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Student Retention and First-Year Programs: A Comparison of Students
in Liberal Arts Colleges in the Mountain South

A dissertation

presented to

the faculty of the Department of
Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Jeff S. Howard

December 2013

Dr. Bethany Flora, Chair
Dr. Susan Epps
Dr. Catherine Glascock
Dr. Don Good

Keywords: Retention, Liberal Arts Colleges, First-Year Programs, First-Year Student

ABSTRACT

Student Retention and First-Year Programs: A Comparison of Students in Liberal Arts Colleges in the Mountain South

by

Jeff S. Howard

The purpose of this study was to examine the association between the retention rate and 9 first-year student programs at Liberal Arts Colleges in the Mountain South, a region in the southern Appalachian Mountains of the United States. Nine first-year programs were studied: Summer Bridge Programs, Preterm Orientation, Outdoor Adventure Orientation, Targeted Seminars, Learning Communities, Early Warning/Early Alert Systems, Service Learning, Undergraduate Research, and Assessment. The data for this study were accessed via the college database of The National Center for Education Statistics (NCES, 2013). Chi Square tests were used for analysis to identify associations between first-year student retention and the presence of each of the 9 programs. The results indicated that the presence of each of the 9 first-year programs was not significantly related to first-year student retention.

DEDICATION

I dedicate this work to my lovely wife Laine Howard in appreciation of her unwavering love and support.

ACKNOWLEDGEMENTS

I appreciate the support of my doctoral advisory committee chair, Dr. Bethany Flora and members Dr. Susan Epps, Dr. Catherine Glascock, and Dr. Don Good. I truly appreciate your support and guidance.

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CHAPTER 1

INTRODUCTION

Institutional administrators in higher education struggle with student attrition and develop programs and support mechanisms to boost retention (Derby & Smith, 2004; Jacobs & Archie, 2008; Tinto, 1993). Half of all students who do not persist in college drop out by the end of the first-year and do not return (Tinto, 2002). This has led to increased efforts by colleges and universities to develop, refine, and sustain first-year student programs and services (McPherson, 2007). The most important factors in increasing student retention are interaction with other members of the campus community, including faculty, staff, and peers, as well as successful student integration into the social and academic fabric of the campus (Astin, 1993; Tinto, 2002).

First-year students, like all students, at a university comprise a diverse mixture of personal traits, backgrounds, experiences, and assorted learning styles. Each of these unique student characteristics can either enhance or inhibit successful integration to the campus community (Choy, 2001; Pascarella & Terenzini, 1983). Thus, academic and social integration are the most important factors in predicting successful incorporation with the institution and persistence from the first-year to the second (Cabrera, Nora, & Castaneda, 1993; Ishitani, 2003).

To be fully integrated, both academically and socially, a first-year student must successfully navigate the strange new college environments. Institutions have developed and refined comprehensive support programs aimed at encouraging and supporting academic and social excellence to assist students in this navigation (Nava, 2010). Such programs aimed at traditional new students have been generalized under a blanket term — first-year programs.

Historically, first-year programs coalesced around the common theme of college adjustment in the freshmen year. Professionals working with new students became more intentional about sharing best practices and strengthening the national conversation on the topic of structured orientation programs and the academic experience in the freshman year, including special seminar courses (Brown, 1981). The resulting professional organizations such as the Association for Orientation, Transition, and Retention in Higher Education (NODA, 2013) and annual conferences like the 32nd Annual Conference on the First-year Experience (NRC, 2013), the 20th National Conference on Student in Transition (NRC, 2013), and the 16th International First-Year in Education Conference (FYHE, 2013) are all an indication of the continuing national and international dialogue.

Background of the Study

First-year programs are defined as institutional efforts aimed at successfully integrating new students into the academic and social fabric of an institution as well as efforts aimed at reducing attrition through positive and plentiful interaction (Astin, 1993; Tinto, 2002). Institutions are not required to offer first-year programs, yet many find them to be important to student success and retention. The ultimate goal of first-year programs is to promote and enhance student success.

Statement of the Problem

The purpose of this study is to evaluate the association between various first-year programs and student retention. The researcher examined the following first-year programs: Summer Bridge Programs, Preterm Orientation, Outdoor Adventure Orientation, Targeted

Seminars, Learning Communities, Early Warning/Early Alert Systems, Service Learning, Undergraduate Research, and Assessment. The presence or absence of these first-year programs was compared to retention rates of first-year students at six liberal arts colleges in the Mountain South, a region in the southern Appalachian Mountains of the United States.

