRACT

Retention is a significant problem for community colleges (Barefoot, 2004) and one solution for counteracting that problem, according to the literature, is to implement a first-year experience program. Very few studies have considered community colleges, and even fewer have taken multiple institutions into account when comparing rates of retention in relation to first-year experience programs. This study compared 80 SACSCOC-accredited public community colleges in terms of their retention for the 2011-2012 academic year, their Carnegie classification, their state, whether or not they are rural or urban, whether or not they are a commuter campus, and which components of a first-year experience (if any) they offer. The components considered were a comprehensive first-year experience program, a first-year seminar, learning communities, orientation, academic advising, health and wellness programs, and campus activities.

Surveys were sent to 266 community colleges and 80 were returned. Retention and Carnegie classification data were collected from the IPEDS Data Center. The data were then compared using SPSS Statistics Software Version 22. Significant findings of the study revealed that Florida, Kentucky, North Carolina, and Virginia had higher rates of retention when orientation and academic advising were considered. North Carolina and Virginia had higher rates of retention when campus activities was considered. Commuter colleges and Rural-serving Large institutions had higher rates of retention when first-year seminar, orientation, academic advising, and campus activities were considered. Commuter institutions were found to have the most significance in the overall net effects.
DEDICATION

This dissertation is dedicated to two important men in my life:

First, to my loving husband, Dr. Jeffrey Hunter Coats, my rock and my soulmate. Your support throughout this process has meant the world to me. Always my cheerleader and my advocate, you have been there through it all, and encouraged me to never give up, but to work toward my goals. I love you with all my heart and soul.

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Chapter One

Introduction

Community colleges began in order to offer higher education to a broader population. By providing open access, more students were able to enroll in college and have the opportunity to complete either a two-year degree and enter the workforce or to complete the first two years of college and transfer on to a four-year institution, according to Beach (2011). Community colleges embody several missions, including open access to higher education, workforce development, and developmental education (Townsend & Dougherty, 2006). The American Association of Community Colleges cites five missions of its institutions: to “serve all segments of society through an open-access admissions policy that offers equal and fair treatment to all students, a comprehensive educational program, [to] serve its community as a community-based institution of higher education, teaching, [and] lifelong learning” (American Association of Community Colleges, 2012). These missions are often in conflict and can be confusing to outside constituencies. Townsend and Dougherty (2006) state that the open access policy makes community colleges an option for many underrepresented groups including minorities, first-generation students, students needing remediation, those of lower socioeconomic groups, and students who can only attend part-time.

The varying missions and subpopulations of the community college make the definition of success a difficult one to define. Although completion, or graduation, is often the goal, success can be many things. For some students, success means completing two courses in order to gain a promotion at work. However, the community college cannot count this as a success due
to data collection methods. Cuseo (1997) argues that this makes community college attrition levels fairly high, especially between the first and second years of college.

Retention Rates in Community Colleges

Retention is particularly challenging for community colleges. Barefoot states that the “most significant dropout occurs at two-year, associate-degree-granting public colleges,” or community colleges (2004). In many community colleges, students are not persisting into their second year of college. Nationally, only 55.4% of all public community college students were retained from fall to fall in 2011 (“National Collegiate Retention and Persistence to Degree Rates,” 2011), compared with approximately 73% in four-year institutions (Barefoot, 2004). Rendon found that an estimated 67% of first semester community college students do not persist, and attrition is higher for minority groups and those coming from a low socioeconomic status (1995). Cohen, Brawer, and Kisker (2014) found that 60% of first-time, degree seeking students returned to their community college during the fall of 2009, compared to 80% of four-year college students. When they included non-degree seeking students, the retention rate fell to just above 50%; the rate for part-time students was only 41%.

Retention rates are especially low in community colleges located in the southeastern United States (“How does your community college stack up,” 2012). Wild and Ebbers (2002) argue that community colleges cannot afford to ignore the retention problem. Retention “is significant for measuring institutional effectiveness in the prevailing environment of accountability and budgetary constraints” and few community colleges can ignore the possible tuition revenue from retained students (Wild & Ebbers, 2002, p. 503). Individual and state systems of community colleges should focus on retention measures to ensure not only their own success, but more importantly, that of their students. Wild and Ebbers call for more research
specifically directed at community colleges, since the current available research is “sparse” (2002, p. 508).

The low retention rates at community colleges could be due to several factors, according to Ishler (2005). Due to the open access mission of the community college, more students with higher risk factors attend these institutions. Students from lower socioeconomic backgrounds, first-generation students, students who only attend part-time, students needing remediation, and minority students are all less likely to persist, yet more likely to attend a community college, at least initially (Hagedorn, 2010; Ishler, 2005). In fact, due to policy decisions in the late 1990s, more students have been encouraged to begin their college careers at community colleges, in part because of the lower tuition rates, according to Barefoot (2004). Due to these student subpopulations being more likely to attend community college and being less likely to persist, institutions need to focus on how to help these students, in addition to the general student population, succeed in college. Cohen, Brawer, and Kisker (2014) found that decisions to dropout are usually made early in a student’s college career; therefore, early intervention is crucial. Colleges have implemented several programs to increase retention rates; one such program that can be influential early in a student’s college career is the first-year experience. Although colleges have implemented first-year experience programs as a strategy to further student success, very few studies have been conducted to evaluate the success of first-year experience programs in community colleges, according to Mills (2010).

First-Year Experience Programs and Retention in Community Colleges

First-year experience programs are sets of institutional initiatives designed to promote student success. Upcraft and Gardner, two of the leading researchers of first-year experience programs, define student success as students making
progress toward fulfilling their educational and personal goals: (1) developing academic and intellectual competence; (2) establishing and maintaining interpersonal relationships; (3) developing an identity; (4) deciding on a career and life-style; (5) maintaining personal health and wellness; and (6) developing an integrated philosophy of life (Upcraft, Gardner, & Associates, 1989, p. 2).

A comprehensive first-year experience program encompasses all of these goals toward success, and can include first-year seminars, orientation programs, learning communities, academic advising, health and wellness programs, and campus activities (Upcraft, Gardner, & Associates, 1989).

First-year experience programs can benefit students as they transition to college and adjust to campus. A successful transition leads to academic and social success, and increased retention rates, according to Noble, Flynn, Lee, and Hilton (2007). Baldwin, Bensimon, Dowd, and Kleiman (2011) point out that first-year experience programs can be especially helpful for community college students, who usually live off campus, are not always involved in cocurricular activities, and are more likely to need remediation than are traditional four-year students. For historically underrepresented students, many of whom attend community college, a first-year experience program can increase their chances of success and retention (Derby, 2007; Stebleton & Schmidt, 2010).

While most studies involving the subject of retention and first-year experience programs have been conducted at four-year institutions, and most are single-site studies (Schnell & Doetkott, 2003), a few have considered the community college, but more are needed. These studies have looked at first-year experience programs in relation to retention, ethnicity, transfer success, grade point average (GPA), and involvement in the campus community. A handful of
dissertations and studies related to the first-year experience have been conducted at single community colleges, and the researchers of those studies have suggested further, and more extensive, research (Emmerson, 2009; Lang, 2006; Malik, 2011; Mosqueda, 2010; Pandolpho, 2009; Weisgerber, 2004). Schrader and Brown (2008) specifically call for “research connecting the work of [first-year experience] programs” and retention rates (p. 333).

Porter and Swing (2006) argue that findings from studies at four-year institutions cannot be generalized to two-year institutions and that there is an “unfortunate lack of cross-institutional data” on first-year experience programs (Porter & Swing, 2006, p. 105). In addition, many studies of first-year experience (including that of Porter and Swing) are case studies and lack a control group of students who did not participate in first-year experience programs. A study is needed to fill this gap, and this study will do that.

Cuseo (1997) provides a valid reason why community colleges should be included in the literature. He presents a case for studying first-year experience in two-year institutions by pointing out that over half of all freshman enroll at a community college before transferring on to a four-year institution, and that more students will do so in the future due to economic conditions and community colleges’ history of access to underrepresented groups (Cuseo, 1997). Community colleges, more so than four-year institutions, also enroll more non-traditional aged students, women, minorities, students with disabilities, those needing remediation, students requiring financial aid, and students who attend only part-time, according to Ishler; and these increasing populations require the most help in order to succeed and persist in college (2005). Nearly one-third of all first-year students leave college (Ishler 2005) and 16% do not return (Porter & Swing, 2006); additionally, student persistence between the first and second years is the lowest (Ishler & Upcraft, 2005). Lipka points out that “[o]nly 28% of first-time, full-time
students seeking an associate degree” will finish that degree within three years; after six years, fewer than 45% will have earned their degree (2010). Due to the high rate of attrition of first-year students at community colleges, Cuseo argues that a first-year experience program could be an effective way to increase retention rates (1997). This makes the study of first-year experience at two-year institutions crucial to the literature.

Porter and Swing (2006) conducted one of the few studies involving multiple campuses, looking at 45 four-year institutions. It is their opinion that, despite the numerous studies conducted on the first-year experience, there is still a shallow body of work on the subject because most studies have been limited to single-institution studies and to the overall benefit of the seminar course. According to their study, there is, to date, “virtually no published research that has attempted a cross-institutional research model to explore how first-year seminar course components affect any course goals, including persistence” (Porter & Swing, 2006, p. 92). While they are discussing four-year institutions, this statement is also true of two-year colleges.

Problem Statement

As stated above, retention is a problem for community colleges, especially those in the southeastern United States (Barefoot, 2004; “How does your community college stack up,” 2012). Although Pascarella (1997) points out that not enough attention has been paid to community colleges in the past, a prominent voice has recently emerged in support of community colleges. President Obama has charged community colleges with increasing graduation rates and has provided $12 million in funding for this goal (Lothian, 2009), and this has forced a closer look at retention strategies. In addition, there is an emphasis on state accountability and funding (McClenney & Waiwaiole, 2005) in relation to retention. In fact, according to Cohen, Brawer, and Kisker (2014), “[m]uch of the expansion in research [on
community colleges] has resulted from state legislatures demanding justification for their appropriations” (p. 361). In order to comply with the national graduation agenda and to learn how to help students persist in their education, colleges must take a hard look at why some students leave while others persist, and how they can design learning to engage and challenge those students to persist. To this end, many community colleges have instituted the student success course as part of a first-year experience program (McClenney & Waiwaiole, 2005). Such courses help students develop relationships with faculty, an important factor in retention (Pascarella & Terenzini, 2005, p. 417). Learning communities are also being utilized by community colleges, campus-wide strategies are being implemented, and environments are being created that foster student engagement.

Terenzini and Reason (2005) suggest that internal organizational factors in the institution could increase student persistence. Internal policies and practices, academic and cocurricular programs, faculty culture, the peer environment, and the individual student’s experience with these factors account for a large part of student success and persistence, according to Terenzini and Reason, and those factors could be controlled by the institution to better enable students to persist (2005). One example of internal organizational factors is a first-year experience program.

Within the existing literature, however, little research has been done on first-year experience programs within community colleges. Even fewer studies have dealt with a sample of multiple institutions. This study will seek to fill that gap in the literature of higher education by conducting a multiple-institution study of first-year experience programs and their components at public community colleges in the southeastern United States and how those components relate to retention.
Purpose of the Study

In order to fill the gap left by current literature on whether or not retention rates differ based on the presence of first-year experience programs in southeastern community colleges, this study will determine which components of a first-year experience program are present at public community colleges accredited by the Southern Association of Colleges and Schools, Commission on Colleges (SACSCOC), and the retention rates of those colleges. This information could be useful to faculty, staff, and administrators of community colleges, as well as policymakers, to determine whether or not to implement a first-year experience program, or individual aspects of such a program, in order to affect their rates of retention.

The purpose of this dissertation is to compare the retention rates of public community colleges in the southeastern United States that have instituted aspects of a first-year experience program with those public community colleges in the same region that have not instituted aspects of such a program. Given the high rate of attrition between first- and second-year students at community colleges (Cuseo, 1997), the results of this comparison will provide much needed information about the differences that exist between first- to second-year retention at colleges that offer aspects of first-year experience programs and those that do not offer aspects of first-year experience programs to policymakers, administrators, and faculty of community colleges.

This research fills a gap according to Barefoot (2004) and Terenzini and Reason (2005), who stated that much of the current retention research focuses on students and external environments, and that the classroom and internal organization of the college experience have been overlooked. In addition, Barefoot points out that few of the studies available meet the standards of experimental design, and even fewer have been published (2004). This study will
look at the organization of first-year experience programs, both in and out of the classroom, while meeting the standards of experimental design.

This quantitative, quasi-experimental study using secondary analysis will look at individual aspects of the first-year experience, including the first-year seminar course, learning communities, orientation programs, academic advising, health and wellness programs, and campus activities. Each of these aspects of first-year experience will be compared to retention rates at individual institutions and evaluated to determine whether or not there is a significant difference between first- to second-year retention rates of institutions that offer aspects of a first-year experience program and those institutions that do not offer aspects of such a program. This comparison will be based on answers to surveys sent out to public community colleges accredited by SACSCOC in the southeastern United States to determine which aspects of a first-year experience program are present at the institutions and the first- to second-year retention rates published by the National Center for Education Statistics.

Significance of the Study

This study will add to the existing literature by filling a gap left by other studies. Previous studies have found a positive relationship between first-year experience programs and student retention and success (Barefoot, 2000; Derby & Smith, 2004; Mills, 2010; Porter & Swing, 2006; Schnell & Doetkott, 2003; Sidle & McReynolds, 2009; Starke, Harth, & Sirianni, 2001; Stebleton & Schmidt, 2010; Upcraft, Gardner, & Associates, 1989). Within this literature, however, little research has been done on first-year experience within community colleges, and even less with a sample of multiple two-year institutions.

Information collected in this study could be useful to faculty, staff, and administrators of community colleges, as well as policymakers, to determine the differences in retention rates of
those colleges that offer aspects of a first-year experience program and the retention rates of those colleges that do not offer aspects of such a program. These differences, in turn, could be used to implement first-year experience programs for students at community colleges. Faculty members will benefit from this study because they will learn which aspects of a first-year experience program are most effective in the classroom. Staff and administrators will benefit from this study by learning what aspects of a first-year experience program have been shown to influence retention on community college campuses, both in and out of the classroom. This study will benefit policymakers by explaining which aspects of a first-year experience program are most effective at retaining students. The policymakers can then work with college administrators to implement first-year experience programs that will help students and increase retention.

Summary

Retention is a challenge for community colleges, especially between the first and second years (Barefoot, 2004). With more students beginning their college career at community colleges, this is an important problem for policymakers, administrators, and faculty. In order to improve retention rates, several colleges have implemented first-year experience programs. However, research on the differences in retention between institutions that offer first-year experience programs and those that do not is lacking, according to Barefoot (2004), Porter and Swing (2006), and Wild and Ebbers (2002). While most studies have focused on four-year institutions and few have considered multiple institutions, this study will fill that gap by looking at multiple community colleges and comparing the retention rates of each college to aspects of a first-year experience program to determine whether or not differences exist.
The next chapter will review the existing literature on first-year experience programs. Chapter three will outline the methods used to conduct this study. Chapters four and five will contain the results and evaluation of the study, along with recommendations for future research.
Chapter Two

Literature Review

A first-year experience program is a set of institutional initiatives designed to promote student success. One definition of student success is students making “progress toward fulfilling their educational and personal goals: (1) developing academic and intellectual competence; (2) establishing and maintaining interpersonal relationships; (3) developing an identity; (4) deciding on a career and life-style; (5) maintaining personal health and wellness; and (6) developing an integrated philosophy of life” (Upcraft, Gardner, & Associates, 1989, p. 2). A comprehensive first-year experience program encompasses all of these goals toward success, and can include first-year seminars, orientation programs, learning communities, academic advising, health and wellness programs, and campus activities (Upcraft, Gardner, & Associates, 1989). Institutions can help students succeed by offering one or more of these components of a first-year experience program, and “[u]nderstanding which aspects of a first-year [experience program]…have the greatest impact on persistence could inform course administrators and instructors about where to concentrate their efforts,” according to Porter and Swing (2006, p. 92). Understanding which aspects of a first-year experience program lead to greater retention is precisely what this study is intended to do.

The research reviewed in this chapter will explain why community colleges should be included in the literature of first-year experience and possible reasons these institutions have been excluded in the past. The problem of retention in community colleges will be addressed, as well as practices that have been implemented to remedy that problem. The majority of the
chapter will describe first-year experience programs, and aspects of those programs that have been studied in the past and that can be built upon with this study. Finally, the theoretical framework for this study will be explained.

Importance of Including Community Colleges in the First-Year Experience Literature

Stebleton and Schmidt (2010) address a gap in the existing first-year experience literature. They point out that the majority of research regarding first-year experience takes place on four-year campuses, and that more research is needed at two-year institutions as theories and applications of programs do not always translate from a four-year to a two-year model (Stebleton & Schmidt, 2010). This correlates with Pascarella’s argument that community colleges “have played a crucial role in American higher education. With a few notable exceptions in the literature, however, we know very little about them” (1997, p. 14). Pascarella points out that though community colleges are largely ignored, they are attended by growing populations of students and deserve more attention in higher education literature (1997). In fact, according to Cohen, Brawer, and Kisker (2014), almost half of all college students begin their college careers at a community college.

Stebleton and Schmidt’s (2010) concern over the application of programs is a valid one, as community college students differ from their four-year counterparts in several ways. Community college students make up nearly half of the undergraduate population in the United States, and, according to several research studies, they choose to attend community colleges for a variety of reasons (Barefoot, 2004; Ishler, 2005; “National Collegiate Retention and Persistence to Degree Rates,” 2011; Pascarella, 1997). Those reasons include cost, access to remedial courses, proximity to home or jobs, and availability of programs according to a study by Miller, Pope, and Steinmann (2005) conducted to determine the challenges faced by community college
students at six community colleges. The researchers discovered their findings through answers to a survey returned by 272 students in the study from both urban and rural community colleges (Miller, Pope, & Steinmann, 2005). Community college students face different challenges than those enrolled in four-year institutions. For example, there are larger proportions of minority and first generation students in community colleges, according to Fike and Fike (2008), as well as women, part-time students, and adult students (Miller, Pope, & Steinmann, 2005). Fike and Fike found that community college students are, on average, older, more likely to need remedial classes, and come from a lower socio-economic status than their four-year college and university counterparts. The researchers uncovered these results through a quantitative retrospective study of retention predictors such as age, ethnicity, parental education, financial aid, hours enrolled, and whether or not developmental education courses were taken for 9,200 first-year students in an urban public community college in Texas from 2001-2004 (Fike & Fike, 2008).

The community college student body, as a whole, is a diverse one with a variety of needs. Community college students are also more likely to be recent immigrants or students with disabilities, according to Stebleton & Schmidt (2010), who carried out a study at Inver Hills Community College in Minnesota. Inver Hills Community College supports a diverse population of students who participated in a successful first-year seminar and learning community initiative to increase retention and graduation rates (Stebleton & Schmidt, 2010). Miller, Pope, and Steinmann also found, in their study, that a growing number of traditional-aged (18-24) students enter community colleges and enroll with the goal of transferring to a four-year college or university (2005). With this knowledge, the importance Pascarella (1997) put on the addition of community colleges to the literature is understandable.
Community college students attend community colleges for a variety of reasons. Fike and Fike (2008) and O’Gara, Karp, and Hughes (2009) feel that due to the open-access policy, convenient locations, and lower tuition, community colleges present an attractive option for these students. Many of these students choose to continue their degree after a prolonged stop out, others are retraining and developing new skills for a new career or promotion, according to Stebleton and Schmidt (2010), and others are beginning their college career with intentions of transferring to a four-year college or university. Cohen, Brawer, and Kisker (2014) point out that community college students attend to “transfer to a senior institution, enter the job market, get a better job, or merely learn for one’s own purposes” (p. 70). McClenney and Waiwairole argue that with such a diverse student body, learning experiences and support services must be carefully designed and implemented in order to engage and challenge community college students to complete their educational goals (2005).

Derby and Smith (2004) agree with Pascarella (1997) that retention trends in community colleges have been neglected in the literature. One reason for this may be the difficulty in tracking community college students. Many students enter two-year colleges with varying goals and objectives, as opposed to four-year students whose major goal is to attain a bachelor’s degree. According to Cohen, Brawer, and Kisker (2014), those varying goals and objectives could account for a large portion of dropouts, stopouts, and students who attend multiple institutions, leading to low retention numbers for individual community colleges. This makes the study of retention at community colleges more difficult according to Derby and Smith (2004), who state that there are no studies that address an individual class, such as a freshman-year seminar, and its relationship to retention.
Mills (2010) also explains that most of the research done on first-year experience has been conducted on four-year campuses. In her research, she found that, at most, 10% of the current literature on first-year experience, and specifically on a seminar course, relates to community colleges. She recommends more research at system and state levels (Mills, 2010).

Explanations for the Lack of Community Colleges in the First-Year Experience Literature

The “existing literature is virtually silent with respect to specific influences on…students who attend community colleges” (Pascarella, Wolniak, & Pierson, 2003, p. 302). Cohen, Brawer, and Kisker (2014) maintain that community colleges have been ignored in the literature since the beginning. This study will fill a void in the literature related to influences on student success at community colleges. In addition, much of the literature regarding community colleges is dated, especially the literature regarding first-year experience and student retention and success in community colleges. Pascarella, Wolniak, and Pierson (2003) suggest that one reason for this omission in the literature may be that community colleges as a category are very diverse. Many studies, according to Pascarella, Wolniak, and Pierson (2003), tend to group community colleges together as a homogeneous group, and this may not be the most effective way to study these institutions. Stebleton and Schmidt point out that community colleges are complex, and continually changing (2010). One aspect of community colleges that can be considered homogenous, according to Baldwin, Bensimon, Dowd, and Kleiman (2011), is their mission: student success. Unfortunately, there is no one proven factor that ensures student success. Due to the diversity of institutions across the community college landscape, each college could implement a different program for success, and have that program succeed on an individual campus. Their findings suggest that these successes can be evident in the classroom if faculty
and staff all contribute to student success in order for it to be effective (Baldwin, Bensimon, Dowd, & Kleiman, 2011).