Research Questions

Using quantitative research methodology, the study was an examination of the presence of nine first-year programs and the retention rates for first-year students at six liberal arts colleges in the Mountain South. Retention rates were determined using fall-to-fall undergraduate enrollment information. The study addressed the following research questions:

RQ1: Is there a significant difference in the retention rates of institutions that have Summer Bridge Programs and the retention rates of institutions that do not have Summer Bridge Programs?

RQ2: Is there a significant difference in retention rates of institutions that have Preterm Orientation and the retentions rates of institutions that do not have Preterm Orientation?

RQ3: Is there a significant difference in retention rates of institutions that have Outdoor Adventure Orientation and the retention rates of institutions that do not have Outdoor Adventure Orientation?

RQ4: Is there a significant difference in retention rates of institutions that have Targeted Seminars and the retention rates of institutions that do not have Targeted Seminars?

RQ5: Is there a significant difference in retention rates of institutions that have Learning Communities and the retention rates of institutions that do not have Learning Communities?

RQ6: Is there a significant difference in retention rates of institutions that have Early Warning/Early Alert Systems and the retention rates of institutions that do not have Early Warning/Early Alert Systems?

RQ7: Is there a significant difference in retention rates of institutions that have Service Learning and the retention rates of institutions that do not have Service Learning?

RQ8: Is there a significant difference in retention rates of institutions that have Undergraduate Research and the retention rates of institutions that do not have Undergraduate Research?

RQ9: Is there a significant difference in retention rates of institutions that have Assessment of the First-year Program and the retention rates of institutions that do not have Assessment of the First-year Program?

Significance of the Study

Increasingly, colleges and universities benchmark and implement best practices aimed at student retention. Student retention is a key indicator of student success. Retention rates are metrics used in performance funding that an institution receives from the state or federal government. Performance funding was implemented to hold institutions more accountable, as a way for government to advocate for student outcomes, an effort to produce a more entrepreneurial spirit within higher education, and an attempt at increasing effectiveness and efficiency (Dougherty, Natow, Bork, Jones, & Vega, 2013).

Parents and students searching for the perfect college home are apt to use published retention rates as a means of comparing institutions. Printed and online college guides, such as the College Navigator hosted by the Integrated Postsecondary Education Data System, a division

of the National Center for Education Statistics (NCES) within the U.S. Department of Education and the Institute of Education Sciences, helps by collecting, analyzing, and making available educational data (NCES, 2013.) By gaining insights into which first-year programs are most effective, institutions may adjust existing programmatic efforts to positively influence student success and retention.

Delimitations of the Study

The first-year programs at liberal arts colleges in the Mountain South area of the United States were examined in this study. These institutions represent both public and private institutions. Six schools were included in the study, with two schools each from the states of North Carolina, Tennessee, and Virginia. Due to the limited geographic selection of these six schools, the results from this study are not generalizable to all institutions of higher education. A second delimitation is the selection of nine components of first-year programs. Results could differ if additional components of first-year initiatives were included in the study.

Limitations of the Study

The primary limitation of the study is that students often participate in more than one first-year program. The design of this study did not allow for exploration of the interaction effects of simultaneous participation in multiple first-year programs. Researcher bias is a limitation given the author's 15-year career spent in the field of student affairs and first-year programs.

Overview of the Study

Nine first-year program initiatives were evaluated by examining the relationship between the program and the retention rate for first year to second year. This study includes five chapters. Chapter 1 introduces the study, statement of the problem, and significance of the research. Chapter 2 presents a literature review of the history and development of first-year programs within higher education including research related to the nine programmatic areas: Summer Bridge Programs, Preterm Orientation, Outdoor Adventure Orientation, Academic/Transition Seminars, Learning Communities, Early Warning/Academic Alert Systems, Service Learning, Undergraduate Research, and Assessment. Chapter 3 presents the methodology, data collection, and data analysis. Chapter 4 presents the results of the study. Chapter 5 offers a conclusion and discussion of the results and the implications for future research, policy, and practice.

Definition of Terms

To assist with clarification, the following working definitions were developed for use in the study:

Assessment - “Programs and services must have a clearly articulated assessment plan to document achievement of stated goals and learning outcomes, demonstrate accountability, provide evidence of improvement, and describe resulting changes in programs and services (CAS, 2013).”

Early Warning/Academic Alert Systems - A flagging system to alert a student and the faculty/academic advisor(s) on scholastic performance or classroom issues, early enough in the

timeframe of the class so that appropriate referrals can be made to intervene and assist the student as needed (Lorenzetti, 2009).

First-Year Program or First-Year Experience - Terminology used to describe the totality of a college or university's program and services geared toward the success and retention of first-year students. The John N. Gardner Institute for Excellence in Undergraduate Education has categorized such programs and services into seven classifications: Summer Bridge Programs, Preterm Orientation, Academic/Transition Seminars, Learning Communities, Early Warning/Academic Alert Systems, Service Learning, and Undergraduate Research (Barefoot, Griffin, & Koch, 2012).

Academic/Transitions First-year/Targeted Seminar - An academic course that aims to enhance the academic and social integration of first-year students by bringing together a variety of new student specific topics, essential skills for college success, and selected processes (Hunter & Linder, 2005; Jessup-Anger, 2011;).

Learning Communities - Learning communities integrate course curriculum by linking one or more academic courses with a student cohort in order to promote learning and foster personal development in a supportive environment enhanced by peer interaction (Mahoney & Schamber, 2011).

Liberal Arts College - Colleges that are primarily undergraduate institutions with a focus on teaching rather than research. They are generally smaller in size, have a residential emphasis, smaller class sizes, and high levels of faculty and student interaction both in and out of the classroom. Typically, students at liberal arts colleges complete 2 years of coursework centered on developing critical thinking and rhetoric skills before beginning study in a major field of study (COPLAC, 2012).

Mountain South - An area within the southern Appalachian Mountains identified by the Appalachian Regional Commission as the South Central subregion encompassing northeast Tennessee, southwest Virginia, and western North Carolina (ARC, 2012).

Outdoor Adventure Orientation - A type of college orientation program that brings together small groups, typically 15 or less, first-year students and uses adventure experiences happening out of doors in a wilderness setting with at least one overnight component (Bell, Holmes, Marion, & Williams, 2010).

Preterm Orientation - A program geared at helping new students, and sometimes their parents and family members, adjust to college life through interaction with faculty, staff, and students during programming, activities, tours, and advising (Disbro, 1995).

Retention - In institutions of higher education, the term retention refers to the continuous enrollment of a student from one term or year through to the next (Fowler & Luna, 2009).

Service Learning - A service-learning opportunity allows students to apply classroom skills and learning to a community problem in a hands on manner resulting in increased knowledge, deeper understanding, and skill refinement through the solving of the problem and through interaction with a diverse group of stakeholders (Sheffield, 2005).

Summer Bridge Programs - Programs providing an important head start to college by offering an opportunity for new students to become comfortable within the new environment through intensive academic instruction typically lasting 4 to 5 weeks and usually encompassing remediation as needed, low cost, a residential option, and peer mentoring resulting in increased confidence and performance (Adams, 2012).

Undergraduate Research - "...an investigation by an undergraduate that makes an original intellectual or creative contribution to a discipline. Regardless of the nature of

individual undergraduate research programs, such research gives students an insight into the scientific enterprise that is unrivaled by any other part of the curriculum. It is important that undergraduate research is fun and engaging and that it endows students with commitment and proprietorship of their own projects (Halstead, 1997, pg. 1390).”

CHAPTER 2

REVIEW OF LITERATURE

Prior studies on first-year program initiatives assume one of several forms: (a) a national study focused on the number of institutions that offer various elements of a first-year initiative, (b) an aimed study directed at one element of a first-year program such as Targeted Seminars, or (c) the focused examination of one group or population of students engaged in one or more aspects of the first-year experience. A focused analysis of the entirety of first-year initiatives to compare the presence of these initiatives to student retention has yet to be conducted. Furthermore, the present study advances the original line of inquiry by taking a focused, regional investigation to compare first-year program success at similar institutions.

The important components needed to study first-year programs are a review of the needs of first-year students that might be both similar to and unique from other students and the variables an institution might use to predict the success and retention of first-year students. The examination of first-year programs and components is a relatively young field of study in the higher education literature with only 22 years since the inaugural national survey on the first-year seminar was conducted (Fidler & Fidler, 1991).

The Needs of the First-Year Student

In her book, *My Freshmen Year*, college professor Rebecca Nathan (2005) returned to the classroom as a student to observe and immerse herself in the first-year college experience as an adult. Nathan wrote of the large and small barriers that can impact student happiness, success, retention, and persistence. The author reflected on her experience in the residence halls, of

language barriers, happenings in the cafeteria, and the disconnect she witnessed between faculty and students. Nathan perceived a growing gap in communication and interaction between faculty and students, resulting in a detrimental impact on the camaraderie formed between student and professor in a classroom setting.