Another possible reason for the gap in community college literature may be that researchers are looking at the wrong journals or that the research simply is not getting published. According to Townsend, Donaldson, and Wilson (2005), articles featuring community colleges are extremely limited in five top-tier or student affairs higher education journals. Despite the fact that over 1,100 public community colleges educate over 5,000,000 students, comprising more than half of all first-time college students, only 8% of articles were found to mention community colleges, according to Townsend, Donaldson, and Wilson (2005).

Townsend, Donaldson, and Wilson (2005) looked at the *Journal of Higher Education*, *Research in Higher Education*, *The Review of Higher Education*, the *Journal of College Student Development*, and the *NASPA Journal* between 1990 and 2003. While this void may be due to the fact the community colleges have their own version of some journals, that articles may not have been submitted in great numbers to the five journals researched in their study, or to some other unknown reason, it is still evident that research concerning community colleges is difficult to find in top-tier higher education journals. Townsend, Donaldson, and Wilson found this to be a concern, as journals tend to shape a field by what they present, and community colleges are currently without a prominent voice (2005). Bray and Major (2011) concur that “the status of higher education journals could influence research in the field” (p. 479). However, only four community college journals appeared in their survey to determine the top journals in higher education. None appeared in the top, Tier One, category; only one appeared in Tier Two; and the other three appeared in Tier Three (Bray & Major, 2011). The findings in the Bray and Major (2011) study correlate with that of Townsend, Donaldson, and Wilson (2005) that community
college journals are not considered prestigious, and that studies about community colleges do not appear in top tier higher education journals.

Retention in Community Colleges

Community colleges, like the rest of higher education, struggle with retention. In fact, the “most significant dropout” occurs at community colleges, and this attrition is made even more significant, according to Stebleton and Schmidt, because community colleges enroll almost 12 million students (2010). However, only 41% of community college students persist into their second year of college and only 34% persist to graduation (Fike & Fike, 2008). Derby and Smith found that only a few studies exist regarding retention in community colleges (2004), and this study will help fill that void. In addition, Fike and Fike suggest that retention of existing students is less expensive than recruitment of new students, and is becoming necessary for financial stability and for the continuance of academic programs in community colleges (2008). They also argue that, as more public policies advocate for accountability, including retention rates leading to graduation or transfer, retention is ever more important to community colleges (Fike & Fike, 2008).

Several factors influence student retention. Derby and Smith (2004) include GPA, test scores, gender, race, major, on-campus residency, institutional size, and working off-campus as factors that influence persistence. An important institutional factor is faculty-student interaction. Derby and Smith’s research study continues by pointing out that many of these factors are based on traditional-aged students in a four-year institution; however, and there is a lack of research on student retention factors in community colleges (2004). Tinto (1993) briefly discusses community college retention and points out the importance of retention programs that emphasize learning communities, strengthening campus activities, and providing timely student services.
Retention rates often do not take into account factors that are specific to community colleges and their students. Baldwin, Bensimon, Dowd, and Kleiman (2011) found that retention rates reported to national databases exclude part-time students, students taking remedial courses, and those who transfer to take a job before completing their degree, even if that was the student’s intended goal. In fact, at Mountain Empire Community College in Virginia, only 32% of surveyed students listed a two-year degree or certificate as their ultimate educational goal (Sydow & Sandel, 1998). Derby and Smith argue that this lack of designation of student type and goals makes it difficult to track these students, and no research has yet been done to attempt this tracking effort (2004). Student dropout rates are often attributed to students being academically underprepared. However, Derby and Smith (2004) found that some students who attend community colleges are prepared, and transfer to a four-year institution before completing a degree, because the community college did not meet their complete academic needs by offering a bachelor’s degree. These students are not taken into account when retention rates are reported (Derby & Smith, 2004).

In addition to these factors, community colleges are often commuter institutions, without residence halls to help students interact more fully with the campus environment. According to Braxton, Hirschy, and McClendon in their review of multiple studies, commuter institutions “lack well-defined and –structured social communities for students to establish membership” (p. 35), and many commuter students have obligations outside of their college life that conflict with their persistence (2004). In their review, the researchers reached the conclusion that this lack of social integration on campus can lead to a greater rate of attrition among commuter students, and by association, community college students (Braxton, Hirschy, & McClendon, 2004).
Graduation rates for community colleges are often low. Based on their findings, O’Gara, Karp, and Hughes (2009) contend that student success, including graduation, at community colleges is low. In their study of community college students, only 45% earned a degree or transferred within six years. Eight percent of those students were still enrolled in college after six years, and 47% had dropped out. Although these numbers include students who entered community colleges with goals other than earning a degree or certificate, O’Gara, Karp, and Hughes demonstrated that the statistics clearly showed that many community college students do not persist to graduation, despite the efforts of the colleges (2009).

Student factors that predict success and retention are different for community college students than for students at four-year colleges and universities. Theories of student persistence and retention, including those of Astin, Bean and Eaton, and Tinto, are based on traditional-aged students in a residential university setting. While these theories may relate to some community college students, the diversity of the community college student body is very different from the population on which these theories are based. For this reason, Fike and Fike (2008) chose to look at variables that distinguish community college students from university students in their quantitative retrospective study of predictors of retention among 9,200 students in a public urban community college in Texas. The researchers looked at college databases to collect ethnicity, age, developmental education, hours enrolled, level of parental education, financial aid, and online course enrollment data for the students. They found the strongest indicator of retention to be enrollment in a developmental reading course. The factors that negatively affected retention were age and number of credit hours dropped during the first semester (Fike & Fike, 2008). Given that most research on retention is conducted at four-year institutions, and community colleges are so diverse, Stebleton and Schmidt call for community college practitioners to
assume leadership roles in retention efforts and to contribute to the literature (2010). This study will make such a contribution.

Research concerning student and institutional factors influencing first-year student success at the community college level is needed, and Pascarella, Wolniak, and Pierson (2003) agree. They studied 285 students from five community colleges located in five states, one from the west coast, one in a middle-Atlantic state, one in New England, one in the Midwest, and one in the Rocky Mountain area. Three of the colleges served large metropolitan areas and two were located near moderate sized cities. All five of the community colleges served low socioeconomic students, had approximately 40% minority students, and had an average student age of 23 years old (Pascarella, Wolniak, & Pierson, 2003).

Community colleges can utilize research to make student success more accessible and attainable for their students. Pascarella, Wolniak, and Pierson considered students’ background characteristics such as gender, race, and precollege educational plans (2003). These three characteristics showed significant predictions of end-of-first-year educational degree plans and plans to complete a bachelor’s degree (11 to 15% over other characteristics, such as work responsibilities, credit hours completed, or test scores). The researchers contend that institutions can be proactive in affecting their students’ educational degree plans, as academic motivation was found in this study to be of statistical significance in leading to higher educational degree plans. Tinto (1993) also found students’ academic lives to be pivotal in their decision to persist in community colleges, more so than their social lives. Braxton, Milem, and Sullivan (2000) also found this to be the case in their study, which found active learning in the classroom to be an indicator of success by helping students develop peer networks and social communities while at college. The researchers argue that the peer networks and social communities indirectly affect
student persistence. While community colleges cannot change gender, race, or precollege educational plans, they can find ways to motivate their students (Pascarella, Wolniak, & Pierson, 2003), and many have instituted retention practices to help students succeed in their goals. For example, Tinto (1993) suggests that faculty interaction is of great importance to community college students, particularly since they are not as involved in campus activities, but spend the majority of their time in the classroom. These findings are in direct correlation with Tinto’s Theory of Student Departure, which emphasizes students’ intentions and commitments to college, and the institutions’ responsibility to reach out to students to help them succeed (Tinto, 1993).

Retention Practices in Community Colleges

The goal of retention is to provide a positive college experience for students, and to help them reach their academic goals (Fike & Fike, 2008), and there are several ways to achieve this goal. Given the diverse student population at community colleges, retention efforts can become “arduous,” according to Stebleton and Schmidt (2010, p. 80). Despite the laborious nature of retention, Stebleton and Schmidt stress that retention efforts should be addressed by everyone at the institution in order to be effective, as low retention rates can be attributed to a lack of institutional support (2010). Tinto (1993) recommends that institutions “frontload their efforts on behalf of student retention” (p. 152) with programs that assist in easing student transition to college such as orientation, advising, first-year seminars, and comprehensive first-year experience programs. In keeping with that suggestion, McClenny and Waiwaiole (2005) discovered several strategies which could help community college students persist in their education. Individual community colleges across the country have implemented success strategies for students within first-year experience programs, including first-year seminars,
learning communities, and intentional interaction between students and their peers and students and faculty (McClenney & Waiwaiole, 2005) such as orientation programs and Supplemental Instruction. By offering these student services, O’Gara, Karp, and Hughes contend that colleges provide opportunities for students to become integrated into the campus environment, which leads to academic success and persistence (2009). Derby and Smith (2004) and Tinto (1997) found first-year seminars to be beneficial for student retention in their studies of student persistence at community colleges in the Midwest and in Seattle, respectively, through both quantitative and qualitative methods. By offering first-year seminars to help improve student success, Sidle and McReynolds (2009) argue that colleges send the message to current and potential students that they place a high priority on their student’s academic success and the students’ goals of persistence and graduation.

Researchers have conducted several studies at community colleges to find ways to help their students persist into the second year of college. Sydow and Sandel (1998) found that at Mountain Empire Community College (Virginia), work and family conflicts were the primary reasons reported by their students who did not persist, accounting for over 60% of the responses elicited from students who had withdrawn, either officially or unofficially, from classes during the fall 1995 semester, based on withdrawal forms and telephone inquiries. In response to these findings, a retention task force committee was formed that provides professional development to faculty on classroom strategies that increase retention, implements recommendations such as better signage for faculty advisor offices, and improves new student orientation procedures, according to Sydow & Sandel (1998).

Attrition, or student dropout, is a problem for many community college students. Non-traditional aged students, those who passed the GED test as opposed to high school graduation,
those who worked more hours off-campus, those who attended part-time, and a lack of financial aid were found to lead to attrition among community college students in a study by Nakajima, Dembo, & Mossler (2012). In a separate study by Miller, Pope, and Steinmann, the researchers discovered that students often do not interact with their student peers or with faculty and other college personnel (2005). Community colleges could introduce programs to assist with these barriers to retention.

Grade point average is one of the strongest indicators of student persistence. Nakajima, Dembo, and Mossler (2012) found GPA to be one of the strongest predictors of student persistence in a survey study of persistence behaviors among 427 southern California community college students enrolled in 50 randomly selected classes during the fall 2007 and spring 2008 semesters. Several factors were interrelated with GPA, including faculty interaction and self-efficacy (Nakajima, Dembo, & Mossler, 2012). Community colleges could use these findings to inform programming. Jamelske (2009) discovered similar findings in his study of 1,997 full-time students under 20 years of age in a medium-size Midwestern university. The sample was 40% male and 92.6% Caucasian; 15.7% were considered low income and 42.3% were first generation students. By reviewing data collected from the Office of the Registrar, he found that students who participated in first-year experience programs earned higher GPAs (from 0.101 to 0.122 points higher, on average) than students who chose not to participate in the program (Jamelske, 2009).

First-year experience programs are one of the most common practices implemented to improve retention; however, more information is needed about these programs, especially in community colleges. Although the literature shows that between 70 and 90% of higher education institutions have implemented some type of first-year experience (Porter & Swing, 2006; Starke,
Harth, & Sirianni, 2001), Barefoot (2000) questions whether or not the programs are improving. She points out that only a “small fraction” (p.13) of first-year experience programs have been objectively evaluated based on their outcomes. Peterkin (2012) reports that 87% of colleges and universities offer a first-year seminar, but the outcomes of these seminars are unclear and more attention should be given to these courses. When implemented in the right way, first-year seminars can help students develop critical thinking skills and provide an intervention that can help them succeed in college (Peterkin, 2012). In addition, a first-year experience program, especially first-year seminars, learning communities, and orientation programs, can bridge the gap between academic and student affairs, according to Barefoot (2000).

First-Year Experience Programs

Based on their research and the findings of their own study of a first-year experience program, Noble, Flynn, Lee, and Hilton (2007) are supportive of developing more first-year experience programs at colleges and universities, and see a need for more research on the topic. This study will contribute to that research. The researchers found, through their research prior to conducting a study of first-year experience, several studies of first-year experience programs that showed a positive effect on academic success, retention, and graduation rates, but also found studies that showed little or no effect on these variables (2007). They attributed the differences in the study results to methodological and procedural differences of variables, individual program content, and the diverse colleges studied. These researchers looked at studies conducted primarily at four-year institutions, as this type of institution is most prevalent in the first-year experience literature.

Noble, Flynn, Lee, and Hilton (2007) studied the ESSENCE first-year experience program at the University of South Alabama from 1998-2001. The researchers looked at 2,915
students during that time and collected data from the institution to examine the students’ first year GPA, four-year graduation rate, and five-year graduation rate. The students who participated in the ESSENCE program earned GPAs of 0.15 points higher than non-participants (Noble, Flynn, Lee & Hilton, 2007). These results support the findings of Nakajima, Dembo, and Mossler (2012) and Jamelske (2009), cited above, who also found GPA to be the strongest indicator of retention.

Participation in the ESSENCE program served to speed up graduation, but did not directly increase the likelihood of graduation overall, according to Noble, Flynn, Lee, and Hilton (2007). However, the researchers found that students who lived on-campus had higher rates of graduation than off-campus students. Those students living on campus were more likely to participate in the ESSENCE program. The most important factor for graduation was GPA, not participation in the ESSENCE program, but since participation in the ESSENCE program led to higher GPAs, the researchers suggest that graduation could be considered an indirect positive effect of the first-year experience program (Noble, Flynn, Lee, & Hilton, 2007).

Elkins, Braxton, and James (2000) found aspects of a first-year experience program to be effective for student persistence in their study of a public, moderately-selective, four-year institution. They cite previous research that relates to their own in finding that orientation programs, communication with parents, early interventions and exposure to campus, campus activities, and academic advising are all critical to student success and persistence.

Schrader and Brown (2008) used the “Knowledge, Attitude, and Behaviors” survey to determine the effectiveness of a first-year experience program at a four-year university. The researchers examined a first-year experience program in a large Northeastern university consisting of a one-credit hour first-year seminar course, speakers, out-of-class seminars, and
online participation (2008). They studied changes in students’ knowledge, attitude, and behaviors as self-reported by the students using the “Knowledge, Attitude, and Behaviors” instrument with a Likert scale previously designed by Schrader and Lawless in 2004. The survey was taken in both pen and pencil format and online, and utilized a quasi-experimental, nonequivalent comparison group design. This instrument was used by Schrader and Brown to better understand student needs, which then led to an evaluation of the effectiveness of the first-year experience program (2008).

An extended orientation can be beneficial to familiarize students with campus and begin creating a sense of belonging to the campus community. In their examination of the first-year experience program, Schrader and Brown surveyed 904 students, 670 of whom participated in the first-year experience program and 234 of whom did not participate. The program began with a three-day orientation session to familiarize students with campus, socialize them with their peers, meet with their advisors, schedule classes, and take placement tests. Schrader and Brown discovered that a majority of these students go on to enroll in a first-year seminar course during their first year (65% in 2002, expanding to 88% in 2006). This structure allows the first-year experience program to cover a set of academic skills and impart a sense of community among incoming students (Schrader & Brown, 2008).

Schrader and Brown (2008) found that the pre-test scores were similar among both participants and non-participants in the first-year experience program, and that there was a significant positive change in the first-year experience participants in the post-test response to the “Knowledge, Attitude, and Behaviors” survey. They found no difference in gender. Although gains found in the first-year experience group could be contributed to the objectives of the program, including increased awareness of resources on campus, academic skills, and the
establishment of a social peer group, Schrader and Brown are hesitant to conclude this due to the nonrandom selection of students. In this study, students chose to participate in the first-year experience program. Schrader and Brown call for more studies of this kind, especially those relating first-year experience to retention and graduation rates of participants (2008).

First-Year Experience in Community Colleges

Although retention is often the goal of a first-year experience program, a related goal is to help students succeed in college. Success can be defined in a variety of ways, but common measures of success such as retention and graduation are difficult to measure at community colleges, according to Baldwin, Bensimon, Dowd, and Kleiman (2011), because retention and graduation patterns are often defined in terms of four-year institutions. In addition, the literature on two-year colleges makes up barely 10% of the scholarly higher education literature, and only a fraction of that relates to success courses, according to Mills (2010). First-year experience programs can assist students in their transition to college and increase their socialization and integration to campus, and Noble, Flynn, Lee, and Hilton found that this contributes to academic and social success, thereby increasing retention rates (2007). According to Baldwin, Bensimon, Dowd, and Kleiman (2011), first-year experience programs can be greatly beneficial for community college students, who do not usually live on campus, are not always involved in cocurricular activities, and are more likely than the general college student population to need remediation.

Involvement for community college students is important, as students who do not become involved academically and socially risk leaving college early, according to Stebleton and Schmidt (2010). Many community college students have commitments outside of class, such as jobs and families, and colleges should take this into account when offering events and
programming connected to a first-year experience program. Stebleton and Schmidt encourage community colleges to engage students through intentional strategies such as learning communities, first-year seminars, service learning, academic advising, and educational experiences both in and out of the classroom (2010). These strategies are in line with Gardner’s (1989) aspects of a first-year experience program: a first-year seminar, learning communities, orientation programs, academic advising, health and wellness programs, and campus activities. Braxton, Hirschy, and McClendon agree with Gardner that a comprehensive program is more than the sum of its parts. They recommend as part of a comprehensive retention program that “[m]any small policy levers rather than one single policy lever should be developed” (2004, p. 67). This describes the individual components of a first-year experience program as they make up a single comprehensive program.

First-year experience programs “vary widely across institutions ranging from highly organized learning communities to basic courses introducing students to college life” and the outcomes of these programs vary along with their organization (Jamelske, 2009, p. 374). Due to the specificity of such programs to individual institutions, the research on first-year experience programs has resulted in mixed outcomes. Jamelske studied a medium-sized Midwestern university in 1997 that implemented a first-year experience program designed to increase curricular and cocurricular components in existing courses in order to increase student involvement on campus. He looked at 1,997 full-time students under age 20 to determine the degree to which the first-year experience program affected retention and GPA after one year. He found little evidence of the success of the first-year experience program on retention and GPA, but realizes the limitation of the structure of the program. Existing courses were used as first-year experience courses, and some faculty members reported making changes to their curriculum
to accommodate the program, while others did not. In addition, those faculty members who were supportive of the first-year experience program reported making similar changes to their non-first-year experience courses (Jamelske, 2008).

First-Year Seminars
Positives. Due to their correlation to student success, first-year seminars are often the cornerstone of first-year experience programs. These courses have been found to contribute to the completion of more credit hours, higher cumulative GPAs, and increased persistence by students who participated in first-year seminars when compared to students who did not take such a course, according to Sidle and McReynolds (2009), who studied a group of 3,084 first-year students who chose to enroll in a first-year seminar and compared them with similarly matched students who chose not to enroll in the course. These results hold true even when the participants are less academically qualified, based on high school rank and standardized test scores, than non-participants at a medium-sized regional university in the Midwest (Sidle & McReynolds, 2009).

There is a lack of multi-institutional studies about the first-year seminar despite the fact that it has been shown to have a positive relationship to student success. Keup and Barefoot (2005) found that students’ feelings of personal success in a variety of factors were positively impacted by a first-year seminar in their study of 3,680 students from 50 four-year institutions nationwide. These results were uncovered through a survey of first-year students who completed the 2000 Cooperative Institutional Research Program (CIRP) Freshman Survey and then analyzed through descriptive and regression analyses. This was only the second multi-institutional study performed, as Keup and Barefoot state that the previous “research relies, almost exclusively, on case studies and institution-specific quantitative research. To date, only
one multi-institutional analysis of the impact of first-year seminar characteristics on…outcomes has been undertaken” and their study builds on that previous work (Keup & Barefoot, 2005, p. 15).

First-year seminars contribute to many areas considered vital to student success in college. They are a way to teach students success skills, such as time management and study skills that help enhance their chances for success in college; orient new students to college; provide information about the campus and its resources; and help in academic and career planning, according to Cohen, Brawer, and Kisker (2014) and O’Gara, Karp, and Hughes (2009). O’Gara, Karp, and Hughes found that first-year seminars also provide interaction between students and faculty, another indicator of retention, in their “qualitative [interview] study of student persistence in [two urban] community colleges [in the northeast during the spring and fall semesters of 2006]” (O’Gara, Karp, & Hughes, 2009, p. 198). The results found by Keup and Barefoot (2005) and O’Gara, Karp, and Hughes (2009) are consistent with those found by Hendel (2007). Hendel found, through logistic regression analysis, that the 723 students who took a first-year seminar at an urban, research extensive, public land grant university were more satisfied with academic advising and had a greater sense of community than did the 723 students who did not take a first-year seminar (2007).

Despite the popularity of first-year seminars, Derby (2007) and Derby and Smith (2004) found no studies in higher education literature linking specific classes to institutional attrition, and only two studies that address classroom attrition (Derby & Smith, 2004, p. 766), and so conducted their own studies at community colleges in the Midwest. The two separate studies at community colleges in the Midwest found a positive correlation between participation in a first-year seminar class and degree completion for two of the three cohorts studied. Derby and
Smith’s study consisted of 7,466 students from fall semester 1999 through spring semester 2002. The student population had an average age of 24, were approximately equal numbers in gender, and varied in ethnicity, with the majority (85%) being Caucasian (2004). Derby’s study consisted of 3,538 students from fall semester 1998 through spring semester 2002. The median age was 23, with 58% women and 42% men, and the majority (3,205 students) being Caucasian (2007). Students in both studies were studied over a four-year time period to determine their degree completion as it related to enrollment in a first-year seminar course (Derby, 2007; Derby & Smith, 2004).