Cross (1982) conducted general research on learning in college, specifically focused on the first 2 years and how learning occurs in the general education classes required of all students. It is through the general education courses that all students engage in a common and shared experience in a variety of disciplinary areas. Exposure to a broad range of subject areas allows students to focus on the areas in that they are most adept. In essence, students naturally find their way to the areas in that they find most comfortable and will direct their own educational path.

In his theory of multiple intelligences Gardner (1983) explained the different ways that people learn. Gardner (1993) was also practical in developing a theory that could be put into practice. He developed seven intelligences including linguistic intelligence (learning through speaking or hearing), bodily-kinesthetic intelligence (learning through the use of one's body), and interpersonal intelligence (the process of learning through interaction and communication with others).

Vella's (1994) offered guidelines (12 principles for effective adult learning) to take into account when planning any program for adult students. The 12 steps include topics such as conducting a needs assessment, taking safety into account, defining and establishing clear roles, and the importance of engagement. Knowles (1984) and his ideas on andragogy laid out five characteristics of the adult learner to take into account. These 5 areas are (a) adults have a developed self-concept, (b) adults bring their own experiences to the table, (c) as adults mature they develop a readiness to learn, (d) adults prefer an immediacy to the application of learning,

and (e) motivation is internal and increases with age and maturity. Astin (1991, 1994) provided historical perspective on the freshman year over the past decade, while Boyer (1997) provided a broader and more sweeping overview of the undergraduate experience in America.

Predictors for Success and Retention

Bebergal (2003) examined demographic and academic factors at a mid-size, public, 4-year institution in southeast Florida, including the type of orientation program the student attended that might be used as predictors of first-year retention. Little concrete data were determined to be linked to persistent students, yet two major factors were linked to those who left the institution: students were enrolled in a lower number of credit hours than persistors and departing students accumulated greater student loan debt than persistors.

Fulcomer (2003) examined a cohort of students at a small, private college located in Northwest Ohio to determine predictors that affect retention of first- and second-year students. Major findings of the study included the importance of using student information such as number of schools the student applied to, whether the student would be playing varsity athletics, if the student would have a work study position, and the students' level of satisfaction with their experience at the school. Academic achievement and satisfaction were important factors for retention.

The comparison of varying student attributes over a period of time has been beneficial for institutional administrators who wish to establish a model to predict student success. A longitudinal study conducted at a Northeast Tennessee community college (French, 2007) established several factors the institution could use to predict the successful fall-to-fall semester retention of first-time freshmen. The factors leading to retention were: semester grade point

average; remedial course enrollment; credit hours completed; and applying for admission more than 61 days in advance of the first day of classes. The factors leading to attrition, or the unsuccessful retention of students, were: receiving only Pell grants, applied science degree candidate, and GED completion.

O'Rear (2004) determined what influences academic achievement specific to the success of new students at 43 Baptist colleges in the United States. This unique study concentrated on the retention efforts of many institutions working to improve their rates, instead of looking at individual institutions. O'Rear collected data broadly and used the compiled material to develop a predictive model that could be used by other, similar institutions to compare and contrast predicted versus realized retention rates. Average entrance examination scores and the costs of attendance versus the amount of financial aid awarded were examined. The study was broad in scale and compared institutions of varying sizes and locations.

Fidler (1989) was an early researcher at the forefront of the field of student retention and examined one aspect of the first-year experience, called targeted seminars. Research indicated that participation in a freshman seminar course enhanced learning and was linked to an increase in student retention to the sophomore year (Fidler, 1990). Further study showed similar findings when comparing school-by-school retention and when examining a seminar course offered at a large land-grant institution (Fidler & Shanley, 1993). The increase in retention of first-year students was found in the general student population as well as in subgroups, where an increase in the retention of African-American students was found among students enrolled in a first-year seminar course (Fidler & Godwin, 1994).

History of First-Year Programs in the United States

Following the student movements, riots, protests, and sit-ins that rocked college campuses in the 1960s, university leadership worked to heal the resulting rifts and build a sense of community among campus constituents. University of South Carolina President Thomas Jones developed the idea of a new freshmen seminar course that he saw as one possible way to overcome these fractures. In 1972 the first South Carolina students enrolled in University 101 (Our History, 2012).