First-year seminars are linked to increased persistence and graduation rates. Students who took the course in the Derby (2007) and Derby and Smith (2004) studies were less likely to dropout and were more likely to return after stopping out. Students who took the course also persisted at a greater rate than students who did not take the course. In fact, students who enrolled in the course were 72 times more likely to complete their degree than those students who did not enroll (Derby, 2007). Derby and Smith (2004) found that associations do exist between retention and a first-year seminar course, particularly in regards to completing an associate’s degree within two years, and especially with Caucasian students. The differing results between ethnic groups is in contrast to earlier studies conducted by Derby, and may be due to the low numbers of ethnic minorities included in the study. Derby and Smith also found that enrollment in a first-year seminar could help prevent students from dropping out, and could help them persist beyond the two-year time frame in order to complete their degree (2004). In this study, Derby and Smith (2004) looked at students who intended to transfer and were not identified as academically underprepared.
The campus resources explored in first-year seminar courses could be particularly beneficial to underrepresented students, such as minorities and first-generation students, who often find the campus environment to be a barrier to higher education (Derby, 2007). Campus resources often emphasized in a first-year seminar course are academic advising, health and wellness opportunities, and campus activities (Gardner, 1989). As minority students make up a large proportion of community college students, this is an important factor to consider. Derby and Smith contend that these courses are important for community colleges, and that they can increase students’ social and academic integration to campus (Derby, 2007; Derby & Smith, 2004). Stebleton and Schmidt suggest that such courses may be especially important for first generation students and underrepresented students who may benefit more but are less likely than traditional students to take advantage of educational opportunities (2010).

Grades earned by students in first-year seminar courses have been correlated with their overall college GPA, persistence, and graduation. Zimmerman (2000) conducted a study that produced similar results with a slightly different population of community college students than that of Derby and Smith. He found that students who did well academically in a first-year seminar course at a two-year technical college associated with The Ohio State University were more likely to have higher academic achievement overall, persist, and graduate. The students at this campus were primarily underprepared for college or classified as at-risk; they were traditional aged, first-time, full-time, degree-seeking students who lived on or near campus. The course was designed to meet the needs of students earning their Associate’s degree, and was a required one-credit course that met for the first half of the semester. Zimmerman’s study continues by explaining that the sections were separated into traditional and non-traditional student populations, and the study captured 12% of the total population of new students at the
institution. The grades earned by students in these courses were found to be correlated with students’ GPA earned during their college career. The students’ course grades were also positively correlated to persistence and graduation, and were a better indicator than high school rank or ACT. Course grades were not as effective an indicator as GPA, but as the course grades correlated with GPA, they could serve as an early warning for students who did not succeed in the course (Zimmerman, 2000), much like the study of Noble, Flynn, Lee, and Hilton at the University of South Alabama (2007). As with the Derby (2007), Derby and Smith (2004), and Noble, Flynn, Lee, and Hilton (2007) studies, this is a single site study, and Zimmerman stresses the need for additional studies from a variety of sources (2000).

Davis (1992) found first-year seminars to be beneficial for both academically at-risk students and students who are not considered to be at-risk at a four-year institution, thereby coinciding with the results of both the Derby (2007) and Derby and Smith (2004) studies and the Zimmerman (2000) study. In his longitudinal retention study of 588 commuter students at Kennesaw State College (Georgia), Davis compared 228 regularly admitted students with a mean SAT score of 944 to 360 developmental studies students with a mean SAT score of 713. Within each group, half of the students enrolled in a first-year seminar and half did not. The course was designed to familiarize students with campus services, such as advising, and to teach academic skills in order to enhance student success. Students were also encouraged to participate in cocurricular events and campus activities. Cohorts were randomly chosen from entering first-year students in the fall semesters of 1984, 1985, and 1986 that had declared majors and had completed at least ten credit hours during their first quarter in college. Due to their at-risk status, Davis explains, some of the developmental students in the study had not declared majors or completed the requisite ten credit hours. A large percentage of students were of non-traditional
age (58% in the fall of 1988), and approximately 60% of the sample population was female. Although this study was conducted at a four-year institution, the college is a commuter college, and the results could be useful for community colleges whose students share this characteristic (Davis, 1992).

The first-year seminar course in Davis’ study was beneficial for both academically prepared and academically underprepared students, and the gains shown for these students outweighed those of students not enrolled in a first-year seminar course (1992). In regards to retention, mean quarter hours completed, and quarterly GPAs earned, there was little difference between the regularly admitted students who enrolled in a first-year seminar and those who did not in Davis’ study. However, the cumulative GPAs of the first-year seminar students were consistently higher than the non-first-year seminar students, concurring with the studies mentioned above conducted by Jamelske (2009); Nakajima, Dembo, and Mossler (2012); Noble, Flynn, Lee and Hilton (2007); Sidle and McReynolds (2009); and Zimmerman (2000). In addition, mean SAT scores increased among the first-year seminar group from 930 to 956, while the non-first-year seminar students’ SAT scores actually declined slightly, from 915 to 910. This suggests that the first-year seminar course enhanced the retention of students with higher SAT scores, which contradicts the belief that such courses only benefit the academically at-risk. In fact, Davis found an almost 20% difference in retention between the first-year seminar students with high SAT scores, and those students with similar scores who did not enroll in the first-year seminar. Among the lower SAT scores, there was no significant difference in retention rates (Davis, 1992).

Retention was found to be positively correlated with the first-year seminar in Davis’ study (1992). Among the developmental studies, or at-risk, students in Davis’ study, 18% of
those not enrolled in the first-year seminar did not persist through their first quarter; only 2% of those enrolled in the first-year seminar did not persist. Retention rates for the first-year seminar students were significantly higher throughout the study, and the retention rates for at-risk students who enrolled in the first-year seminar were greater than that of regularly admitted students with lower SAT scores. The cumulative GPAs were also higher (2.10 +/- 0.5 as compared to 1.89 +/- 0.7), and the mean SAT scores for the first-year seminar students also increased by 25 points over that of the non-first-year seminar students. There was no significant difference found in completed quarter hours between those at-risk students who took the first-year seminar and those who did not (Davis, 1992).

Sidle and McReynolds (2009) found similar positive results to Davis’ (1992) study in their study of the relationship between a first-year seminar course and student retention and success in a public, four-year Midwestern university during a four-year longitudinal study. The researchers compared a control group of 431 students who chose not to enroll in the elective course with a group of 431 students who did enroll in the first-year seminar; the students comprised 28% of the first-year student population. The students were hand-selected to match according to ACT score, high school GPA and rank, originating county, university-determined course placement, ethnicity, and gender by Sidle and McReynolds (2009).

The first-year seminar students in Sidle and McReynolds (2009) study earned higher GPAs, persisted at a higher rate, and had a greater sense of belonging on campus than did non first-year seminar students. The students in the Sidle and McReynolds study who chose to participate in the first-year seminar persisted into their sophomore year of college at a rate of 63%, compared to 56% in the control group. In addition, the participants completed more of their first academic year than did nonparticipants. First-year seminar students earned higher
cumulative GPAs than students who did not enroll in the course (2.17 as compared to 1.99), and were more likely to be in good academic standing. Those in the control group were more likely to be at risk of academic probation and suspension. In this research report, students who enrolled in the course completed more credit hours in relation to hours attempted and were less likely to risk losing financial aid as a result. The course did not have a significant effect on the percentage of general education courses completed by students. The students who participated in the course also reported an increased understanding of the purposes of a university education, feeling more comfortable and involved on campus, and an enhanced belief that they were capable of success (Sidle & McReynolds, 2009).

Sidle and McReynolds (2009) attribute the students’ success in the first-year seminar to several factors. Participation in the first-year seminar was the common variable, but there were others. Students in this university elected to enroll in the course, possibly demonstrating a higher rate of motivation than those who chose not to enroll. The institution also contributed to the students’ success by offering the course and structuring it in such a way that is student-centered and taught by specially-recruited faculty members and administrator teams that had a reputation for their effectiveness in working with first-year students. This team teaching approach also increases student-to-faculty interaction and ratios (Sidle & McReynolds, 2009).

Student motivation may also have been a contributing factor in the success of a first-year seminar in a small private business college, studied by Odell (1996). In her study, students were both assigned and volunteered to take a pilot first-year seminar course for two-hour weekly blocks during the first eight weeks of their first semester. The course was not offered for credit, and was taught by faculty, adjunct faculty, and staff members. Of the 137 students assigned to the course and the 96 students that volunteered to take it, 144 students completed the course.
Thirty-nine of the volunteers dropped out of the course (34.8%) and 50 of the assigned students dropped out (41.7%). Some left due to scheduling conflicts with athletics or cocurricular activities, especially those in afternoon sections of the course (Odell, 1996).

The goals of the first-year seminar in Odell’s study were found to be successful (1996). The purposes of the first-year seminar course were to improve academic skills including study, time management, and test taking skills; develop living skills such as health and wellness management and financial management, healthy living choices, and goal setting; and promote institutional knowledge of campus resources including the library and computer labs, advising services, and career services. Indirect goals of the seminar were to foster self-confidence in the students and give them a sense of community and belonging on campus (Odell, 1996). Students who completed the course earned higher GPAs than students who did not complete the course, results that concur with previously mentioned studies. The completers’ GPAs averaged 2.68 in their first semester to 2.69 in their second semester, compared to non-completers’ average of 2.53 to 2.56 during their first two semesters. First-year seminar completers were much more likely than non-completers to be in good academic standing at the college (Odell, 1996), similar to the students in Sidle and McReynolds’ study (2009). In every aspect of Odell’s study, the course proved more beneficial for males than for females, and for volunteer students more than those assigned to the course (1996).

One of the most significant findings of Odell’s study was that students considered “high-risk” who completed the first-year seminar dropped or failed fewer courses than did non-completers considered “high-risk” (1996). Only 23.5% dropped or failed one or more courses as compared to 60.4% of non-completers, and 76.5% of completers did not drop or fail any of their courses, as compared to 39.6% of non-completers. Since students considered “high-risk” often
drop or fail more courses than the general student population, according to Odell, these numbers are encouraging for the continuation of the first-year seminar at this college (1996).

First-year seminars are considered best practices at many colleges, and have therefore been implemented to help increase student success. Zane State College (Ohio), La Guardia Community College (New York), and San Juan College (New Mexico) all implemented first-year seminars to increase student-faculty interaction, help students through basic skills course sequences, and provide an introduction to college. Through focus groups conducted with students on these campuses, and their responses on the Community College Survey of Student Engagement (CCSSE), the first-year seminars at these colleges were identified as best practices, showing increased student engagement and academic success (McClenny & Waiwaiole, 2005).

O’Gara, Karp, and Hughes (2009) conducted a qualitative semi-structured interview study of persistence among community college students to determine how institutional support services, such as the first-year seminar, contribute to or hinder progress toward a degree. The researchers spoke with 44 students at two urban community colleges during their second semester (spring 2006) and then again six months later, regardless of whether or not they were still enrolled in college. Of the original 44 students, they were able to speak with 36 again, and 30 of those students were still enrolled. Several administrators at both colleges were also interviewed in order to find out what types of services were offered at each institution (O’Gara, Karp, & Hughes, 2009).

The students at both colleges in the O’Gara, Karp, and Hughes study found the first-year seminar to be beneficial. They learned about the college, utilized new study skills, and developed relationships with both their peers and their faculty members. The course served as a “one-stop shop” for many students, a place where they could engage in discussions about various resources
available on campus, and they reported learning more about services offered on campus, such as tutoring and advising, from the course than from other sources around campus. More importantly, students reported actually using these services (O’Gara, Karp, & Hughes, 2009).

The students in the O’Gara, Karp, and Hughes (2009) study learned important information about college and ways to be successful as a student. According to O’Gara, Karp, and Hughes (2009), the first-year seminar gave the students the opportunity to read the student handbook, something they would not otherwise have had time to do, and the course was also helpful for advising students about course selection and registration. The students also reported, in interviews during this study, learning study skills and time management skills, important tools for students who work outside of class, as do 57% of community college students. The course also served as a way to get involved in campus activities. Many students developed peer relationships during the semester, and those relationships and the involvement stemming from them persisted beyond the course and into subsequent semesters, serving as a way for students to integrate into college life, according to O’Gara, Karp, and Hughes (2009).

Schnell and Doetkott (2003) also found that students who participated in a first-year seminar were more likely to persist than students who did not participate. The researchers looked at retention rates of 927 students in a medium-sized Midwestern public university over the course of four years in a single site longitudinal study. Students were paired based on ACT score, high school rank and size of graduating class, and academic major. Schnell and Doetkott discovered that the students who enrolled in the first-year seminar persisted at higher rates than those who did not enroll in the seminar. In the first year of the study, 96% of the seminar students were retained, compared to 91% of the non-seminar students. In the second year, 75% of the seminar students were retained, compared to 63% of non-seminar students. In the third
year, 59% as compared to 51% were retained; and in the fourth year, 51% of seminar students were retained as compared to 44% of non-seminar students (Schnell & Doetkott, 2003).

In addition to the direct positive outcomes above, indirect outcomes such as student-to-student and student-to-faculty interaction can occur with first-year seminars. First-year seminars can increase student-to-student interaction and increase the likelihood of student success. Student-to-student interaction can be a significant challenge to community college students, according to Miller, Pope, and Steinmann, due to the fact that many live at home and often do not participate in cocurricular activities (2005). Community college students primarily study at home alone, without the benefit of a peer network, inhibiting their chances to succeed (Miller, Pope, & Steinmann, 2005). O’Gara, Karp, and Hughes (2009) found, in their study of students at two urban northeastern community colleges, that first-year seminars helped students connect to their peers and form relationships, especially when the focus of the seminar was participation. These relationships can integrate students into campus, thereby increasing their chances of success and retention (O’Gara, Karp, & Hughes, 2009).

Students’ integration to campus often begins at orientation, and for this reason, Braxton, Milem, and Sullivan (2000) recommend that first-year seminars should begin with orientation. The seminars should have smaller enrollments than traditional classes and should bridge the gap between the curricular and the cocurricular at an institution. First-year seminars can be an opportunity for faculty and student affairs staff to work together to make the first year of college a seamless transition for students, according to Braxton, Milem, and Sullivan (2000).

Student-to-faculty interaction can be critical to both the academic and social integration of new students, according to Stebleton and Schmidt (2010). Mills (2010) found this to be true for student-to-faculty interaction with a first-year seminar. Students who participated in a first-
year seminar demonstrated more interaction with faculty than students who did not participate in the seminar course. These community college students, many of whom qualify as at-risk students, can benefit from faculty interaction, and a first-year seminar improves access to faculty members and the opportunity for more interaction, according to Mills (2010). In fact, student-faculty interaction “has been found to have a stronger relationship to student satisfaction with the college experience than any other variable” according to Sydow and Sandel (1998, p.639-640).

Faculty members at Mountain Empire Community College (Virginia) used encouragement and support in their classroom techniques with students, provided out-of-class assistance, made their courses relevant to the lives of their students, provided ample feedback, made the classroom student-centered, and made accommodations for students when necessary as part of their retention measures for student success. In addition, a “buddy system” was implemented that encouraged more interaction between students and faculty and staff (Sydow & Sandel, 1998, p. 642).

Student-to-faculty interaction has been found to be important in several studies. Sidle and McReynolds (2009) and Tinto (1997) also emphasize the importance of student and faculty interaction based on their findings, especially among commuter students, whose only interaction with faculty may be in the classroom. As many community colleges have only commuter campuses, student-faculty interaction in a first-year seminar has a significant bearing on community college students (Sidle & McReynolds, 2009; Tinto, 1997). In fact, Nakajima, Dembo, and Mossler found faculty concern for students to be the only psychosocial variable that influenced student persistence in their study of community college students in southern California (2012). Braxton, Hirschy, and McClendon (2004) also argue that student persistence within commuter colleges will be higher if students perceive a greater “degree of academic
integration” in the classroom (p. 42), including a faculty that is committed to them and their success.

Researchers overwhelmingly found retention to be a positive outcome of first-year seminars (Davis, 1992; Derby, 2007; Derby & Smith, 2004; Schnell & Doetkott, 2003; Zimmerman, 2000). Graduation rates and GPA were also found to be positive across most of the studies discussed above (Davis, 1992; Odell, 1996; Sidle & McReynolds, 2009; Zimmerman, 2000). In addition, Davis (1992) found first-year seminars to be beneficial for those students considered at-risk as well as those not considered at-risk. Indirect positive outcomes were also found by Miller, Pope, and Steinman (2005); Mills (2010); O’Gara, Karp, and Hughes (2009); Sidle and McReynolds (1998); and Sydow and Sandel (1998) in the form of student-to-student and student-to-faculty interaction. Despite these positive findings, only 15% of colleges that offer a first-year seminar require their students to take the course (CCSSE, 2012).

Negatives. First-year seminars are not always considered successful, however. Rhodes and Carifio interviewed community college students to determine their levels of satisfaction with a first-year seminar course because students, faculty, and administrators were dissatisfied with the current course (1999). In order to increase student satisfaction, the researchers first had to find out why student perceptions were unfavorable. They conducted in-depth qualitative interviews with 15 students from three sections of the course, asking questions that were phrased in such a way to direct students to give positive, neutral, or negative feedback about the course. The responses of the students were divided fairly evenly, with half giving positive feedback about the course, and half responding negatively. The most common negative comment discovered by Rhodes and Carifio was that the course was mandatory, and most of these answers were given by older, non-traditional students. Students were most satisfied with aspects of the course that
addressed basic college skills, such as note-taking, learning styles, health and wellness management, and money management; information about campus resources (such as academic advising and tutoring) were also helpful to students. The structure of the course content and curriculum needed improvement in the students’ opinions. Rhodes and Carifio found that older students’ needs and different learning styles had not been considered when the course was designed, and in community colleges, those students must be taken into account (1999).

Students would benefit most from first-year seminars if those courses were taken early in their college career according to O’Gara, Karp, and Hughes (2009). The researchers found that, although students were introduced to transfer success centers during first-year seminars, many did not make use of them, even in their third semester at community college. They spoke with students who had not yet made concrete plans to transfer, even though they were nearing the end of their two-year degree. It is not clear to the researchers why this was the case. Although the students at the two urban community colleges studied made use of other success services, the transfer centers were underutilized. Their sample size was small, was compensated monetarily, and did not include students who did not take a first-year seminar course; therefore, the researchers recommend that more studies be conducted, especially quantitative studies that utilize the random assignment of sample populations. They also recommend that first-year seminars be required, that faculty members be made permanent academic advisors for their students, and that students should take the course early in their college careers, based on the positive findings in their study, discussed above (O’Gara, Karp, & Hughes, 2009).

Students who take a first-year seminar may not have different outcomes at all from those students who do not participate in a first-year seminar. In a study of 755 first-time, full-time students in large, public, predominantly white research institution in the southeast, Strayhorn
(2009) found that participants in a first-year seminar did not differ from their counterparts who did not participate in a first-year seminar on several factors. Those factors include academic integration, social integration, and satisfaction with college. Strayhorn points out, however, that this is a single site study and that “[e]mpirical evidence of the effectiveness of these programs, while growing, is still needed” (2009, p. 10).

Lang (2007) found first-year seminars to be beneficial for persistence and graduation rates, but not for credit hours completed or for GPA. He carried out a study resulting in similar outcomes to Strayhorn (2009) at the University of Buffalo. Lang assessed the effectiveness of a first-year seminar on students’ GPA and graduation rates. The students in the study were matched according to gender, race, intended major, SAT score, and high school GPA. Independent sample t-tests were conducted to ensure that the students were comparable; half of the students took a first-year seminar and half did not. Once students were chosen, Lang (2007) compared their GPAs and completed credit hours each semester for their first two years of college. Lang found that the completed credit hours and GPA between the two groups of students did not differ significantly over the course of two years. However, there was a significant difference in regards to persistence and graduation, with first-year seminar students outperforming those who did not participate in first-year seminars (2007).

The negative aspects of first-year seminar courses are not as straightforward as the positive aspects. Some researchers found no differences in student satisfaction, academic or social integration, or GPA (Lang, 2007; Strayhorn, 2009). Rhodes and Carifio (1999) found differences in student populations only. There is very little in the literature about negative outcomes of first-year seminars.
Types of First-Year Seminars

Friedman and Marsh (2009) built a study on the previous research of Porter and Swing (2006) to determine what type of first-year seminar is most effective. Citing the growth of first-year seminars around the country (up to 94% of four-year colleges and universities offer some sort of first-year seminar) since the 1970s, Porter and Swing developed a multi-institutional study to determine the effectiveness of various aspects of first-year seminar courses. They recognized four types of first-year seminar: a college success, or transition theme; an academic theme; themes connected to a specific academic discipline; and a remedial theme (Porter & Swing, 2006). Friedman and Marsh (2009) argue, three years later, that “[w]hile the effectiveness of college success and transition seminars is established, the research on academic seminars is just starting to develop” and that “[w]hile literature exists for both extended orientation and academic seminars, there is little published research that directly compares the effectiveness of these two types of courses” (p. 32).

Porter and Swing (2006) conducted one of the few multi-institutional studies on first-year seminars and their effectiveness. They looked at the relationship of a first-year seminar with student persistence. The researchers administered the First-Year Initiative (FYI) survey to 45 four-year institutions, with a total of 20,031 respondents, in which over 75% of the first-year seminars were a college success, or transition, theme (Porter & Swing, 2006). Using a multilevel modeling approach, Porter and Swing estimated the effectiveness of individual aspects of first-year seminars on students’ intent to persist. The intent to persist acted as the dependent variable, with student and institutional factors such as high school grades, work hours, gender, ethnicity, institutional acceptance rate, and Carnegie classification acting as independent variables for the study. Items from the FYI survey included aspects of the first-year seminar course, including
study skills and academic engagement, campus policies, campus engagement, peer connections, and health education (Porter & Swing, 2006).

Porter and Swing (2006) found two aspects of the first-year seminar, as well as several student characteristics, that affected persistence. Based on the examination of FYI survey results, Porter and Swing found that 76.8% of students in their study intended to persist (2006). The majority of these students had better high school grades, and more females intended to persist than did males. Students who worked during the week were less likely to express the intent to persist. Two aspects of first-year seminars, according to Porter and Swing (2006), affect intent to persist: study skills and academic engagement (an increase of 16 percentage points) and health education (an increase of 14 percentage points). Their “results indicate that choice of content in first-year seminars may indeed make a difference, especially when they are effective in specific content areas” (Porter & Swing, 2006, p. 104).

Friedman and Marsh (2009) expand on the Porter and Swing (2006) study above by describing the importance of understanding the potential effectiveness of different types of first-year seminars (p. 33). Friedman and Marsh’s quantitative, single-site study compared two types of first-year seminar: thematic and transitional/student success (2009). They applied Porter and Swing’s study to a single institution to determine the effect of each type of seminar on retention rates, first-year GPAs, and “student perceptions of the course experience and outcomes of that experience” (p. 33) at Appalachian State University (Friedman & Marsh, 2009).

Friedman and Marsh looked at Appalachian State University at a time when the institution was reorganizing its first-year seminar program (2009). Since 1987, their first-year seminars had been transitional/student success courses, and when concerns arose over the “academic rigor” (p. 33) of the courses, the General Education Task Force formed seminars
based on interdisciplinary themes. First-year seminars were developed with the themes of banned books, environmental science, and studio art. The courses still included traditional first-year seminar topics, such as health and wellness education, campus resources (such as academic advising and career centers), campus community, and time management; the rest of the course consisted of thematic content. The traditional first-year seminar courses were also offered (Friedman & Marsh, 2009).

Friedman and Marsh (2009) compared pre-college variables among groups of students in the Appalachian State University study. The study consisted of 177 first-semester students and nine sections of first-year seminars; 46 students enrolled in the thematic sections of first-year seminar and made up the experimental group for the study, according to Friedman and Marsh (2009). Students in Friedman and Marsh’s (2009) study were all given the First-Year Initiative (FYI) survey, also used in Porter and Swing’s (2006) study. Friedman and Marsh analyzed the FYI survey results using the Bonferoni method to protect against Type I error, and significant differences were found in two of the ten variables tested: out of class engagement and knowledge of campus policies (2009). The traditional first-year seminar students scored higher on these two variables than did the thematic first-year seminar students, a mean of 4.67 as compared to 2.84 for out of class engagement and a mean of 5.48 as compared to 4.16 for knowledge of campus policies; however, the effect sizes for both were low to moderate, according to Friedman and Marsh (2009). In addition, without the Bonferoni correction, several variables would have been statistically significant, including higher means for the traditional first-year seminar students for academic services, satisfaction with the institution, and belonging/acceptance. Friedman and Marsh also point out that the traditional, or transition, first-year seminar students had higher means for all ten variables than did the thematic first-year seminar students (2009).
The study carried out by Friedman and Marsh had three limitations, as described by the researchers. First, the thematic first-year seminars were new courses and were being compared to existing transitional first-year seminars. The transitional seminar students responded to the FYI survey at a higher rate than did the thematic seminar students. The environmental science and studio art thematic seminars contained students who were in related majors, and this may have “inflated the outcomes associated with the course” (p. 39). Lastly, there were a limited number of participants, making the study difficult to generalize, according to Friedman and Marsh (2009). However, Friedman and Marsh, like Porter and Swing (2006) three years before them, found significant differences for engagement outside of class and knowledge of services (2009). They did not find a difference in retention rates, as Porter and Swing (2006) did, and also call for more research to determine the most effective aspects of first-year seminars (Friedman & Marsh, 2009).

Learning Communities

Learning communities can be an effective environment used by colleges to help students succeed. According to McClenney and Waiwaiole, an “important factor in student retention is a college’s effort to foster an environment that encourages students to connect with faculty and with one another. One way to create these connections is through learning communities” (2005, p. 39). Learning communities intentionally structure students’ time, credit hours, and educational experiences, linking them to their peers and engaging them in academic programs such as advising, increasing academic and social engagement through student-to-student and student-to-faculty interaction and through campus activities (McClenney & Waiwaiole, 2005; Stebleton & Schmidt, 2010). In their review of multiple studies, Braxton, Hirschy, and McClendon found that learning communities encourage academic integration into campus and increase the chances of
persistence, and they encourage commuter colleges to develop such programs by advocating that “possible improvement in student retention rates in commuter colleges…depends on the creation of communities of learning” (2004, p. 81).

Academic and social integration can occur through learning communities. According to Stebleton and Schmidt (2010) and Tinto (1997), learning communities can be beneficial to community college students, many of whom commute to campus, work, and have commitments outside of school. As many community colleges are also commuter institutions, this particular intervention is important to consider for retention (Stebleton & Schmidt, 2010; Tinto 1997). For these students, Tinto (1997) suggests that the classroom may be their only connection to faculty members, student peers, and the college as a whole. This is where academic and social integration must occur, if it is going to occur for these students (Tinto, 1997).

Learning communities can be created around any theme: student involvement; major course of study; or even remedial courses, which could be especially beneficial. Approximately 40% of first-time students enroll in at least one remedial, or developmental, course, according to Stebleton and Schmidt’s study (2010). Jamelske (2009) suggests that by designing a learning community around developmental courses, institutions provide students with a peer study and support group, leading to an increase in GPA, all crucial indicators of retention.

In a study conducted by Tinto (1997), Seattle Community College, a commuter campus, implemented learning communities to increase student learning and persistence with positive results. This study is one of only a few that considers the classroom in relation to student persistence. By making the classroom a shared, rather than an individual experience, students have the opportunity to develop a peer group within learning communities, according to Tinto (1997). These classroom communities lead to larger communities of students outside the
classroom, providing a link to involvement for students. In fact, students who participated in the learning community courses at Seattle Community College reported socializing in peer groups outside of the classroom, as well. Tinto suggests that this peer network bonds students with the college, thereby increasing persistence (1997). Students who took the courses also had a more positive outlook toward the college, and a higher GPA than did those students who did not participate in the learning community courses (Tinto, 1997).

Practitioners at Inver Hills Community College (Minnesota) found learning communities to be successful at their institution. They initiated learning communities around a first-year seminar course when their retention rates began to decrease. In this study, mentioned previously, Stebleton and Schmidt (2010) found that students who participated in the learning communities reported a greater sense of comfort in getting to know their peers and faculty members, and an increased level of engagement, both key components of retention and major objectives of the program. The students who enrolled in the course during the fall 2007 semester persisted into the spring 2008 semester at a rate of 86%, compared to 76% of students who did not enroll in the course (Stebleton & Schmidt, 2010).

Learning communities, and in particular, living learning communities, can effectively engage students on campus. Kanoy and Bruhn (1996) studied living learning communities in residence halls in a small, private women’s college located in a metropolitan area in the Southeast. In their study, incoming first-year students self-selected into residence halls that offered a living learning component, including a sophomore peer educator and additional social and educational programs than traditional residence halls. Kanoy and Bruhn hypothesized, based on existing research, that the living learning communities would promote involvement, enhanced academic performance, and retention through peer interactions and increased opportunities for
involvement on campus. As the transition to college is a challenge for many first-year students, the living learning communities could help ease that transition and provide a peer in the form of a second-year student in the residence, with a ratio of only seven first-year students to every sophomore peer educator. Kanoy and Bruhn explained that the programs offered to the students in these residence halls lasted all semester, as typical orientation programs have been found to be too short to be fully effective in incorporating new students into a college environment (1996).

Kanoy and Bruhn (1996) studied students who were similar to one another, some of whom participated in the living learning communities and some of whom did not. In Kanoy and Bruhn’s study, 240 first-year students matriculated, with 195 choosing to live on campus (1996). Of the 44 who enrolled in the living learning communities, 33 were chosen to participate, and 29 completed the program. Once chosen, Kanoy and Bruhn matched the living learning community students with non-living learning community students who were similar in GPA, age, socioeconomic status, and race. All of the students were female, traditional aged, 95% were Caucasian, and most were middle-class. A t-test compared the incoming predicted GPA of the students and found no difference between the groups. Therefore, all things being equal, the living learning community was the only variable, according to Kanoy and Bruhn (1996).

Kanoy and Bruhn (1996) found that the students who participated in the living learning communities earned higher GPAs, and performed better than their predicted GPAs, especially in their second year of college, despite reporting fewer study hours than non-participants (12.90 hours per week as compared to 15.64 hours per week). This is supportive of previously cited studies, and also includes the additional information of study hours. By the end of the fourth year, the non-living learning community students had begun to close the gap in GPAs, earning a 2.84 compared to a 2.96 in the living learning communities (Kanoy & Bruhn, 1996).
Significant differences in retention rates for the two groups in Kanoy and Bruhn’s study were found. At the end of four semesters, the living learning community students were retained at a rate of 79.4%, and the matched control group was retained at a rate of 63.3%. None of the living learning community students were suspended for academic reasons; the non-living learning community students had an academic suspension rate between 2.7% and 9.1% each semester, which Kanoy and Bruhn (1996) explain could account for the slight difference in overall retention rates. Due to this, Kanoy and Bruhn hypothesize that the living learning communities could have indirectly affected retention rates, as they affected academic achievement. This academic achievement can be attributed to the fact that students in the living learning communities received structured support during their transition to college and the extended orientation provided in the living learning environment afforded them extra peer support and interactions, creating a greater sense of community, according to Kanoy & Bruhn (1996).

First-Year Seminars with Learning Communities

First-year seminars are often included in learning communities, which foster a connection between students and faculty. By intentionally structuring students’ time, learning experiences, and academic credit through first-year seminars and learning communities, McClenney and Waiwaiole found that retention rates increased at Montgomery College (Texas) and Skagit Valley College (Washington) (2005).

First-year seminars within learning communities have the potential to engage students both academically and socially. Practitioners at Inver Hills Community College experimented with a first-year seminar course within a learning community. Stebleton and Schmidt (2010) report that counselors were used to bridge the gap between student and academic affairs in a
first-year experience program to benefit students, using learning communities with a first-year seminar. The students who participated in the program reported “increased ease” (Stebleton & Schmidt, 2010, p. 85) and more comfort when communicating with peers and faculty, one of the main objectives of the course. Students also had significantly higher retention rates than those students who did not participate in the course (86% as compared to 70% of the general student population). Stebleton and Schmidt suggest that participation in the first-year seminar resulted in increased student engagement, which then led to increased rates of retention. The program was assessed “using an outside consultant [who] provided evidence that the [first-year experience] program engaged students academically and socially. Students reported that they felt ‘a sense of connection’ with faculty and peers” (Stebleton & Schmidt, 2010, p. 91).

Stebleton and Schmidt (2010) call for more practitioner involvement and leadership in retention efforts. While calling for more involvement, they acknowledge the fact that most student affairs retention research centers on four-year institutions and that the theories applied to those students may not translate easily to community college students. In addition, community college student affairs practitioners are not as actively engaged in retention research as four-year practitioners. They also stress that retention efforts must become part of the college culture and that they must be supported by everyone, college-wide (Stebleton & Schmidt, 2010). This study sought to find a way to include student affairs practitioners in retention and help students succeed. Sydow and Sandel also stress that retention efforts must be college-wide. In their study at Mountain Empire Community College (Virginia), a college-wide retreat including all faculty, administrators, and staff was held to inform and involve everyone in the retention effort (1998).
Additional Aspects of First-Year Experience Programs

In addition to first-year seminars and learning communities, other aspects of a first-year experience program can lead to increased student success and retention. McClenney and Waiwaiolo found advising and counseling to have a relationship to increased retention (2005). These services can help put students at ease as they enter the unfamiliar territory of college, and assist them in navigating their way through. The researchers also found tutoring to be another service community colleges can offer to help students succeed and to increase retention rates. Tutoring is also beneficial in that it takes learning out of the classroom (McClenney & Waiwaiolo, 2005) and makes it a more holistic experience for the student. Cohen, Brawer, and Kisker (2014) found orientation programs to be helpful, providing “students with maps of educational requirements and services available to them” (p. 216), especially if the orientation is mandatory. These researchers also found advising to be helpful to students in matching their abilities to their goals and academic strengths. Braxton, Milem, and Sullivan (2000) also found academic advising to be important, especially for first-year students. Student-to-student interaction, student-to-faculty interaction, and involvement are important aspects of a first-year experience program that can increase student success and retention, and are discussed below.

Orientation programs are another aspect of first-year experience programs that can positively affect retention by increasing social integration and adjustment to campus. According to Braxton, Hirschy, and McClendon, this is especially true of commuter colleges (2004), a trait that describes many community colleges. These researchers suggest that orientation programs should be mandatory as they help new students identify with the college and can be used to orient not only the students, but also the parents and significant others (Braxton, Hirschy, & McClendon, 2004).
Braxton, Hirschy, and McClendon also recommend that colleges offer workshops to students on how to cope with stress. In particular, they advise that proactive strategies for dealing with stress be taught in the workshops (2004). This is in keeping with Upcraft, Gardner, and Associates’ definition of “maintaining personal health and wellness” as part of a comprehensive first-year experience program (1989, p. 2).

Student Involvement and Campus Activities

Involvement and engagement on campus have been shown to be significant predictors of retention on college campuses, according to Cohen, Brawer, and Kisker (2014) and Tinto (1997). Students who took a three-credit hour first-year seminar course at Ramapo College were found to be “consistently more engaged” on campus than students who did not take the course, in a study carried out by Starke, Harth, and Sirianni (2001, p. 27). Although this engagement occurred at a four-year institution, the results could be important for community colleges, as well. Stebleton and Schmidt (2010) argue that efforts toward engagement at community colleges must be deliberate and intentional. Efforts such as learning communities, first-year seminars, orientation programs, intrusive advising, service learning, and campus activities must be carefully thought out and implemented in order to provide the most benefit to students who are likely to have one or more characteristics associated with early attrition (Stebleton & Schmidt, 2010).

Cohen, Brawer, and Kisker (2014) acknowledge that it may be more difficult for community colleges to implement activities that increase student engagement because many lack residences, students are busy with off-campus jobs, and those students who held leadership positions in high school often attend four-year colleges. However, student services such as advising, ongoing orientations, and campus activities should be emphasized to help students connect long enough to achieve their academic goals. Student activities involving academic
departments, athletic activities, and leadership programs are three examples given by Cohen, Brawer, and Kisker (2014) of ways of get community college students more involved on campus. Braxton, Hirschy, and McClendon recommend that colleges “develop ways to foster the involvement of students through participation in campus extracurricular activities, interactions with peers, and interactions with faculty members (p. 74), as these types of activities and interactions lead to a higher rate of retention among students.

Terenzini and Reason (2005) suggest that internal institutional factors, such as those mentioned above, could affect student success and persistence. Their Framework for Studying College Impacts considers students’ precollege characteristics as well as institutional factors such as policies and procedures, academic and cocurricular programs, faculty culture, the students’ peer environment, and the individual student’s experience with each of these factors. Through the relationships between and among these factors, policymakers at institutions can create ways to increase the chances for student success, learning, and persistence (Terenzini & Reason, 2005). It is their Framework for Studying College Impacts that serves as the theoretical framework for this study.

Theoretical Framework

The theoretical framework used for this study is Terenzini and Reason’s (2005) Framework for Studying College Impacts. Terenzini and Reason looked at the first year of college to determine the influence of institutional organization and policies on student persistence. Using Pascarella and Terenzini’s previous research as a basis, Terenzini and Reason considered the first year of college as a critical year that “takes into account the multiple student, faculty, and institutional influences research shows are involved in shaping first-year student learning and persistence” (Terenzini & Reason, 2005, p. 1). Terenzini and Reason recommend
their framework for considering organizational context in multi-institutional studies (2005), making it a natural fit for this study.

Pascarella and Terenzini (2005) found that a student’s first-year experiences and academic performance are related to persistence and graduation. However, according to Terenzini and Reason (2005), an average of 29% of four-year college students leave before starting their second year of college. Dropout rates are higher among first generation, underrepresented, and lower socioeconomic students (Terenzini & Reason, 2005) and these students are more likely to begin college at a community college, making student persistence an important issue for these institutions.

Terenzini and Reason note Upcraft, Gardner, and Barefoot among the researchers who have addressed the need for interventions during the first year to enhance the quality of students’ education. However, Terenzini and Reason argue that much of the literature is segmented and atheoretical. In addition, the previous literature does not focus on internal organizational features of an institution. Their framework focuses on students’ first-year of college as well as the multiple influences that contribute to that first year, including faculty, student, and institutional factors. These institutional factors include the curriculum, budgeting, staffing, faculty, policies related to the classroom, and policies and arrangements specific to the first year of college. It is intended to provide a comprehensive and integrated theory of the first year of college (Terenzini & Reason, 2005).

Terenzini and Reason list seven factors over which institutions have some control and could lead to student learning and persistence:

1. Have organizational structures and policies that provide a comprehensive, integrated, and coordinated approach to the first year.
2. Facilitate appropriate recruitment, admissions, and student transitions through policies and practices that are intentional and aligned with institutional mission.

3. [Assign] the first college year a high priority for the faculty.

4. Serve all first-year students according to their varied needs.

5. Engage students, both in and out of the classroom, in order to develop attitudes, behaviors, and skills consistent with the desired outcomes of higher education and the institution’s philosophy and mission.

6. Ensure that all first-year students encounter diverse ideas, worldviews, and people as a means of enhancing their learning and preparing them to become members of pluralistic communities.

7. Conduct assessment and maintain associations with other institutions and relevant professional organizations in order to achieve ongoing first-year improvement (2005, pp.3-5).

Many of these factors are mentioned throughout the literature on first-year experience programs, as seen earlier in this chapter.

The framework, shown below in Figure 1, attempts to take into account all of the factors mentioned above and to identify how those factors influence a student’s first year of college. Terenzini and Reason describe their framework as a multidisciplinary “college impact model” (p. 2) that is “intended to identify the broad array of factors and some of the possible causal mechanisms that influence the kinds of experiences first-year students have on campus and the attendant educational outcomes” (2005, p. 13). The framework developed out of the Foundations of Excellence in the First College Year Project, and although the framework has been applied
only to four-year college students, many of the same populations are present in community colleges, and the framework could be applied to those students as well. In fact, the researchers point out the relevancy of the framework to public policy in the form of providing greater access to college (Terenzini & Reason, 2005). Access is traditionally a large part of the community college mission, and this framework can help guide community colleges in not only providing access in the form of enrollment, but also in providing a successful first-year experience program to their students in the form of academic and social enhancements during their first year of college.

Figure 1. Terenzini and Reason’s Framework for Studying College Impacts (2005, p 21)

In this study, the organizational context of the college experience and its relationship with retention is considered. This study will determine whether or not differences in retention exist at community colleges in the southeastern United States based on the presence of first-year experience programs and aspects of such programs. As a set of institutional initiatives designed
to promote student success, first-year experience programs (Upcraft, Gardner, & Associates, 1989, p. 2), fall into the organizational context of Terenzini and Reason’s Framework for Studying College Impacts in the form of comprehensive first-year experience programs, first-year seminars, learning communities, orientation programs, academic advising, health and wellness programs, and campus activities. Each of these components are internal structures and practices within an institution that are either academic or cocurricular in nature.

In addition to access, Terenzini and Reason suggest that their framework offers a “comprehensive and detailed conceptual map of the forces that shape student success during the critical first year of college” (2005, p. 14). The framework considers causal relationships between and among students’ precollege experiences, the institutional organizational context, the students’ peer environment, the students’ individual experiences within these environments, and the students’ outcomes. These relationships are important not only for student success and persistence, but also for institutional effectiveness to determine which factors are most effective at a given institution so that policies can be put into place to create increased student success and persistence (Terenzini & Reason, 2005).

Summary

This chapter has demonstrated, through a review of multiple studies, the benefits of first-year experience programs, including increased retention and graduation rates, GPA, student involvement and a sense of belonging on campus. However, it has also revealed the lack of studies conducted in community colleges and the lack of studies involving multiple institutions. This study will seek to fill that gap left in the literature by considering multiple community colleges and how their retention relates to aspects of first-year experience programs present on their campuses. The next chapter will outline how the study will be conducted.
Chapter Three

Methodology

The purpose of this study was to determine whether or not a difference existed between retention rates of community colleges that implemented aspects of a first-year experience program and retention rates of community colleges that did not implement aspects of a first-year experience program. As seen in Terenzini and Reason’s Framework for Studying College Impacts (2005), first-year experience programs and aspects of such programs have potentially substantial ties to retention rates at community colleges. If differences in retention rates based on these ties were shown, colleges could adapt their organizational context to better help their students succeed (Terenzini & Reason, 2005).

In this study, rates of retention in public community colleges accredited by the Southern Association of Colleges and Schools, Commission on Colleges (SACSCOC) were compared to components of first-year experience programs that were present at each college. These components included first-year seminar courses, learning communities, orientation programs, academic advising, health and wellness programs, and campus activities. The retention rates of those institutions that offered one or more components of a first-year experience program were compared with the retention rates for those institutions that did not offer any components of such a program, based on answers to a survey and information collected from the Integrated Postsecondary Education Data System (IPEDS), a data center website of the National Center for Education Statistics. This chapter describes the research design, research questions and hypothesis, the research variables, the population and sample, the data collection procedures, the
research instrument, the validity and reliability of the instrument, the statistical analysis of the study, the limitations and delimitations, and a summary.

Research Design

The design selected for this study was a quantitative quasi-experimental design to determine the significance of differences between two groups using data collected from a survey and data retrieved from IPEDS. The previous literature on first-year experience programs called for more quantitative studies and more multi-institutional studies (Keup & Barefoot, 2005; O’Gara, Karp, & Hughes, 2009; Porter & Swing, 2006; Terenzini & Reason, 2005). The most effective way to compare differences between variables of multiple institutions was through a quasi-experimental design of the significance of differences. A quasi-experimental design, a type of between-group design, makes use of intact groups instead of random assignment, according to Creswell (2012), who states that between-group design is “[t]he most frequently used design in education …where the researcher compares two or more groups” (p. 309). A quasi-experimental design was appropriate for this study, as intact groups must be used and the differences between them compared to determine whether or not a significant difference existed.

Research Questions and Hypotheses

1. Research Question 1: Does the retention rate differ between community colleges that offer a comprehensive first-year experience program and community colleges that do not offer a comprehensive first-year experience program?

2. Research Question 2: Does the retention rate differ between community colleges that offer a first-year seminar course and community colleges that do not offer a first-year seminar course?
3. Research Question 3: Does the retention rate differ between community colleges that offer learning communities and community colleges that do not offer learning communities?

4. Research Question 4: Does the retention rate differ between community colleges that offer an orientation program and community colleges that do not offer an orientation program?

5. Research Question 5: Does the retention rate differ between community colleges that offer an academic advising program and community colleges that do not offer an academic advising program?

6. Research Question 6: Does the retention rate differ between community colleges that offer health and wellness programs and community colleges that do not offer health and wellness programs?

7. Research Question 7: Does the retention rate differ between community colleges that offer campus activities and community colleges that do not offer campus activities?