The occurrences at South Carolina were being seen throughout the United States giving rise to the incorporation of their model at other institutions. In 1982 South Carolina hosted peers and colleagues in a discussion of its first-year seminar model and in 1983, John N. Gardner, the faculty director of University 101, coordinated the first Annual Conference on The Freshman-Year Experience. The University of South Carolina had established itself at the forefront of the first-year programs movement and thus formed the National Resource Center at the university in 1986. As the center continued to grow and evolve, it went through several different names, finally adopting its current moniker, the National Resource Center for The First-Year Experience and Students in Transition in 1998 (Our History, 2012).

As the seminar model saw success, it was copied and expanded. New staffing and new offices developed around the transition and first-year programs. This new area also became the center of new assessment and evaluation tools to measure program effectiveness. Programs were refined, enhanced, grew, and initiatives were focused and honed. New partnerships were established and bridges built between the academic and student affairs areas toward a shared goal of student success and retention, with the result being first-year programs as they are known today (Upcraft & Gardner, 1989).

Gardner went on to establish the Policy Center on the First-Year of College in 1999, now called the John N. Gardner Institute for Excellence in Undergraduate Education, housed in Brevard, North Carolina. The Institute established the Foundations of Excellence program for institutions to conduct self-study of their first-year initiatives and to compare their work to that of their peers. The Gardner Institute, along with the Center at South Carolina, is still at the forefront of the first-year program movement (JNGI History, 2012).

Summer Bridge Programs

Colleges and universities can benefit from prediction models that include specific characteristics to help develop first-year programs aimed at retaining students. Stuart (2010) stated that colleges are increasingly using early detection mechanisms to target students with academic weaknesses and limited financial means. These precollege programs, also called bridge programs, are geared toward providing students with additional support and resources to undergird success and reduce risk factors.

Bridge programs grew out of the idea of strengthening the support and resources available for freshman. Ackermann (1990) touted the benefits of such a program for students of underrepresented populations and from low-income families. Ackermann tracked students who participated in a summer program for two terms after the program. The program involved an intensive 6-week course for new freshman and/or transfer and the program offerings related to transitional issues and adjusting to campus life. The hope was that the program would bolster student academic achievement and increase retention by allowing students to gain a comfort level with the new college environment. Furthermore, bridge program students were given the opportunity to engage with various campus contacts and resources. The results of the study

indicated that participants were more academically successful and persisted at a higher rate than nonparticipants.

Summer Bridge Programs (SBPs) have been one retention effort aimed at positively influencing the academic preparation and skills of entering freshmen prior to the first day of classes. Usually residential in nature, SBPs may target new students based on various categories (race or ethnicity, socioeconomic status, test scores, GPA, etc.). Students may participate in seminars and preparatory classes, complete learning support requirements, or work towards the completion of for credit courses. Such programs allow students to experience college life in a unique, resource-rich environment of challenge and support designed to facilitate student success.

Strayhorn (2011) examined the impact of a SBP on one cohort of students in four specific areas: academic self-efficacy, personal sense of belonging, academic skills, and social skills. Results indicated that the SBP had the most significant impact in the academic realm with cohort members achieving a GPA that averaged 30% higher than peers who did not participate in such a program.

Preterm Orientation

New student orientation programs can take many forms, from online versions, to on ground, traditional day events, to outdoors or wilderness experiences. What new student orientations have in common are some desired outcomes. A successful orientation assists students in their transition to the university, generates a higher degree of learning both in and out of the classroom, aids in social integration, and helps students find their niche in the campus community (Robinson, 1996).

In 1989 The Carnegie Foundation for the Advancement of Teaching in conjunction with the American Council on Education conducted a year-long national study of campus life among institutions of higher education. The process included a literature review, campus visits, and a survey of 500 colleges and universities. Results indicated that higher education was in good health and generally well managed. However, some consistent themes impacting institutions as a community of learning also emerged. Colleges were concerned by student apathy, the abuse of alcohol, racial and diversity issues, and a general sense of incivility. The colleges acknowledged these problems but felt unprepared to address the concerns (Boyer, 1990).