8. Research Question(s) 8: If clusters of identical first-year experience components (for example, a large sample of institutions that offer a first-year seminar, learning communities, and orientation) are found at multiple community colleges, those clusters will be compared to community colleges without that particular cluster to determine a difference in retention rates.

9. Research Question 9: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among community colleges in different states?
10. Research Question 10: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between urban and rural community colleges?

11. Research Question 11: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between commuter and non-commuter community colleges?

12. Research Question 12: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among the various Carnegie classifications for community colleges?

13. Research Question 13: What is the net effect of aspects of first-year experience programs on the retention rates of community colleges?

The independent variable in the analysis was the first-year experience program. Individual components, such as first-year seminars and learning communities, were independent measured variables. The retention rate served as the dependent variable. The two treatment variables were colleges with individual components of a first-year experience program and those without components of a first-year experience program. The treatment variables were compared through Independent T-tests and One-way ANOVA tests for each component or cluster of components, and then a net effect was shown through multiple regression analysis. This is shown in Table 1, below.

Table 1. Research Questions, Data, and Statistics to Answer Questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Used to Answer</th>
<th>Statistics Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Does the retention rate differ between community colleges when a comprehensive first-year</td>
<td>Independent Variable: Comprehensive first-year experience program</td>
<td>Independent t-test</td>
</tr>
<tr>
<td></td>
<td>dependent variable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dependent Variable:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention rate</td>
<td></td>
</tr>
</tbody>
</table>

65
<table>
<thead>
<tr>
<th>Question</th>
<th>Independent Measured Variable</th>
<th>Dependent Variable</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>2: Does the retention rate differ between community colleges when a first-year seminar course is in place?</td>
<td>Independent Measured Variable: First-year seminar course</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>3: Does the retention rate differ between community colleges when learning communities are in place?</td>
<td>Independent Measured Variable: Learning communities</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>4: Does the retention rate differ between community colleges when an orientation program is in place?</td>
<td>Independent Measured Variable: Orientation program</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>5: Does the retention rate differ between community colleges when an academic advising program is in place?</td>
<td>Independent Measured Variable: Academic advising</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>6: Does the retention rate differ between community colleges when a health and wellness program is in place?</td>
<td>Independent Measured Variable: Health and wellness program</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>7: Does the retention rate differ between community colleges when campus activities are in place?</td>
<td>Independent Measured Variable: Campus activities</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>8: Does the retention rate differ between community colleges when clusters of first-year experience program components are present?</td>
<td>Independent Measured Variable: Clusters of first-year experience program components</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
<tr>
<td>9: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among community colleges in different states?</td>
<td>Independent Variable: State</td>
<td>Dependent Variable: Retention rate</td>
<td>One-Way ANOVA</td>
</tr>
<tr>
<td>10: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience</td>
<td>Independent Variable: Urban/Rural Setting</td>
<td>Dependent Variable: Retention rate</td>
<td>Independent t-test</td>
</tr>
</tbody>
</table>
programs, between urban and rural community colleges?

11: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between commuter and non-commuter community colleges?

| Independent Variable: Commuter/Non-Commuter Setting | Dependent Variable: Retention rate | Independent t-test |

12: What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among the various Carnegie classifications for community colleges?

| Independent Variable: Carnegie classification | Dependent Variable: Retention rate | One-Way ANOVA |

13: What is the net effect of aspects of first-year experience programs on retention rates of community colleges?

| Independent Variable: Components of a first-year experience program; state; urban or rural setting; commuter or non-commuter status; and Carnegie classification | Dependent Variable: Retention rate | Control Variables: gender, age, race/ethnicity, socioeconomic status, grade point average, and pre-enrollment conditions of students | Multiple Regression Analysis |

Based on the literature presented throughout the first three chapters, the hypotheses for the research questions was that retention rates would be higher in those community colleges where one or more components of a first-year experience program was in place.

**Research Variables**

Based on the research questions and hypotheses of the study, several variables were present. The independent variable in the study was be a first-year experience program. The measured variables within the first-year experience program were the individual components of
the first-year experience programs, including first-year seminars, learning communities, orientation programs, academic advising, health and wellness programs, and campus activities. The dependent variable in the study was retention rates of community colleges. The control variables were gender, age, race/ethnicity, socioeconomic status, grade point average, and pre-enrollment conditions of students. The treatment variables fell into two groups: group one was community colleges with components of a first-year experience program; group two was community colleges without components of such a program.

Population and Sample

The population for this study consisted of 266 public community colleges in the southeastern United States (n=266). Each institution was a unit of analysis in the study. The institutions were chosen from the states served by SACSCOC: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia. The institutions were chosen on the basis of the degree(s) offered on their campuses. Those institutions that offered the Associate in Arts or Associate in Science degree, or a combination of the Associate’s degree and technical degrees, were included in the study. Those institutions that offered the Baccalaureate degree, only technical degrees, that were affiliated with a specific four-year institution, or that had missions considered too narrow to fit the criteria were eliminated from the sample population. This population was chosen because it is largely absent from the existing literature on first-year experience programs. The current literature on this topic is made up of four-year institutions and single-site studies. The population in this study filled a gap left by the prior literature.

The inclusion of Associate’s degree-, or Associate’s and technical degree-, granting institutions kept the sample population of community colleges in this study close to the mission
of all community colleges, as expressed by the American Association of Community Colleges (2012) as “comprehensive educational” institutions. This definition of community colleges was used because the American Association of Community Colleges is the primary national advocacy organization and the “national voice for community colleges.” The American Association of Community Colleges “promotes community colleges through five strategic action areas: recognition and advocacy for community colleges; student access, learning, and success; community college leadership development; economic and workforce development; and global and intercultural education” (American Association of Community Colleges, 2012). The exclusion of institutions awarding Baccalaureate degrees, technical degrees only, those affiliated with four-year institutions, and those with overly narrow missions was done to comply with the previous definition of community colleges, and kept the sample population similar in definition and in intended mission of the institution. The population was chosen by looking at community colleges in the southeastern region of the United States that had similar missions and that were accredited by SACSCOC.

The Carnegie Foundation classifies institutions as Associate’s level if “all degrees are at the associate’s level, or where bachelor’s degrees account for less than [ten] percent of all undergraduate degrees.” There are 14 classifications of associate’s level colleges; seven were used for this study (Carnegie Foundation, 2010). The Carnegie classifications for associate’s level community colleges that were included in this study are the following:

- Associate’s—Public Rural-serving Small,
- Associate’s—Public Rural-serving Medium,
- Associate’s—Public Rural-serving Large,
- Associate’s—Public Suburban-serving Single Campus,
• Associate’s—Public Suburban-serving Multicampus,
• Associate’s—Public Urban-serving Single Campus, and
• Associate’s—Public Urban-serving Multicampus.

The Carnegie classifications for associate’s level community colleges that did not fit the criteria for this study, and were therefore not used in this study, are as follows:

• Associate’s—Public Special Use,
• Associate’s—Private Not-for-profit,
• Associate’s—Private For-profit,
• Associate’s—Public 2-year Colleges under Universities,
• Associate’s—Public 4-year, Primarily Associate’s,
• Associate’s—Private Not-for-profit 4-year, Primarily Associate’s, and
• Associate’s—Private For-profit 4-year, Primarily Associate’s (Carnegie Foundation, 2010).

Retention rates for the 266 public, SACSCOC-accredited community colleges were pulled from the IPEDS database. This database consists of fall to fall retention rates for first-time full-time students. These students made up the population of the colleges that were compared in this study.

Data Collection Procedures

The data about institutional offerings of first-year experience programs during the 2011-2012 academic year were collected using an online survey distributed to each community college in the SACSCOC region. The survey, along with a cover letter, were submitted through Qualtrics to the 266 community colleges accredited by SACSCOC. This survey listed individual components of a first-year experience program, along with a definition for each, and asked at
least two representatives from each college, in most cases an academic advisor or similar position, to mark which components were offered at the respective institution during the 2011-2012 academic year. In addition, a definition of a comprehensive first-year experience program was provided and each institution was asked whether or not they offered a comprehensive first-year experience program during the 2011-2012 academic year. The representatives of each institution were also asked whether or not their institution was a commuter institution. The survey determined which aspects of a first-year experience program were present at each institution during the 2011-2012 academic year, the most recent year of data available through IPEDS. All colleges received the survey at the same time. After two weeks, those who had not responded were sent the survey again. One week after this, those colleges who still had not responded received the survey for a third time. After four weeks, all results were entered into an Excel spreadsheet. Those colleges that did not respond were not included in the results. The survey instrument and cover letter can be found in Appendices A and B.

Retention rates for each institution were gathered using the Integrated Postsecondary Education Data System (IPEDS) website: http://nces.ed.gov/ipeds/datacenter/login.aspx. IPEDS records the first-time full-time student rates of retention for those students returning for the subsequent fall semester. These students were the population for this study. Each first-year retention rate for fall 2011-fall 2012 was recorded on the same Excel spreadsheet as the survey data. The Excel data was then transferred to SPSS Statistics software, Version 22, and the two sets of data were compared to determine whether or not a significant difference in retention rates existed between those colleges that offered aspects of first-year experience programs and those that did not offer aspects of such programs.
Research Instruments

This study consisted of two research instruments. The first research instrument that was used in this study was an online survey, created using the Qualtrics software through the University of Alabama website. The survey was sent to the 266 public community colleges accredited by SACSCOC. The survey determined which aspects of a first-year experience program were present at each college during the 2011-2012 academic year, the most recent year of data available through IPEDS. An online survey was used due to the immediacy of possible responses, the ease of distribution, and the “extensive use of the Web” (p. 383) by individuals in higher education positions (Creswell, 2012). Although there were concerns over low response rates, security issues, and possible redirection of surveys to junk mail folders, the possibilities of reaching every school in an economic and effective manner and of high response rates outweighed these concerns. According to Creswell (2012), online surveys have resulted in both high and low response rates, and the response rates vary by study.

Although there was a concern over response rates, the large number of colleges contacted resulted in a large enough pool of respondents to conduct the study with generalizable results. In an effort to overcome these concerns, each recipient at the institutions were selected based on their position and possible knowledge of first-year experience programs at their institution. Email addresses of two academic advisors, counselors, student success center directors, and similar positions were sent the survey along with a cover letter explaining the study and a consent form for participating in the study. These positions were chosen to receive the study due to their frequent interaction with a diverse population of students in multiple academic degree programs and the awareness they should have of success strategies that are in place at their institutions. The contact information for these individuals were gathered from the websites of
each institution. The individual websites of each college were visited to determine the best person to contact based on the structure and availability of personnel at that particular institution. Once the contacts were determined, their names and email addresses were added to a spreadsheet of data that included the name, state, Carnegie classification, and retention rate of each college.

The second research instrument that was used in this study was a secondary analysis of the IPEDS retention data. First-year retention rates for the most recent year available (fall 2011-fall 2012) were found for each institution using the final release data in the IPEDS Data Center website. Community colleges are required to submit retention data to IPEDS on an annual basis, so this information was readily available for each school.

The quasi-experimental design determining significance of differences was conducted using the data collected from the online survey and the IPEDS Data Center website. Once the survey data was compiled into a spreadsheet, it was combined with first-year retention data from IPEDS that was collected for the colleges that responded to the survey. The first-year experience data and the retention data were then compared using independent t-tests in SPSS, Version 22. The results were compared both individually based on the research questions listed above and for net effects using Multiple Regression Analysis in SPSS, Version 22, to determine whether or not a significant difference existed between community colleges that offer aspects of a first-year experience program and community colleges that did not offer aspects of a first-year experience program.

Validity and Reliability

The surveys completed by the institutions related accurate information for the time given, and the IPEDS database provided accurate information on retention rates for a given year. This type of survey has proven reliable in previous studies. The retention rates in the IPEDS database
will not change in the future and can be replicated at any time, therefore proving to be valid and reliable. IPEDS “is a comprehensive federal database that includes enormous amounts of information about higher education institutions in the United States” and “can provide administrators with a wealth of data…to conduct peer comparisons” (Schuh, 2001, p. 30).

Statistical Analysis

Using the statistics software program SPSS, Version 22, the retention rates of each institution were compared with each of the first-year experience components. Each component, and cluster of components, were coded into the SPSS system, along with the institution’s rate of retention. In addition, those institutions without components of a first-year experience were also entered, along with their rates of retention. At this point, a comparison was made between those institutions without components of a first-year experience program and those with components, or clusters of components, of a first-year experience program.

The comparison was made on SPSS, Version 22, statistics software using an independent t-test for each component and cluster of components to determine whether or not a difference in retention rates exists for those colleges with components and those without components of a first-year experience program. An independent t-test was used to best compare two groups on the same variable. Although t-tests are vulnerable to error, especially Type I error (Creswell, 2012), this was the best test to determine whether or not a significant difference existed between the two groups. The probability of a Type I error was also reduced by a large sample size (n=266), thereby ensuring the central limit theorem and normal distribution could take place. One-way ANOVA tests were also run to determine differences in retention amount states and among Carnegie classifications. The Multiple Regression test was also run to compare each independent variable with the dependent variable of retention and confirm the results found by the t-tests.
The post-hoc analysis of these results showed whether or not significant differences existed between community colleges in the southeastern United States that offered aspects of first-year experience programs and community colleges in the same region that did not offer aspects of first-year experience programs. Those differences were revealed through the analysis of the independent t-tests and the multiple regression analysis. Of the 266 colleges that received surveys, those that did not respond were not included in the study. However, with such a large quantity of institutions contacted, generalizable results should occur.

Limitations

A limitation of this study was the fact that some community colleges offer the first-year seminar as a credit course while others do not. This is also true of orientation; it is sometimes offered as a credit, and sometimes is not. Other aspects of a first-year experience program do not usually have a credit attached, such as academic advising, and campus activities. For this reason, there was no separation between those colleges that offer aspects of the first-year experience for credit and those that did not. Although this may make a small difference in the results, it was not possible to differentiate retention rates based on credit versus non-credit aspects of a first-year experience program based on data from IPEDS. Similarly, aspects of first-year experience programs are mandatory at some colleges, but not at others. This was also not possible to determine within IPEDS. Another limitation of the study was the response rate of institutions surveyed for this study. However, as stated above, with the large number of institutions contacted, the response rate was large enough to make generalizations based on the results of the study.
Delimitations

Delimitations of this study included the type of college and the region studied. This study focused on SACSCOC-accredited public two-year colleges in the southeast region of the United States. Only those colleges that offer Associate’s degrees or a combination of Associate’s degrees and two-year terminal degrees were studied. Two-year schools that have a connection to a four-year institution were not studied, nor were two-year schools that offered a four-year degree or that had a mission considered too narrow to meet the definition of a community college as defined by the American Association of Community Colleges. This was be done to make up for the gap in the literature referring to community colleges in respect to retention and first-year experience. In addition, the southeast region was chosen because first-year experience originated in this area, at the University of South Carolina; this study looked at first-year experience in a different environment, that of two-year instead of four-year institutions.

Another delimitation of this study was the fact that retention rates at individual institutions were not evaluated before and after the implementation of a first-year experience program. Instead, retention rates were evaluated between institutions on the basis of whether or not they had some aspect of a first-year experience program during a specific year. This was done because of the many variables that can affect retention, and those variables cannot be controlled across institutions, especially considering that institutions implemented their first-year experience programs at different times. Variables such as the time difference in implementation, the economy, level of state and local support, and unemployment rates, to name a few, could affect retention and skew the results of the study. For this reason, retention rates were only studied between institutions, and not at different times within individual institutions.
Summary

This study was designed to determine whether or not a difference existed between the rates of retention in those community colleges that offered one or more components of a first-year experience program and those community colleges that did not offer components of a first-year experience program. The study included each component, clusters of components, and the absence of components of a first-year experience program. Surveys were submitted to 266 community colleges in the southeastern United States to determine which, if any, components of a first-year experience program were present at each institution during the 2011-2012 academic year. Retention rates for these same institutions were collected from the IPEDS website database. This data was then entered into SPSS statistics software, Version 22, and compared using independent t-tests, one-way ANOVA tests, and multiple regression analysis. The retention rates of those institutions with no components of a first-year experience program were compared with the retention rates of those institutions with one or more components of a first-year experience program. The results are presented in Chapter Four.
Chapter Four

Results

The purpose of this study was to compare the retention rates of Southern Association of Colleges and Schools, Commission on Colleges (SACSCOC)-accredited, public community colleges in the southeastern United States that have instituted first-year experience programs or aspects of a first-year experience program with those SACSCOC-accredited, public community colleges in the same region that have not instituted first-year experience programs or aspects of such a program. In April 2014, 266 surveys were distributed to public community colleges accredited by SACSCOC. Using Qualtrics survey software, the surveys were distributed to email accounts of advisors and similar positions at those colleges to determine whether or not first-year experience programs, and aspects of those programs, were present at the institutions during the 2011-2012 academic year. In addition, the representatives from each college were asked whether or not their institution was a commuter campus. Once the surveys were sent, data collection was begun on first-year retention rates for the institutions for the fall 2011-fall 2012 academic year as well as the Carnegie classification for each institution. This data was collected from the Integrated Postsecondary Education Database (IPEDS) Data Center website. When the surveys were complete, the data was put into an Excel spreadsheet and then transferred to SPSS Statistics software, Version 22 to analyze the collected data.

In this chapter, demographics of the respondents will be presented, and then the collected data and results will be presented in order of the research questions. The research questions are as follows:
1. Does the retention rate differ between community colleges that offer a comprehensive first-year experience program and community colleges that do not offer a comprehensive first-year experience program?

2. Does the retention rate differ between community colleges that offer a first-year seminar course and community colleges that do not offer a first-year seminar course?

3. Does the retention rate differ between community colleges that offer learning communities and community colleges that do not offer learning communities?

4. Does the retention rate differ between community colleges that offer an orientation program and community colleges that do not offer an orientation program?

5. Does the retention rate differ between community colleges that offer an academic advising program and community colleges that do not offer an academic advising program?

6. Does the retention rate differ between community colleges that offer health and wellness programs and community colleges that do not offer health and wellness programs?

7. Does the retention rate differ between community colleges that offer campus activities and community colleges that do not offer campus activities?

8. If clusters of identical first-year experience components (for example, a large sample of institutions that offer a first-year seminar, learning communities, and orientation) are found at multiple community colleges, those clusters will be compared to community colleges without that particular cluster to determine a difference in retention rates.
9. What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among community colleges in different states?

10. What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between urban and rural community colleges?

11. What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between commuter and non-commuter community colleges?

12. What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among the various Carnegie classifications for community colleges?

13. What is the net effect of aspects of first-year experience programs on the retention rates of community colleges?

Demographics of Respondents

Eighty institutions are represented in this study. Of the 266 surveys distributed, 80 responses were returned, a return rate of 30%. Each state was represented, as was each Carnegie classification that was surveyed. The breakdown of distributed surveys and respondents’ states and Carnegie classifications is seen below, in Figures 2-5.
Figure 2. Distributed Surveys by State

Of the 266 public, SACSCOC-accredited community colleges surveyed, 21 were in Alabama; four in Florida; seven in Georgia; and 16 in Kentucky. In Louisiana, nine community colleges were surveyed; 15 in Mississippi; and 56 in North Carolina. Seventeen surveys were sent to community colleges in South Carolina, 13 in Tennessee, 83 in Texas, and 25 in Virginia.

Figure 3. Respondents by State
Of the 266 surveys distributed, 80 were returned. Ten surveys were returned from Alabama, a 48% return rate. Three surveys were returned from Florida, a 75% return rate. Three surveys were returned from Georgia, a 43% return rate. Six surveys were returned from Kentucky, a 38% return rate. Three surveys were returned from Louisiana, a 33% return rate. Three surveys were returned from Mississippi, a 20% return rate. Fifteen surveys were returned from North Carolina, a 27% return rate. Seven surveys were returned from South Carolina, a 41% return rate. Four surveys were returned from Tennessee, a 31% return rate. Twenty-one surveys were returned from Texas, a 25% return rate; and five surveys were returned from Virginia, a 20% return rate.

Of the 266 community colleges surveyed, 33 were classified as Rural-serving Small; 115 were classified as Rural-serving Medium; and 32 were classified as Rural-serving Large. The Carnegie classification for 13 of the surveyed community colleges was Suburban-serving Single Campus and 20 were classified as Suburban-serving Multicampus. Four of the surveyed community colleges were classified as Urban-serving Single Campus and 48 were classified as Urban-serving Multicampus institutions. One surveyed college was classified as Public, Special-Use; however, this institution offered Associate’s Degrees in a variety of fields and fit the parameters of the study. They were surveyed, but did not respond and are not represented in the figures below.
The 80 respondents to the survey consisted of six Rural-serving Small community colleges, an 18% rate of return. Forty-five respondents were Rural-serving Medium institutions, a 39% rate of return; and eight were Rural-serving Large institutions, a 25% rate of return. Suburban-serving Single Campus institutions made up five of the respondents, or a 38% return rate; and Suburban-serving Multicampus institutions accounted for 3 of the responses, or a 15% rate of return. Two Urban-serving Single Campus community colleges responded for a 50% return rate, and 11 Urban-serving Multicampus institutions responded for a 23% return rate. These respondents are seen in Figure 5, below.
The hypothesis for each research question, based on literature presented in the first three chapters, is that retention rates will be higher in those community colleges where one or more components of a first-year experience program is in place. The research questions, results, and explanations of the hypothesis based on those results are presented in this section.

Research Question One

Does the retention rate differ between community colleges that offer a comprehensive first-year experience program and community colleges that do not offer a comprehensive first-year experience program?

Table 2. *Research Question One T-test Results*

<table>
<thead>
<tr>
<th>First-Year Experience</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
<td>54.12</td>
<td>7.756</td>
<td>.869</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>54.43</td>
<td>1.618</td>
<td></td>
</tr>
</tbody>
</table>
There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of a comprehensive first-year experience program. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.

Research Question Two

Does the retention rate differ between community colleges that offer a first-year seminar course and community colleges that do not offer a first-year seminar course?

Table 3. Research Question Two T-test Results

<table>
<thead>
<tr>
<th>First-Year Seminar</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td>Yes</td>
<td>62</td>
<td>54.53</td>
<td>7.863</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>18</td>
<td>53.22</td>
<td>9.175</td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of a first-year seminar. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.

Research Question Three

Does the retention rate differ between community colleges that offer learning communities and community colleges that do not offer learning communities?

Table 4. Research Question Three T-test Results

<table>
<thead>
<tr>
<th>Learning Communities</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td>Yes</td>
<td>26</td>
<td>55.31</td>
<td>8.313</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>54</td>
<td>53.72</td>
<td>1.099</td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of learning communities. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.
Research Question Four

Does the retention rate differ between community colleges that offer an orientation program and community colleges that do not offer an orientation program?

Table 5. Research Question Four T-test Results

<table>
<thead>
<tr>
<th>Orientation</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>69</td>
<td>54.19</td>
<td>8.170</td>
<td>.893</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>54.55</td>
<td>8.287</td>
<td></td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of an orientation program. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.

Research Question Five

Does the retention rate differ between community colleges that offer an academic advising program and community colleges that do not offer an academic advising program?

Table 6. Research Question Five T-test Results

<table>
<thead>
<tr>
<th>Academic Advising</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>72</td>
<td>54.61</td>
<td>7.582</td>
<td>.220</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>50.88</td>
<td>12.218</td>
<td></td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of an academic advising program. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.

Research Question Six

Does the retention rate differ between community colleges that offer health and wellness programs and community colleges that do not offer health and wellness programs?
Table 7. *Research Question Six T-test Results*

<table>
<thead>
<tr>
<th>Health and Wellness Programs</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>54.54</td>
<td>7.690</td>
<td>.820</td>
</tr>
<tr>
<td>No</td>
<td>54</td>
<td>54.09</td>
<td>8.405</td>
<td></td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of a health and wellness program. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.

Research Question Seven

Does the retention rate differ between community colleges that offer campus activities and community colleges that do not offer campus activities?

Table 8. *Research Question Seven T-test Results*

<table>
<thead>
<tr>
<th>Campus Activities</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Retention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>74</td>
<td>54.27</td>
<td>8.268</td>
<td>.900</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>53.83</td>
<td>6.853</td>
<td></td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of the surveyed community colleges given the presence of campus activities. Based on the T-test results for this research question, there is insufficient evidence to reject the null hypothesis.

Research Question Eight

If clusters of identical first-year experience components (for example, a large sample of institutions that offer a first-year seminar, learning communities, and orientation) are found at multiple community colleges, those clusters will be compared to community colleges without that particular cluster to determine a difference in retention rates.

Three clusters were found that at least 10% of the survey respondents shared. Eleven of the respondents (14%) shared a cluster of a comprehensive first-year experience program, first-year seminar, orientation, academic advising, health and wellness programs, and campus
activities. Eleven of the respondents (14%) shared a cluster of a comprehensive first-year experience program, first-year seminar, orientation, academic advising, and campus activities.

Eight of the respondents (10%) shared a cluster of a comprehensive first-year experience program, first-year seminar, learning communities, orientation, academic advising, and campus activities.

Six of the respondents, or 8%, offered all seven of the variables (a comprehensive first-year experience program and all six components). Other combinations of clusters were found in only one, two, three, five, or six respondents, accounting for between only one and 8% of the total respondents. However, the clusters of these respondents overlap greatly with those of the clusters that make up 10% or more of the survey respondents. For example, 49 of the respondents indicated that their institution offered a comprehensive first-year experience program. Thirty of those respondents make up the three clusters that account for 10% or more of the total respondents. Those 30 respondents make up 60% of the total number of institutions (n=50) that offer a comprehensive first-year experience program, and those 50 institutions make up 63% of the total respondents (n=80). As a large majority of the institutions offer the same programs, and there were no instances of several institutions offering a cluster of programs that did not appear in any of the other respondents that offered programs, this research question cannot be answered.

Research Question Nine

What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among community colleges in different states?
Table 9a. Research Question Nine ANOVA Results

<table>
<thead>
<tr>
<th>Full-Time Retention with…</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sum of Squares</td>
<td>Mean Square</td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>First-Year Experience</td>
<td>Between Groups</td>
<td>844.524</td>
<td>93.836</td>
<td>1.755</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2085.435</td>
<td>53.473</td>
<td></td>
</tr>
<tr>
<td>First-Year Seminar</td>
<td>Between Groups</td>
<td>985.121</td>
<td>98.512</td>
<td>1.803</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2786.314</td>
<td>54.634</td>
<td></td>
</tr>
<tr>
<td>Learning Communities</td>
<td>Between Groups</td>
<td>533.697</td>
<td>88.949</td>
<td>1.416</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1193.842</td>
<td>62.834</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Between Groups</td>
<td>1466.339</td>
<td>146.634</td>
<td>2.768</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3072.212</td>
<td>52.969</td>
<td></td>
</tr>
<tr>
<td>Academic Advising</td>
<td>Between Groups</td>
<td>1072.338</td>
<td>107.234</td>
<td>2.174</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3008.773</td>
<td>49.324</td>
<td></td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>Between Groups</td>
<td>332.500</td>
<td>41.563</td>
<td>.695</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>957.500</td>
<td>59.844</td>
<td></td>
</tr>
<tr>
<td>Campus Activities</td>
<td>Between Groups</td>
<td>1043.006</td>
<td>104.301</td>
<td>1.721</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3756.501</td>
<td>60.589</td>
<td></td>
</tr>
</tbody>
</table>

Retention rates did not statistically significantly differ among community colleges in states that offered comprehensive First-Year Experience programs, First-Year Seminars, Learning Communities, or Health and Wellness programs. Statistically significant differences in retention rates were found among states whose public community colleges offered Orientation, Academic Advising, and Campus Activities, as marked with an asterisk (*) above. These results are seen below in Tables 12b-d.
Table 9b. ANOVA Results of Retention Rates and Orientation among States

<table>
<thead>
<tr>
<th>Full-Time Retention Between (I) State and (J) State</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval Lower Bound</th>
<th>95% Confidence Interval Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) FL (J) LA</td>
<td>13.333</td>
<td>5.942</td>
<td>.029</td>
<td>1.44</td>
<td>25.23</td>
</tr>
<tr>
<td>(I) KY (J) LA</td>
<td>11.200</td>
<td>5.315</td>
<td>.0396</td>
<td>.56</td>
<td>21.84</td>
</tr>
<tr>
<td>(I) NC (J) AL</td>
<td>10.322</td>
<td>3.344</td>
<td>.003</td>
<td>3.63</td>
<td>17.02</td>
</tr>
<tr>
<td>(I) NC (J) GA</td>
<td>14.600</td>
<td>5.638</td>
<td>.012</td>
<td>3.32</td>
<td>25.88</td>
</tr>
<tr>
<td>(I) NC (J) LA</td>
<td>16.100</td>
<td>4.791</td>
<td>.001</td>
<td>6.51</td>
<td>25.69</td>
</tr>
<tr>
<td>(I) NC (J) SC</td>
<td>14.433</td>
<td>3.758</td>
<td>.002</td>
<td>4.91</td>
<td>19.96</td>
</tr>
<tr>
<td>(I) NC (J) TX</td>
<td>10.205</td>
<td>2.843</td>
<td>.001</td>
<td>4.51</td>
<td>15.90</td>
</tr>
<tr>
<td>(I) VA (J) LA</td>
<td>13.000</td>
<td>5.146</td>
<td>.014</td>
<td>2.70</td>
<td>23.30</td>
</tr>
<tr>
<td>(I) VA (J) SC</td>
<td>9.333</td>
<td>4.202</td>
<td>.030</td>
<td>.92</td>
<td>17.74</td>
</tr>
<tr>
<td>(I) VA (J) TX</td>
<td>7.105</td>
<td>3.408</td>
<td>.042</td>
<td>.28</td>
<td>13.93</td>
</tr>
</tbody>
</table>

In each of the above results in Table 9b, State (I) has higher retention rates than State (J). Florida community colleges that offer Orientation have higher rates of retention than Louisiana community colleges that offer Orientation. Kentucky community colleges that offer Orientation have higher retention rates than Louisiana community colleges that offer Orientation. North Carolina community colleges that offer Orientation have higher retention rates than community colleges that offer Orientation in Alabama, Georgia, Louisiana, South Carolina, and Texas. Virginia community colleges that offer Orientation have higher rates of retention than community colleges in Louisiana, South Carolina, and Texas that offer Orientation.
In each of the above results in Table 9c, State (I) has higher rates of retention than State (J).

Florida community colleges that offer Academic Advising have higher retention rates than Louisiana community colleges that offer Academic Advising. Kentucky community colleges that offer Academic Advising have higher retention rates than community colleges in Alabama, Louisiana, and South Carolina that offer Academic Advising. North Carolina community colleges that offer Academic Advising have higher rates of retention that community colleges that offer Academic Advising in Alabama, Louisiana, South Carolina, and Texas. Virginia community colleges that offer Academic Advising have higher retention rates than community college in Louisiana and South Carolina that offer Academic Advising.

Table 9d. ANOVA Results of Retention Rates and Campus Activities among States

<table>
<thead>
<tr>
<th>Full-Time Retention Between (I) State and (J) State</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>(I) NC (J) AL</td>
<td>6.767</td>
<td>3.333</td>
<td>.047</td>
<td>.10</td>
</tr>
<tr>
<td>(I) NC (J) LA</td>
<td>12.167</td>
<td>5.945</td>
<td>.045</td>
<td>.28</td>
</tr>
<tr>
<td>(I) NC (J) SC</td>
<td>9.000</td>
<td>3.892</td>
<td>.024</td>
<td>1.22</td>
</tr>
<tr>
<td>(I) NC (J) TX</td>
<td>6.930</td>
<td>2.870</td>
<td>.019</td>
<td>1.19</td>
</tr>
<tr>
<td>(I) VA (J) SC</td>
<td>9.333</td>
<td>4.494</td>
<td>.042</td>
<td>.35</td>
</tr>
</tbody>
</table>
In each of the above results in Table 9d, State (I) has higher retention rates than State (J). North Carolina community colleges that offer Campus Activities have higher rates of retention than community colleges that offer Campus Activities in Alabama, Louisiana, South Carolina, and Texas. Virginia community colleges that offer Campus Activities have higher retention rates than South Carolina community colleges that offer Campus Activities.

Research Question Ten

What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between urban and rural community colleges?

Table 10. Research Question Ten T-test Results

<table>
<thead>
<tr>
<th>Full-Time Retention with…</th>
<th>Rural or Urban</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Experience</td>
<td>Rural</td>
<td>34</td>
<td>54.91</td>
<td>8.582</td>
<td>.355</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>9</td>
<td>52.11</td>
<td>4.781</td>
<td></td>
</tr>
<tr>
<td>First-Year Seminar</td>
<td>Rural</td>
<td>45</td>
<td>54.84</td>
<td>8.576</td>
<td>.645</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>11</td>
<td>53.91</td>
<td>5.127</td>
<td></td>
</tr>
<tr>
<td>Learning Communities</td>
<td>Rural</td>
<td>14</td>
<td>56.93</td>
<td>9.466</td>
<td>.366</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>8</td>
<td>53.38</td>
<td>6.927</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Rural</td>
<td>49</td>
<td>54.51</td>
<td>8.775</td>
<td>.875</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>12</td>
<td>54.08</td>
<td>6.388</td>
<td></td>
</tr>
<tr>
<td>Academic Advising</td>
<td>Rural</td>
<td>53</td>
<td>54.92</td>
<td>7.951</td>
<td>.709</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>12</td>
<td>54.00</td>
<td>6.439</td>
<td></td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>Rural</td>
<td>16</td>
<td>54.56</td>
<td>7.958</td>
<td>.268</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>3</td>
<td>49.00</td>
<td>5.568</td>
<td></td>
</tr>
<tr>
<td>Campus Activities</td>
<td>Rural</td>
<td>52</td>
<td>54.42</td>
<td>8.792</td>
<td>.802</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>13</td>
<td>53.77</td>
<td>6.220</td>
<td></td>
</tr>
</tbody>
</table>

There is no statistically significant difference in the retention rates of urban and rural community colleges among the surveyed community colleges that offer first-year experience programs, and aspects of first-year experience programs. Urban community colleges in this study consisted of the Carnegie classifications of Associate’s—Public Urban-serving Single Campus and Associate’s—Public Urban-serving Multicampus community colleges. Rural community
colleges in this study consisted of the Carnegie classifications of Associate’s—Public Rural-serving Small, Associate’s—Public Rural-serving Medium, and Associate’s—Public Rural-serving Large community college. Suburban community colleges were not used for Research Question Ten.

Research Question Eleven

What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, between commuter and non-commuter community colleges?

Table 11. Research Question Eleven T-test Results

<table>
<thead>
<tr>
<th>Full-Time Retention with…</th>
<th>Commuter Institution?</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Experience</td>
<td>Yes</td>
<td>42</td>
<td>54.88</td>
<td>7.902</td>
<td>.139</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7</td>
<td>50.14</td>
<td>6.256</td>
<td></td>
</tr>
<tr>
<td>First-Year Seminar</td>
<td>Yes</td>
<td>52</td>
<td>55.48</td>
<td>8.197</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>10</td>
<td>49.60</td>
<td>2.459</td>
<td></td>
</tr>
<tr>
<td>Learning Communities</td>
<td>Yes</td>
<td>23</td>
<td>56.00</td>
<td>8.017</td>
<td>.247</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3</td>
<td>50.00</td>
<td>10.440</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Yes</td>
<td>56</td>
<td>55.57</td>
<td>7.611</td>
<td>.003*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>13</td>
<td>48.23</td>
<td>8.084</td>
<td></td>
</tr>
<tr>
<td>Academic Advising</td>
<td>Yes</td>
<td>60</td>
<td>55.48</td>
<td>7.758</td>
<td>.005*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>12</td>
<td>50.25</td>
<td>4.827</td>
<td></td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>Yes</td>
<td>22</td>
<td>55.00</td>
<td>7.111</td>
<td>.063</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>3</td>
<td>46.67</td>
<td>4.726</td>
<td></td>
</tr>
<tr>
<td>Campus Activities</td>
<td>Yes</td>
<td>61</td>
<td>55.20</td>
<td>7.689</td>
<td>.008*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>12</td>
<td>48.42</td>
<td>8.479</td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant difference in retention rates was found in those aspects of first-year experience marked with an asterisk (*) including First-Year Seminar, Orientation, Academic Advising, and Campus Activities. No statistical significance was found in relation to First-Year Experience, Learning Communities, or Health and Wellness programs.
Research Question Twelve

What are the differences between retention rates of community colleges that offer first-year experience programs, and aspects of first-year experience programs, among the various Carnegie classifications for community colleges?

Table 12a. Research Question Twelve ANOVA Results

<table>
<thead>
<tr>
<th>Full-Time Retention with…</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>295.428</td>
<td>49.238</td>
<td>.785</td>
<td>.587</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2634.532</td>
<td>62.727</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-Year Seminar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>476.872</td>
<td>79.479</td>
<td>1.327</td>
<td>.261*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3294.564</td>
<td>59.901</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Communities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>214.747</td>
<td>53.687</td>
<td>.745</td>
<td>.572</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1512.792</td>
<td>72.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>518.687</td>
<td>86.448</td>
<td>1.424</td>
<td>.217*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4370.984</td>
<td>60.708</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Advising</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>351.879</td>
<td>58.646</td>
<td>1.022</td>
<td>.419*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3729.232</td>
<td>57.373</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and Wellness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>411.833</td>
<td>68.639</td>
<td>1.407</td>
<td>.266</td>
</tr>
<tr>
<td>Within Groups</td>
<td>878.167</td>
<td>48.787</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campus Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>541.750</td>
<td>90.292</td>
<td>1.400</td>
<td>.228*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4257.757</td>
<td>64.511</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Retention rates did not statistically significantly differ among Carnegie classifications of public community colleges that offered comprehensive First-Year Experience programs, Learning Communities, or Health and Wellness programs. Statistically significant differences in retention rates were found among Carnegie classifications of public community colleges that offered First-Year Seminar, Orientation, Academic Advising, and Campus Activities. These results are seen below in Tables 12b-e, below.
Table 12b. *ANOVA Results of Retention Rates and First-Year Seminar among Carnegie Classifications*

<table>
<thead>
<tr>
<th>Full-Time Retention Between (I) Carnegie Classification and (J) Carnegie Classification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Rural-serving Large (J) Suburban-serving Single Campus</td>
<td>12.208</td>
<td>5.240</td>
<td>.024</td>
<td></td>
<td>1.71</td>
<td>22.71</td>
</tr>
</tbody>
</table>

In the result in Table 12b, Carnegie Classification (I) has higher retention rates than Carnegie Classification (J). Rural-serving Large community colleges that offer a First-Year Seminar have higher rates of retention than Suburban-serving Single Campus community colleges that offer a First-Year Seminar.

Table 12c. *ANOVA Results of Retention Rates and Orientation among Carnegie Classifications*

<table>
<thead>
<tr>
<th>Full-Time Retention Between (I) Carnegie Classification and (J) Carnegie Classification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Rural-serving Large (J) Suburban-serving Single Campus</td>
<td>11.475</td>
<td>4.442</td>
<td>.012</td>
<td></td>
<td>2.62</td>
<td>20.33</td>
</tr>
</tbody>
</table>

In the result in Table 12c, Carnegie Classification (I) has higher retention rates than Carnegie Classification (J). Rural-serving Large community colleges that offer Orientation have higher rates of retention than Suburban-serving Single Campus community colleges that offer Orientation.

Table 12d. *ANOVA Results of Retention Rates and Academic Advising among Carnegie Classifications*

<table>
<thead>
<tr>
<th>Full-Time Retention Between (I) Carnegie Classification and (J) Carnegie Classification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Rural-serving Large (J) Suburban-serving Single Campus</td>
<td>9.857</td>
<td>4.748</td>
<td>.042</td>
<td></td>
<td>.38</td>
<td>19.34</td>
</tr>
</tbody>
</table>
In the result in Table 12d, Carnegie Classification (I) has higher retention rates than Carnegie Classification (J). Rural-serving Large community colleges that offer Academic Advising have higher rates of retention than Suburban-serving Single Campus community colleges that offer Academic Advising.

Table 12e. ANOVA Results of Retention Rates and Campus Activities among Carnegie Classifications

<table>
<thead>
<tr>
<th>Full-Time Retention Between (I) Carnegie Classification and (J) Carnegie Classification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Rural-serving Large</td>
<td>6.375</td>
<td>3.124</td>
<td>.045</td>
<td>.14</td>
<td>12.61</td>
<td></td>
</tr>
<tr>
<td>(J) Rural-serving Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I) Rural-serving Large</td>
<td>11.475</td>
<td>4.579</td>
<td>.015</td>
<td>2.33</td>
<td>20.62</td>
<td></td>
</tr>
<tr>
<td>(J) Suburban-serving Single Campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the results in Table 12e, Carnegie Classification (I) has higher retention rates than Carnegie Classification (J). Rural-serving Large community colleges that offer Campus Activities have higher rates of retention than Rural-serving Medium community colleges and Suburban-serving Single Campus community colleges that offer Campus Activities.

Research Question Thirteen

What is the net effect of aspects of first-year experience programs on the retention rates of community colleges?

Table 13a. Research Question Thirteen Multiple Regression Results/ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>732.516</td>
<td>66.592</td>
<td>1.008</td>
<td>.449</td>
</tr>
<tr>
<td>Residual</td>
<td>4493.972</td>
<td>66.088</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 13a show no statistical significance.
Table 13b. Research Question Thirteen Multiple Regression Results/Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>First-Year Experience</td>
<td>1.143</td>
<td>2.141</td>
<td>.068</td>
<td>.595</td>
</tr>
<tr>
<td>First-Year Seminar</td>
<td>-1.213</td>
<td>2.418</td>
<td>-.0.63</td>
<td>.617</td>
</tr>
<tr>
<td>Learning Communities</td>
<td>-1.533</td>
<td>2.144</td>
<td>-.0.89</td>
<td>.477</td>
</tr>
<tr>
<td>Orientation</td>
<td>-.182</td>
<td>2.850</td>
<td>-.0.008</td>
<td>.949</td>
</tr>
<tr>
<td>Academic Advising</td>
<td>-4.032</td>
<td>3.263</td>
<td>-.1.50</td>
<td>.221</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>1.020</td>
<td>2.227</td>
<td>.059</td>
<td>.648</td>
</tr>
<tr>
<td>Campus Activities</td>
<td>1.277</td>
<td>3.780</td>
<td>.0.042</td>
<td>.737</td>
</tr>
<tr>
<td>State</td>
<td>-.049</td>
<td>.296</td>
<td>-.0.019</td>
<td>.870</td>
</tr>
<tr>
<td>Carnegie Classification</td>
<td>.178</td>
<td>1.200</td>
<td>.0.041</td>
<td>.883</td>
</tr>
<tr>
<td>Commuter Institution</td>
<td>-6.885</td>
<td>2.519</td>
<td>-.0.324</td>
<td>.008*</td>
</tr>
<tr>
<td>Rural or Urban</td>
<td>-2.831</td>
<td>5.955</td>
<td>-.1.129</td>
<td>.636</td>
</tr>
</tbody>
</table>

The only statistically significant result shown in Table 13b is that of Commuter Institutions. Of each of the predictors, only commuter status is statistically significant in terms of difference in retention rates of public, SACSCOC-accredited community colleges. Based on the Multiple Regression results for this research question, with the exception of Commuter Institutions (p=.008), there is insufficient evidence to reject the null hypothesis.

Summary of Results

In this study, multiple aspects of a comprehensive First-Year Experience program were considered and tested for a difference in full-time retention rates. In addition to the components of First-Year Experience, institutional type and state were considered and compared in relation to First-Year Experience offerings and full-time rates of retention. Individually, First-Year Experience and aspects of a First-Year Experience program, including First-Year Seminars, Learning Communities, Orientation, Academic Advising, Health and Wellness programs, and Campus Activities, had no statistically significant differences in retention rates among public
SACSCOC-accredited community colleges that offered these programs and peer institutions that did not offer them.

Among the 11 states surveyed, there was no statistical significance in the retention rates when First-Year Experience, First-Year Seminar, Learning Communities, and Health and Wellness programs were considered. However, there was a statistical significance found in retention rates when Orientation (p-value range of .001-.042), Academic Advising (p-value range of .010-.050), and Campus Activities (p-value range of .019-.047) were considered. Within these statistically significant results, Florida, Kentucky, North Carolina, and Virginia had the highest rates of retention when Orientation and Academic Advising were considered. North Carolina and Virginia had the highest rates of retention when Campus Activities was considered.

No statistical significance was found in any of the variables, including First-Year Experience, First-Year Seminar, Learning Communities, Orientation, Academic Advising, Health and Wellness programs, and Campus Activities, between Urban and Rural SACSCOC-accredited public community colleges. In addition, no statistical significance was found between Commuter and Non-Commuter colleges when the variables of First-Year Experience, Learning Communities, and Health and Wellness programs were considered. However, there was a statistically significant difference in the retention rates of Commuter and Non-Commuter community colleges when First-Year Seminar (p=.024), Orientation (p=.012), Academic Advising (p=.042), and Campus Activities (p=.045, p=.015) were considered.

Among Carnegie classifications, no statistically significant rates of retention were found with the variables of First-Year Experience, Learning Communities, or Health and Wellness programs. Statistically significant findings were seen with First-Year Seminar (p=.024),
Orientation (p=.012), Academic Advising (p=.042), and Campus Activities (p-values of .015 and .045). In all four instances, Rural-serving Large institutions had a higher rate of retention.

The overall net effect showed no statistical significance (p=.449) when Multiple Regression ANOVA was tested. Among the Multiple Regression Coefficients, statistical significance was only found between Commuter Institutions (p=.008). All other coefficients (a comprehensive First-Year Experience program, First-Year Seminar, Learning Communities, Orientation, Academic Advising, Health and Wellness programs, Campus Activities, State, Carnegie classification, and Urban or Rural setting) showed no statistical significance (p-value range of .221-.949). The next chapter will discuss the findings with greater analysis and detail. Limitations will also be discussed, as well as implications for future research.
Chapter Five

Conclusions

As stated in chapter one, retention is a significant issue for community colleges, especially those in the southeastern United States (Barefoot, 2004; “How does your community college stack up,” 2012). One solution for low retention rates utilized by many community colleges is a first-year experience program, especially a first-year seminar, according to McClenney and Waiwaiole (2005). Such internal organizational factors as first-year experience programs and seminars within the college could increase retention according to Terenzini and Reason (2005) and their Framework for Studying College Impacts specifically considers the first year of college. Terenzini and Reason (2005) suggest a comprehensive and integrated approach to the first-year of college in which students are engaged both in and out of the classroom. First-year experience programs fit this definition by offering a comprehensive set of curricular and cocurricular opportunities for students to interact and become engaged with their institution.

Because retention is a problem for community colleges, and first-year experience programs have been instituted to help repair the problem, this study compared the retention rates of public community colleges accredited by the Southern Association of Colleges and Schools, Commission on Colleges (SACSCOC) that offer a comprehensive first-year experience program, or aspects of such a program (including first-year seminar, learning communities, orientation, academic advising, health and wellness programs, and campus activities) with the retention rates of SACSCOC-accredited public community colleges that do not offer a comprehensive first-year experience program, or aspects of such a program. In addition, among those SACSCOC-
accredited community colleges that offered a first-year experience program, or aspects of a first-year experience program, differences in rates of retention were considered among Carnegie classifications, among states (Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia), between commuter and non-commuter college campuses, and between urban and rural community colleges. Surveys were emailed to representatives of the 266 community colleges that fit the parameters of this study, and 80 responded. Retention and Carnegie classification information was collected from the IPEDS Data Center website. The survey and IPEDS data were entered into an Excel spreadsheet and transferred to SPSS Statistics software, Version 22 to run Independent t-tests, One-way ANOVAs, and a Multiple Regression Analysis. The results, presented in chapter four, will be analyzed in this chapter.

This chapter will include a summary and analysis of the results of the study. In addition, implications for future research will be discussed, as will implications for practice. Limitations will also be presented in this chapter.

Summary and Discussion of Results

First-year experience programs, and aspects of such programs including first-year seminar, learning communities, orientation, academic advising, health and wellness programs, and campus activities, were compared and tested for a difference in full-time retention rates for the 2011-2012 academic year. Institutional Carnegie classification, state, urban or rural colleges, and commuter or non-commuter colleges were also compared and tested for differences in retention. Independent t-tests compared individual aspects of first-year experience between community colleges that offered the programs and those that did not offer them. When considering First-Year Experience, First-Year Seminar, Learning Communities, Orientation,
Academic Advising, Health and Wellness Programs, and Campus Activities (Research Questions One through Seven), no statistical significance was revealed. Individually, there is no statistically significant difference in retention rates between SACSCOC-accredited public community colleges that offer first-year experience programs and aspects of those programs, and peer institutions that do not offer first-year experience programs and aspects of those programs.

The results found here are in direct opposition to the recommendations made by McClenney and Waiwaiole (2005) and Tinto (1993) to create first-year programming including orientation, advising, first-year seminars, learning communities, and comprehensive first-year experience programs. First-year seminars, in particular, have been found to be successful in community college settings (Derby, 2007; Derby & Smith, 2004; Tinto, 1997; and Zimmerman, 2000). Perhaps Barefoot (2009) was correct in questioning whether or not the existing first-year experience programs were being adequately assessed. However, there may be other explanations.

Given the overwhelming predominance in the literature of positive outcomes from individual first-year experience components, the findings in this study are surprising. There may not be a higher retention rate in southeastern public community colleges based on individual aspects of first-year experience, but these same aspects revealed higher rates of retention in this population of this study in regards to commuter institutions, among states, and among Carnegie classifications. Therefore, different results may be found with a different methodology or with improvements to the methodology in this study. For example, definitions for the components of the first-year experience need to be modified, as they may not have been understood completely by the respondents, as shown in the limitations section, below.

This study can function as a starting point to other studies, but with a different methodology. Instead of considering retention, credit-hour completion may be a more precise
way to measure community college students’ success. As graduation is not the only goal of community college students, retention is not always the best predictor of success. Future studies should consider the individual goals of students. Those goals can be translated into number of credit-hours needed to complete that particular goal. Credit-hour completion toward those goals with the presence of first-year experience programs, and components of those programs, can then be tracked to determine success in relation to first-year experience programming.

There are limitations related to the survey responses in Research Questions One through Seven that will be discussed in the Limitations section of this chapter that may have contributed to these results. Specifically, respondents that answered “no” to the question of whether or not their institution offered a comprehensive first-year experience program, but answered “yes” to each, or most, of the questions that asked whether or not aspects of a comprehensive first-year experience program were offered; and conversely those that answered “yes” to the presence of a comprehensive first-year experience program, yet answered “no” to the presence of each, or most, of the aspects of a comprehensive first-year experience program.

Research Question Nine compared SACSCOC-accredited public community colleges that offered first-year experience programs, or aspects of such a program, among the states served by SACSCOC. Among the 11 states, no statistical significance was found in the retention rates when First-Year Experience, First-Year Seminar, Learning Communities, or Health and Wellness programs were considered. However, Florida, Kentucky, North Carolina, and Virginia had higher rates of retention than other states when Orientation was considered.

Of the states that had higher retention rates, all of the Florida and Virginia community colleges offered Orientation (100%), five of the six Kentucky colleges offered Orientation (83%), and 10 of the 15 North Carolina colleges offered Orientation (67%). These same states
had higher rates of retention when Academic Advising was considered, as well. Again, Florida
and Virginia had a 100% rate of offering Academic Advising; 13 of the 15 North Carolina
colleges offered Academic Advising (87%); and five of the six Kentucky colleges offered
Academic Advising (83%). When Campus Activities was considered, North Carolina and
Virginia had the highest rates of retention. One-hundred percent of the Virginia colleges (6 out of
6 institutions) offered Campus Activities and 80% of the North Carolina colleges (12 out of 15
institutions) offered Campus Activities, as seen below in Table 14. These findings support earlier
literature, including Braxton, Hirschy, and McClendon (2004), who suggest that orientation can
increase retention; McClenney and Waiwaiolo’s study that found increased rates of retention
when advising was present (2005); and Cohen, Brawer, and Kisker (2014) who determined that
involvement on campus can be predictive of retention.

Table 14. Percentage of Orientation, Academic Advising, and Campus Activities in States with
Higher Rates of Retention

<table>
<thead>
<tr>
<th></th>
<th>Orientation</th>
<th>Academic Advising</th>
<th>Campus Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>100%</td>
<td>100%</td>
<td>N/A</td>
</tr>
<tr>
<td>Kentucky</td>
<td>83%</td>
<td>83%</td>
<td>N/A</td>
</tr>
<tr>
<td>North Carolina</td>
<td>67%</td>
<td>87%</td>
<td>80%</td>
</tr>
<tr>
<td>Virginia</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Differences between urban and rural community colleges were compared in Research
Question Ten, but no significant differences in retention were found between urban and rural
campuses that offered first-year experience programming. Past studies have considered both
urban and rural campuses, but results have not been delineated based on this characteristic.
Suburban-serving campuses were not used for this research question, and future studies should
consider the differences between Urban, Rural, and Suburban colleges.
Research Question 11 compared commuter and non-commuter colleges. Whether or not a college was considered a commuter campus was determined by a survey question. No statistical significance in retention rates was found with regard to First-Year Experience, Learning Communities, or Health and Wellness programs. However, most of the significant findings of the study were found between commuter and non-commuter colleges.

When the variables of First-Year Seminar, Orientation, Academic Advising, and Campus Activities were considered, statistically significant differences in retention rates were found, with commuter campuses having higher rates of retention. Eighty-three percent of the respondents were commuter colleges (66 out of 80 total respondents) and 18%, or 14 of the 80 respondents, were non-commuter colleges. These findings support earlier literature, especially that of Braxton, Hirschy, and McClendon (2004), who specifically mention the positive effects of orientation at a commuter college, including increased retention; McClenney and Waiwaiole’s study that found increased rates of retention with advising (2005); and Cohen, Brawer, and Kisker’s study that found a positive relationship between campus activities and retention (2014).

Retention rates among Carnegie classifications did not differ in regard to First-Year Experience, Learning Communities, or Health and Wellness programs. Statistically significant differences in rates of retention were found, however, with First-Year Seminar, Orientation, Academic Advising, and Campus Activities. In each instance, Rural-serving Large institutions had a higher rate of retention. Rural-serving Large institutions accounted for 10% of the respondents to this study.

These findings support earlier literature in regards to first-year seminar, orientation, academic advising, and campus activities. Each of these aspects of first-year experience programs has been found to be predictive of retention (Braxton, Hirschy, & McClendon, 2004;
Braxton, Milem, & Sullivan, 2000; Cohen, Brawer, & Kisker, 2014; Davis, 1992; Derby, 2007; Derby & Smith, 2004; Jamelske, 2009; Kanoy & Bruhn, 1996; McClennen & Waiwaiole, 2005; O’Gara, Karp, & Hughes, 2009; Schnell & Doetkott, 2003; Sidle & McReynolds, 2009; Stebleton & Schmidt, 2010; Tinto, 1997; Zimmerman, 2000). Given the positive findings in the literature with regard to first-year experience programs and learning communities, more research is needed to determine the effectiveness of these programs in different types of institutions.

Overall, the net effect of this study showed no statistical significance. Within the breakdown of individual characteristics of the net effect, only the variable of Commuter Institutions was found to have a statistical significance. This finding is important for community colleges, as 76% of community colleges nationwide are commuter colleges (Epstein, 2007). The effect of first-year experience programs, and aspects of those programs, on commuter colleges in this study could have a significant bearing on decisions made by commuter colleges to increase rates of retention of their students.

Colleges and universities, both two-year and four-year, have access to a large amount of literature on first-year experience programs and individual aspects of those programs. However, until now, that literature did not include a multiple-site or regional study of these programs and their relation to retention in community colleges. This study fills a gap in the literature pointed out by Barefoot (2004), Mills (2010), Pascarella (1997), Porter and Swing (2006), and Schrader and Brown (2008). This is the first regional study of community colleges’ rates of retention with the variables of first-year experience. With knowledge of the data in this study, retention rates for public, SACSCOC-accredited community colleges in the southeastern United States can be viewed for the variables of First-Year Experience, First-Year Seminar, Orientation, Learning Communities, Academic Advising, Health and Wellness programs, and Campus Activities. In
addition, data was collected by state, by Carnegie classification, whether or not the institution was a commuter campus, and whether or not the institution was urban or rural and those variables were considered in relation to first-year experience programs, the individual aspects of those programs, and rates of retention.

Commuter campuses, in particular, can use the findings of this study to determine which aspects of a first-year experience program would best fit their college and student population and then make plans to implement those programs. Policymakers may want to look into First-Year Seminars, Orientation, Academic Advising, and Campus Activities in particular, as those aspects of First-Year Experience resulted in higher rates of retention among commuter colleges. A majority of community colleges in this study offered these programs; 78% of respondents offered a First-Year Seminar, 86% offered Orientation, 90% offered Academic Advising, and 91% offered Campus Activities, as seen below in Table 15. Commuter colleges are having a good return rate on these programs based on their retention rates, and could make a contribution to the literature that future studies consider and future policymakers use to determine which programs to offer on their campuses.

Table 15. Differences in Retention Rates among Commuter Campuses

<table>
<thead>
<tr>
<th>Retention Rates of Commuter Campuses Higher than Non-Commuter Campuses with…</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year Seminar</td>
<td>p=.000</td>
</tr>
<tr>
<td>Orientation</td>
<td>p=.003</td>
</tr>
<tr>
<td>Academic Advising</td>
<td>p=.005</td>
</tr>
<tr>
<td>Campus Activities</td>
<td>p=.008</td>
</tr>
</tbody>
</table>

Commuter campuses make up the majority of community colleges in the country (Epstein, 2007), so the findings in this study are important not only for the southeast region, but for all community colleges. This study reiterates Davis’ study at Kennesaw State University
(Georgia), which found positive outcomes of first-year experience programming at a commuter institution (1992). The outcomes of this study also offer an answer to the problems posed by Baldwin, Bensimon, Dowd, & Kleiman (2011) and Braxton, Hirschy, and McClendon (2004) that community college students are often not involved on campus either because of off-campus responsibilities such as jobs or family commitments, or because the college does not offer ways for them to get involved in classroom or cocurricular activities. The findings in this study show that such opportunities for commuter students to get involved are important for retention, and it would benefit not only the student but also the institution to make the effort to implement ways for students to get more involved on campus and to encourage students to utilize those implemented programs. McClenney and Waiwaiole (2005) caution that such implementation must be intentional and structured. Colleges must make an organized and intentional effort to implement programs that involve students in peer and faculty interactions in order to make them as effective as possible (McClenney & Waiwaiole, 2005).

Considering the differences in retention rates among states when certain aspects of First-Year Experience programs were present, policymakers in other states may want to research how Florida, Kentucky, North Carolina, and Virginia organize their Orientation and Academic Advising programs, since those states had higher rates of retention with respect to Orientation and Academic Advising. Almost every respondent in the study offered both Orientation and Academic Advising (86% offered Orientation and 90% offered Academic Advising) but these states seem to be doing something different that is worth considering. Florida and Virginia should also be viewed in terms of Campus Activities. Their retention rates were higher than other states that offered Campus Activities, even though this was the program offered most often among the community colleges in the study, at 91%. The states that were found to have higher
retention rates and the states that were found to have lower rates of retention when compared to those states are seen below in Table 16.

Table 16. Differences in Rates of Retention among States

<table>
<thead>
<tr>
<th>States with higher rates of retention:</th>
<th>Orientation (p=.007 overall)</th>
<th>Academic Advising (p=.032 overall)</th>
<th>Campus Activities (p=.096 overall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida &gt;</td>
<td>LA (p=.029)</td>
<td>LA (p=.023)</td>
<td>N/A</td>
</tr>
<tr>
<td>Kentucky &gt;</td>
<td>LA 9(p=.039)</td>
<td>AL (p=.050)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LA (p=.010)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SC (p=.023)</td>
<td></td>
</tr>
<tr>
<td>North Carolina &gt;</td>
<td>AL (p=.003)</td>
<td>AL (p=.021)</td>
<td>AL (p=.047)</td>
</tr>
<tr>
<td></td>
<td>GA (p=.012)</td>
<td>LA (p=.006)</td>
<td>LA (p=.045)</td>
</tr>
<tr>
<td></td>
<td>LA (p=.001)</td>
<td>SC (p=.010)</td>
<td>SC (p=.024)</td>
</tr>
<tr>
<td></td>
<td>SC (p=.002)</td>
<td>TX (p=.038)</td>
<td>TX (p=.019)</td>
</tr>
<tr>
<td></td>
<td>TX (p=.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia &gt;</td>
<td>LA (p=.014)</td>
<td>LA (p=.011)</td>
<td>SC (p=.042)</td>
</tr>
<tr>
<td></td>
<td>SC (p=.030)</td>
<td>SC (p=.025)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TX (p=.042)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Among Carnegie classifications, only Rural-serving Large institutions showed any advantage over other classifications in terms of retention and First-Year Experience. When First-Year Seminar, Orientation, Academic Advising, and Campus Activities were present, Rural-serving Large community colleges had higher rates of retention, as seen below in Table 17. Although their strategies may not work for Urban-Serving institutions, Rural-serving Small, Rural-serving Medium, and possibly Suburban-Serving institutions could benefit from looking into the strategies used by the Rural-serving Large institutions in the areas of First-Year Seminar, Orientation, Academic Advising, and Campus Activities, especially if those institutions are also in a state that had higher rates of retention in the specified area.
### Table 17. Differences in Rates of Retention among Carnegie Classifications

<table>
<thead>
<tr>
<th>Carnegie classification with higher rate of retention:</th>
<th>First-Year Seminar</th>
<th>Orientation</th>
<th>Academic Advising</th>
<th>Campus Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural-serving Large institutions &gt;</td>
<td>Suburban-serving Single Campus institutions (p=.024)</td>
<td>Suburban-serving Single Campus institutions (p=.012)</td>
<td>Suburban-serving Single Campus institutions (p=.042)</td>
<td>Suburban-serving Single Campus institutions (p=.015)</td>
</tr>
<tr>
<td>Suburban-serving Single Campus institutions (p=.045)</td>
<td>Rural-serving Medium institutions (p=.045)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Learning Communities, a best practice in higher education and supported by the research of Braxton, Hirschy, and McClendon (2004); Jamelske (2009); McClenney and Waiwaiole (2005); Stebleton and Schmidt (2010); and Tinto (1997), did not show any significant results with retention in this study. Only 33% of the responding institutions offered Learning Communities and only 50% of that 33% considered them “Very Important” to their institution. The studies cited here that found positive outcomes in learning communities did not take place in the southeast and that could make a difference in the findings, but it warrants more research. Again, like the other individual components that did not show significance, this study may provide a starting place for studies with a different methodology. Learning communities, and other individual components of first-year experience, such as first-year seminars and orientation, that consistently result in positive outcomes in the literature may result in positive outcomes for public SACSCOC-accredited community colleges, but the right measure has not been found to study them.

Likewise, only 31% of the respondents offered a Health and Wellness program and less than 50% considered them “Very Important” to their institution. On the other hand, 61% of the
respondents offered a comprehensive First-Year Experience program, and 73% considered the program “Very Important” to their institution. These three variables were not found to be statistically significant with any other variable. Again, this could be specific to the southeastern region and should be studied elsewhere, especially given the extent of the literature that points to learning communities and comprehensive first-year experience programs having a positive effect on students and institutions.

This study is the first to consider multiple community colleges within a single region and compare retention rates to variables of first-year experience, state, Carnegie classification, commuter status, and urban or rural location. The findings can provide a platform for future studies to duplicate methodology, theoretical framework, variables, and region, to replicate in other regions and/or statewide systems, or to use with a different methodology or more precise measures of components of the study, such as definitions of first-year experience components. This study can provide baseline data for future studies looking at similar variables and populations.

Limitations

As with any study, the limitation of human error can occur. As mentioned previously, surveys were emailed to a minimum of two individuals at each institution chosen to participate in the study. Eighty responses were returned. Of those responses, 49, or 61%, reported that their institution did offer a comprehensive First-Year Experience program. However, of those 49 respondents, 63% did not offer Learning Communities, 59% did not offer Health and Wellness programs, 12% did not offer a First-Year Seminar, and 10% did not offer Orientation. Most did offer Academic Advising and Campus Activities (96%). Conversely, 19 respondents, or 24%, reported that their institution did not offer a comprehensive first-year experience program.
However, 84% of those institutions did offer Campus Activities, 81% offered Orientation and Academic Advising, 61% offered a First-Year Seminar, 26% offered Learning Communities, and 16% offered Health and Wellness Programs. Those institutions that responded that they did not offer a comprehensive First-Year Experience program showed the greatest number of program offerings, and makes for the greatest discrepancy in this limitation. These findings are seen below in Table 18. While some community colleges may offer most, or all, aspects of first-year experience programs considered by this study (first-year seminar, learning communities, orientation, academic advising, health and wellness programs, and campus activities) but not offer them under one comprehensive umbrella titled “First-Year Experience,” the presence of a large number of the aspects could be considered a comprehensive first-year experience program. For this reason, answers could be skewed based on the respondent’s opinion of whether or not the parts of a first-year experience program equaled a comprehensive program. Although definitions were given in the survey, more precise definitions should be considered for future research. Although this limitation made it difficult to determine results and make inferences for Research Question Eight, it provides greater insight into how to phrase future questions in similar studies.

Table 18. Limitation of Definitions

<table>
<thead>
<tr>
<th>First-Year Experience</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>61%</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>However,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-Year Seminar</td>
<td>12%</td>
<td>61%</td>
</tr>
<tr>
<td>Learning Communities</td>
<td>63%</td>
<td>26%</td>
</tr>
<tr>
<td>Orientation</td>
<td>10%</td>
<td>81%</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>59%</td>
<td>16%</td>
</tr>
<tr>
<td>Academic Advising</td>
<td>4%</td>
<td>81%</td>
</tr>
<tr>
<td>Campus Activities</td>
<td>4%</td>
<td>84%</td>
</tr>
</tbody>
</table>
Another limitation of this study is the response rate. With 80 responses out of 266 distributed surveys, the study has a response rate of 30%. While the response rate was lower than hoped for, it does meet critical limit theorem and can be generalized (Witte & Witte, 2010). With those 80 responses, each state and Carnegie classification was represented and could be compared for the research questions.

Within the aspects of first-year experience programs, there were certain details that were not delineated. For example, various types of first-year seminars exist but were not separated out for the purposes of this study. First-year seminars and orientation programs are sometimes offered for credit, and are sometimes mandatory. Credit versus non-credit and mandatory versus voluntary programs were not considered in this study. In addition, living learning communities are a type of learning community but were not separately included in this study. As the majority of community colleges in the southeastern United States are commuter colleges, the presence of living learning communities as part of a residence hall would not have provided a large affirmative response. While some of the learning communities involved in this study may, in fact, be living learning communities, they were not separated out as only 18% of the responding institutions were non-commuter, or residential, colleges. Delineation of first-year experience program components could be used in future studies.

Implications for Future Research and Practice

The significance of this study was to fill a gap left in the literature by existing studies. Previous studies primarily involved four-year institutions and consisted of single-site studies. This study fills gap in the literature by collecting data from multiple two-year colleges on first-year experience program offerings and rates of retention. The results of this study can be used to further research in this area.
Although statistically significant findings did not result from individual first-year experience program offerings at SACSCOC-accredited public community colleges, future research should be conducted in other regions. First-year experience studies involving community colleges have been conducted primarily in the Midwest (Derby, 2007; Derby & Smith, 2004; Stebleton & Schmidt, 2010; and Zimmerman, 2000). Other studies have been completed in large urban areas, such as the studies done by Fike and Fike (2008) in Texas; by McClenney and Waiwaiole in Texas (2005); by Nakajima, Dembo, and Mossler (2012) in southern California; and by Tinto (1997) in Seattle. Other studies have taken place in Washington (McClenney & Waiwaiole, 2005) and Virginia (Sydow & Sandel, 1998). Each of these studies was a single-site study. Regions and states have not been studied for trends involving first-year experience and retention. Only three of the studies cited in this study have been multiple-site community college studies. Miller, Pope, and Steinmann (2005) studied six community colleges in rural and urban areas and O’Gara, Karp, and Hughes (2009) studied two urban community colleges in the Northeast. Pascarella, Wolniak, and Pierson (2003) studied five community colleges in five different regions; one in a mid-Atlantic state, one in New England, one in the Midwest, one on the West Coast, and one on the Rocky Mountain area; three were in metropolitan areas and two served medium-sized cities.

Individual aspects of first-year experience should be further delineated for future study. For example, first-year seminars offered for credit should be compared to those that are not credit-bearing. In addition, some first-year seminars are mandatory while others are voluntary; differences may be found between those two types of seminar. First-year seminars can extend an orientation, can be designed around a theme, related to an academic area, or offered for students enrolled in developmental courses. Friedman and Marsh (2009) and Porter and Swing (2006)
studies these varying types of seminars, and their work could be expanded upon. These researchers studied four-year institutions, and their studies could be duplicated in two-year institutions to determine whether or not retention rates would differ among types of first-year seminars using the methodology of this study.

Orientation can be compared in much the same way as first-year seminars. Orientation sometimes carries a credit and is sometimes mandatory. Future studies should look at the differences between types of orientations at community colleges. Using the methodology of this study, retention rates could be compared between credit and non-credit and mandatory and voluntary orientation programs.

Pascarella, Wolniak, and Pierson (2003) argue that community colleges cannot be grouped together homogeneously in a study and perhaps that is why no studies have previously been done in this way. However, this study disaggregated the data by state, Carnegie classification, urban versus rural location, and commuter versus non-commuter campus to account for those variations in types of community colleges. This study also meets the demands of Barefoot (2004) who pointed out that few studies meet the standards of experimental design and that even fewer are published.

Just as community colleges are not homogeneous, the student populations attending community colleges are diverse. Community colleges are more likely than their four-year counterparts to enroll minorities, first-generation, lower socioeconomic, part-time students, and those needing remediation (Townsend & Dougherty, 2006). Students also enter community colleges with varying goals, and graduation is not always one of those goals. For this reason, future studies should consider looking at a different population. This study considered first-time, full-time, degree-seeking students in order to utilize the IPEDS Data Center website. However,
this demographic does not describe all community college students. Future studies should consider part-time students, first-generation students, minorities, lower socioeconomic, and those requiring remediation. Those students could be compared to peers at institutions that do not offer first-year experience programs. Some of these populations, including first-generation, minorities, and lower socioeconomic, should also be studied at four-year institutions. Future studies should find a methodology that takes student intent into account, and then track those students to determine whether or not individual students’ goals were reached. The completion of those goals could then be compared to first-year experience programs offered at the students’ college to determine whether or not there is a difference in retention rates when aspects of a first-year experience program are present.

By considering first-year experience, and the variables contained within first-year experience, for an entire region, this study provides a starting point for other researchers to continue looking at multiple regions or statewide systems of community colleges. Prior to this study, very few multi-institutional studies for first-year experience existed. Barefoot (2004) recommends such studies and, as shown here, they can be revealing and beneficial for the participating institutions. According to Mills (2010), only about 10% of the first-year experience literature deals with community colleges; therefore, more studies are needed. As suggested by McClenney and Waiwaiole (2005), the diverse community college student body needs intentional implementation of programs in order to succeed. Statewide and regional policymakers and stakeholders should use this information in this and future studies to provide intentional implementation of those areas of first-year experience that proved beneficial for their type of institution.
Multiple-site studies should be conducted at four-year institutions. According to Schnell and Doetkott (2003), most studies of first-year experience are at four-year institutions and most are single-site studies. Of the four-year college and university studies cited here, 14 were single-site studies and only two were multiple-site studies. The single site studies were conducted in various regions and at varying types of four-year institutions. The two multiple-site studies were extensive, with Keup and Barefoot (2005) studying 50 institutions and Porter and Swing studying 45 institutions (2006). These studies, however, will soon be considered outdated. In fact, the most recent single-site studies were in 2009 (Friedman and Marsh; Jamelske; and Strayhorn).

Porter and Swing (2006) argue that findings from studies at four-year institutions cannot be generalized to two-year institutions and there is a lack of multiple-site studies on first-year experience. The same argument can be made that findings from studies at two-year institutions cannot be generalized to four-year institutions. Therefore, the findings from this study, while generalizable to two-year institutions, should not be used to determine policy at a four-year institution with similar characteristics to the institutions found here. Using the same methodology, multiple-site studies should be conducted at four-year institutions, regionally, statewide, or within a single Carnegie classification. This would give policymakers and stakeholders a more accurate view of what first-year experience programming would be most effective at their institutions.

Qualitative studies should be conducted, particularly in the southeastern region of the United States, as the majority of the respondents offering first-year experience programs and aspects of such programs rated those programs as “Somewhat Important” or “Very Important” on the survey, as shown in a combined percentage of “Importance” in Figure 6, below.
Ken O’Donnell, senior director of student engagement and academic initiatives and partnerships for the California State University system, explained that “a lot of the understanding of the efficacy of these practices has been anecdotal,” (p. 1) speaking of high-impact success programs for students, such as first-year experience. However, he now argues that these practices must be assessed to determine goals and effectiveness (Sander, 2014). While quantitative data is beneficial, it does not tell the entire story, and qualitative data can fill in those gaps. First-year experience programs are often used as deterrents to attrition, and students who are having trouble persisting will have a story to tell. According to Cohen, Brawer, and Kisker (2014), students who dropout often do so early in their college career. Early intervention is crucial for those students (Cohen, Brawer, & Kisker, 2014) and the information learned from those students can provide a qualitative measure of assessment to first-year experience programs.

Quantitative data in the form of retention numbers and how they relate to first-year experience offerings for an individual or group of institutions can give policymakers and stakeholders a starting place from which to delve more deeply into a qualitative study of what works and what does not work for their students. For example, Rhodes and Carifio (1999)
conducted a qualitative study of a first-year seminar program to determine student satisfaction levels. They interviewed students and found that non-traditional aged students did not like the mandatory course (Rhodes and Carifio, 1999). This specific data would have been difficult to glean from a purely quantitative study, but with the qualitative assessment, the researchers were able to give more precise answers and suggestions to those implementing the first-year seminars.

The one statistically significant finding of the net results of this study was that commuter colleges had a higher rate of retention than non-commuter colleges that offered first-year experience programs and components of such programs. This is a variable that should be studied in future research to determine whether or not the finding would be duplicated. The results of this study can be used by policymakers and stakeholders of community colleges with commuter campuses to implement first-year experience programs in order to increase their rates of retention. Eighty-three percent of the community colleges in this study were commuter colleges. Nationwide, 76% of community colleges are commuter colleges (Epstein, 2007). This allows for a great deal of future research and implementation of first-year experience programming on community college campuses not only in the southeast, but nationwide as well.

This study showed that commuter colleges had a higher rate of retention, in particular, when First-Year Seminar, Orientation, Academic Advising, and Campus Activities were present. Baldwin, Bensimon, Dowd, and Kleiman (2011) argue that first-year experience programs can be beneficial for community college students who are commuter students. Commuter students are those that are not usually involved in cocurricular activities and are more likely to need remedial courses than the general student population and for this reason could benefit from first-year experience programs, according to Baldwin, Bensimon, Dowd, and Kleiman (2011). Braxton, Hirschy, and McClendon (2004) add to this argument by stating that commuter
institutions often do not offer structured programs and opportunities for students to get involved on campus; therefore, students are unable to establish a social connection with the campus and with their peers. In addition, many commuter students have off-campus responsibilities such as jobs and families that interfere with their persistence and that persistence can be increased on commuter campuses if students experience a higher rate of involvement, especially in the classroom (Braxton, Hirschy, & McClendon, 2004). The findings in this study show that first-year experience can be a useful tool in helping commuter students to persist in their education. First-year experience programs, and components of those programs, can address these issues by getting commuter students more involved through campus activities, increasing faculty-student interaction through academic advising and first-year seminar, and giving students the opportunity to learn more about resources available to them through the college at orientation. Policymakers and stakeholders of nonresidential community colleges should look into first-year experience, and into orientation, first-year seminar, academic advising, and campus activities in particular, to help increase retention rates for their students.

Rural-serving Large community colleges had higher rates of retention than other Carnegie classifications when First-Year Seminars, Orientation, Academic Advising, and Campus Activities were present. This is another study that should be replicated, not only among SACSCOC-accredited colleges, but in other regions as well. Among the varying Carnegie classifications, the community colleges that participated in the study now have more knowledge about their individual standings in regard to retention and first-year experience programming and can use that information to improve services for their students. As there are 134 Rural-serving Large community colleges in the United States (Carnegie Standard Listings, n.d.), these findings have the potential to influence a large number of institutions. Policyholders and stakeholders of
Rural-serving Large community colleges can use the data from this study to implement aspects of first-year experience programs to influence rates of retention at their colleges.

Using Terenzini and Reason’s Framework for Studying College Impacts, developed from the Foundations of Excellence in the First College Year Project (2005), future studies should consider not only organizational context, but also the peer environment, both of which overlap in a comprehensive first-year experience program and the components that make up a first-year experience program. Terenzini and Reason state that first generation, underrepresented, and lower socioeconomic students leave college at a higher rate than their peers (2005). Since these students are more likely to begin college at a community college, the framework of these researchers gives future studies a natural platform from which to begin collecting data from institutions.

Policymakers and stakeholders at community colleges, and at four-year institutions, should use Terenzini and Reason’s Framework for Studying College Impacts to determine which of the areas of the Framework apply to their institution and need the most attention, and then focus on that element of the Framework for a future study. This study focused on organizational context, but precollege characteristics, the peer environment, or any of the subheadings within those areas could be used as a focus for future study. By starting with the outcomes section of the Framework and knowing the area that needs the most improvement at an individual institution or within a region, a decision could be made as to the focus of the study within either the organizational context, the precollege characteristics, or the peer environment.

Conclusion

Few significant results were found between those that offer first-year experience programs and those that do not offer such programs. Additionally, this study found few
significant results in the differences in retention rates among colleges that offer first-year experience programs and aspects of those programs. However, the findings that were statistically significant are useful for future research and practice at community colleges, especially those with commuter campuses.

Differences found among states and among Carnegie classifications have bearing on future practices by community colleges in those areas and those that belong to Carnegie classifications in which differences were found. Differences found between commuter and non-commuter colleges can be useful for both two-year and four-year institutions. For a broader understanding of the relationship between first-year experience programs and retention rates of community colleges that offer them, future quantitative and qualitative studies should be conducted that continue the trend of multiple institution studies in both two-year and four-year institutions.
REFERENCES


APPENDIX A. Online Survey Submitted to Community Colleges

First-Year Experience at Community Colleges

QConsent: FIRST-YEAR EXPERIENCE CONSENT FORM

FOR QUESTIONS ABOUT THE STUDY, CONTACT:
Rebecca Coats
Enterprise State Community College
600 Plaza Drive
Enterprise, AL 36330
(334) 406-3423

DESCRIPTION:
You are invited to participate in a research study comparing retention rates of public community colleges that offer first-year experience programs, and aspects of first-year experience programs, with retention rates of public community colleges that do not offer such programs. You will be asked 8-15 questions in an online survey about programs that may be offered at your institution and how important you consider those programs. This study will be used to determine whether or not there is a difference in retention rates between those colleges that offer first-year experience programs and components and those colleges that do not.

RISKS AND BENEFITS:
There are no risks associated with this study. The benefit of this study will be an addition to the literature of retention and first-year experience programs in public community colleges. Your decision whether or not to participate in this study will not affect your employment.

TIME INVOLVEMENT:
Your participation in this study will take approximately 5-10 minutes.

SUBJECT’S RIGHTS:
If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from this study. If you have questions about this study, please contact Rebecca Coats using the contact information provided above. If you have questions about your rights as a research participant, contact Ms. Tanta Myles (the University Compliance Officer) at (205) 348-8461 or toll-free at 1-877-820-3066. If you have complaints or concerns about this study, file them through the UA IRB outreach website at http://osp.ua.edu/site/PRCO_Welcome.html. Also, if
you participate, you are encouraged to complete the short Survey for Research Participants online at this website. This helps UA improve its protection of human research participants.

If you understand the statements above, are at least 19 years old, and freely consent to be in this study, click on the YES button to begin.

☐ Yes (1)

Q1 During the 2011-2012 academic year, did your institution offer a comprehensive First-Year Experience program?

- A First-Year Experience program is defined as a set of institutional initiatives designed to promote student success such as developing academic competence, establishing interpersonal relationships, developing an identity, deciding on a career, maintaining personal health and wellness, and developing an integrated philosophy of life (Upcraft, Gardner, & Associates, 1989). A comprehensive First-Year Experience program is offered to first-time college students and can consist of a first-year seminar, learning communities, new student orientation, academic advising, health and wellness programs, campus activities, and other components of a college education that are intentionally designed to work together to promote student success.

☐ Yes (1)
☐ No (2)

Answer If During the 2011-2012 academic year, did your institution offer a comprehensive First-Year Experience program?  A First-Year Experience program is defined as a set of institutional initiatives... Yes Is Selected

Q1a How important do you consider the comprehensive First-Year Experience program to be at your institution?

<table>
<thead>
<tr>
<th>Importance of First-Year Experience (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
<th>Not at all Important (5)</th>
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Q2 During the 2011-2012 academic year, did your institution offer a First-Year Seminar?

- A First-Year Seminar is a one-semester course (sometimes mandatory and sometimes optional) offered to first-year students for a variety of reasons. It can help them become better acquainted with college (such as an extended orientation course that lasts the entire semester), increase their study skills, or it could be based around an academic or degree-centered theme. It is often a one- or two-credit hour course.

☐ Yes (1)
☐ No (2)
Answer If During the 2011-2012 academic year, did your institution offer a First-Year Seminar? A First-Year Seminar is a one-semester course (sometimes mandatory and sometimes optional) offered t... Yes Is Selected

Q2a How important do you consider the First-Year Seminar to be at your institution?

<table>
<thead>
<tr>
<th>Importance of First-Year Seminar (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
<th>Not at all Important (5)</th>
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Q3 During the 2011-2012 academic year, did your institution offer Learning Communities for first-year students?

- A Learning Community is an intentional enrollment of a group of students into one or more courses together for the duration of at least one semester.

○ Yes (1)
○ No (2)

Answer If During the 2011-2012 academic year, did your institution offer Learning Communities for first-year students? A Learning Community is an intentional enrollment of a group of students in... Yes Is Selected

Q3a How important do you consider Learning Communities to be at your institution?

<table>
<thead>
<tr>
<th>Importance of Learning Communities (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
<th>Not at all Important (5)</th>
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Q4 During the 2011-2012 academic year, did your institution offer an Orientation program for first-year students?

- An Orientation program is an introductory program offered to incoming students to become acquainted with the college. It is sometimes mandatory and sometimes optional, and usually lasts one to two days. It does not usually last beyond the one to two day introduction or carry a college credit, as opposed to the extended orientation seminar mentioned in #2.

○ Yes (1)
○ No (2)
Answer If During the 2011-2012 academic year, did your institution offer an Orientation program for first-year students? An Orientation program is an introductory program offered to incoming students... Yes Is Selected

Q4a How important do you consider the Orientation program to be at your institution?

<table>
<thead>
<tr>
<th>Importance of Orientation (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
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</table>

Q5 During the 2011-2012 academic year, did your institution offer Academic Advising to first-year students?
- Academic Advising consists of students being assigned to a specific full-time faculty or staff member who serves as an academic advisor for first-year students.
  - Yes (1)
  - No (2)

Answer If During the 2011-2012 academic year, did your institution offer Academic Advising to first-year students? Academic Advising consists of students being assigned to a specific full-time facult... Yes Is Selected

Q5a How important do you consider Academic Advising to be at your institution?

<table>
<thead>
<tr>
<th>Importance of Academic Advising (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
<th>Not at all Important (5)</th>
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Q6 During the 2011-2012 academic year, did your institution offer Health and Wellness programs for first-year students?
- Health and Wellness programs include educating students on mental and physical health and wellness benefits and/or offering ways for students to increase their mental and physical well-being through an intentional program.
  - Yes (1)
  - No (2)
Q6a How important do you consider the Health and Wellness programs to be at your institution?

<table>
<thead>
<tr>
<th>Importance of Health and Wellness programs (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
<th>Not at all Important (5)</th>
</tr>
</thead>
</table>

Q7 During the 2011-2012 academic year, did your institution offer Campus Activities for first-year students?

- Campus Activities include a variety of options outside of the classroom that increase student involvement and learning, including clubs and organizations, and on- and off-campus events and programming intentionally designed for students. This does not include programming offered for the community or for faculty and staff of the college.

| Yes (1) | No (2) |

Q7a How important do you consider Campus Activities to be at your institution?

<table>
<thead>
<tr>
<th>Importance of Campus Activities (1)</th>
<th>Very Important (1)</th>
<th>Somewhat Important (2)</th>
<th>Neutral (3)</th>
<th>Not very Important (4)</th>
<th>Not at all Important (5)</th>
</tr>
</thead>
</table>

Q8 Is your institution a commuter institution?

- A commuter institution is one in which no residences are offered by the institution. Instead, students arrange their own off-campus housing and commute to campus for class.

| Yes (1) | No (2) |
APPENDIX B. Email Cover Letter Submitted to Community Colleges for Online Survey

To Whom It May Concern:

My name is Rebecca Coats. I am a doctoral student at the University of Alabama. For my dissertation, I am studying the differences between retention rates of southeastern community colleges that offer aspects of first-year experience programs and those community colleges that do not offer aspects of such programs. Because you are an educator at a community college who works closely with students, I am inviting you to participate in this research study by completing the attached survey. The following questionnaire about first-year experience offerings at your institution will take approximately five to ten minutes to complete. The first question is a consent form and a bit longer than the remaining 8-15 questions, which are fairly short and deal with your institution’s offering for first-year students.

Thank you for taking the time to assist me in my educational endeavors and to add to the literature on first-year experience programs at community colleges. The data collected will provide useful and much-needed information on this topic. If you have any questions regarding this survey, please contact me at the email address below.

Sincerely,

Rebecca B. Coats
rbcoats@crimson.ua.edu
APPENDIX C: IRB Approval Letter

April 11, 2014

Rebecca B. Coats
ELPTS
College of Education
The University of Alabama

Re: IRB # EX-14-CM-051 “Rebecca Coats Dissertation Proposal”

Dear Ms. Coats:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your protocol has been given exempt approval according to 45 CFR part 46.101(b)(2) as outlined below:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and
(ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your application will expire on April 10, 2015. If your research will continue beyond this date, complete the relevant portions of Continuing Review and Closure Form. If you wish to modify the application, complete the Modification of an Approved Protocol Form. When the study closes, complete the appropriate portions of FORM: Continuing Review and Closure.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number.

Good luck with your research.

Sincerely,
FIRST-YEAR EXPERIENCE CONSENT FORM

FOR QUESTIONS ABOUT THE STUDY, CONTACT:
Rebecca Coats
Enterprise State Community College, 800 Plaza Drive, Enterprise, AL 36330
(334) 406-3423

DESCRIPTION: You are invited to participate in a research study comparing retention rates of public community colleges that offer first-year experience programs, and aspects of first-year experience programs, with retention rates of public community college that do not offer such programs. You will be asked seven questions in an online survey about programs that may be offered at your institution and how important you consider those programs. This study will be used to determine whether or not there is a difference in retention rates between those colleges that offer first-year experience programs and components and those colleges that do not.

RISKS AND BENEFITS: There are no risks associated with this study. The benefit of this study will be an addition to the literature of retention and first-year experience programs in public community colleges. Your decision whether or not to participate in this study will not affect your employment.

TIME INVOLVEMENT: Your participation in this experiment will take approximately five to ten minutes.

SUBJECT’S RIGHTS: If you have read this form and have decided to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

If you have questions about this study, please contact Rebecca Coats using the contact information provided above. If you have questions about your rights as a research participant, contact Ms. Tanta Myles (the University Compliance Officer) at (205) 348-8481 or toll-free at 1-877-820-3088. If you have complaints or concerns about this study, file them through the UA IRB outreach website at http://osp.ua.edu/site/IRCO_Welcome.html. Also, if you participate, you are encouraged to complete the short Survey for Research Participants online at this website. This helps UA improve its protection of human research participants.

If you understand the statements above, are at least 19 years old, and freely consent to be in this study, click on the _____ (CONTINUE or I AGREE) button to begin.

UA IRB Approved Document
Approval date: 4-11-14
Expiration date: 4-10-15