The Carnegie Foundation addressed these areas of concern by building their final report around six characteristic principles (called communities) that are inclusive of the social and academic functions of campus life and that provide a measure for the health of the community of learning in the first-year and beyond. A purposeful community maintains a focus on knowledge and academics and yields a partnership of the faculty and students to fortify teaching and learning. An open community provides for civil discourse in an environment of honesty, integrity, and mutual support. A just community maintains an environment of respect, affirmation, and equality for all. A disciplined community means all members of the campus community agree to abide by prescribed and well defined procedures governed by the common good. A caring community encourages service and the intense support of the well-being of each community member. A celebrative community values traditions, rituals, and continuity (Boyer, 1990). These six areas offer a framework for the success of the university community.

Other aspects of the first-year experience that influence a student's success include those activities that occur prior to enrollment and the first day of classes, namely orientation activities. Hodum (2007) examined the perception of one such program's effectiveness by analyzing the

faculty, staff, and students at a liberal arts college with a specific focus on retention and the successful integration of new students. Although Hodum looked at only one college and one first-year experience component, the orientation program's success was linked to the positive feeling students had about their personal campus experience. The environment that was created at the orientation naturally generated interaction amongst the new students and formation of friendships and family group type networks. Pre- and postevaluations of first-year students participating in orientation activities indicated that the students had impractical ideas about what their academic, personal, and social life would be like while at college (Krallman, 1997). In general, the orientation experience helped students better gauge and adjust to more reasonable expectations.

Academic advisors and their relationship with first-year students play an important role in orientation programs and in student success (Swanson, 2006). Research at one small faith-based liberal arts college demonstrated that having extra time with a professional staff member trained on academic advising and learning about the student's strengths on a personal basis resulted in a higher rate of persistence amongst those students. A study of African American freshmen (Brown, 2008) examined participation in a minority orientation program on the social adjustment and retention rates of the students at the predominantly white university. Students participating in the program were compared with students who did not. Participants were found to be more socially adjusted and to have successfully completed more credit hours than their counterparts who were not participating in the program.

The most effective orientation programs are those aimed at increasing retention based on both student and university needs and interests, delivered in an appropriate format, and able to target specific student populations. Lorenzetti (2002) suggested guidelines for creating an online

orientation program for new online students. Recommendations included breaking the information into manageable sections, formatting content as if it is an online course to grow familiarity with the format, discussing the similarities and difference between classroom and online academics, promoting awareness of campus resources and access, and continually reviewing and assessing the program.

Neither the real nor the perceived outcomes are any different for an online orientation aimed at virtual students or an on campus orientation involving personal interaction. The objectives are the same: both should promote and enhance retention, develop a sense of belonging and connection with the institution and one's peers, and facilitate interaction and get students involved in their own educational experience (Scagnoli, 2001). Online orientation may not be limited to occurring prior to enrollment. St. Leo University implemented an online orientation class required of all new students to be completed sometime during their first semester of enrollment. Retention increased from 50% to 65% (Putre, 2008).

Outdoor Adventure Orientation

The impact of experiential learning based programs such as Outdoor Adventure Orientation must be assessed by examining the participants' perceptions of the program and the impact the program had on their university experience. Wolfe (2011) assessed the effectiveness of an intentional outdoor orientation program based on proven retention factors and examination of the participant's experience. Those students participating in the outdoor orientation experienced a greater feeling of connection and commitment to both peers and the institution, a stronger sense of transition, and felt personal growth and development were more well-rounded.

Students are each unique and their learning styles and personal interests vary greatly. An outdoor orientation program would not be of interest to every student, but for students with a passion for the outdoors it might be more enticing and engaging than the traditional, classroom orientation experience. Brown (1998) found that students completing an outdoor orientation program were better acclimated and retained at a high rate than their peers in other types of orientation programs.

Outdoor Adventure Orientation programs have seen steady growth in participants and offerings over the past 2 decades (OOPS, 2013). The Association of Outdoor Recreation and Education hosts an annual symposium on the subject and also tracks national participation. The organization's last census in 2012, shows that the number of institutions hosting programs grew from 162 in 2006 to 185 in 2012 and that participants increased by more than 5,000 during the same time period (OOPS, 2013).

Some orientation programs, including Outdoor Adventure Orientations, may not occur preterm, or prior to the semester of enrollment. Some programs continue through the opening of the new academic year or extend throughout the entire first semester; these are often called extended orientation programs. They may or may not be linked to a targeted seminar course and might include outdoor adventure components such as low ropes or high ropes courses, team building exercise, or physical activity components. The effects of an extended orientation program on both academic performance and retention of first-year students was conducted by Lehning (2008). The study showed that freshmen who participated in the university's program were retained to their sophomore year at a higher rate and that such students also had achieved a slightly higher grade point average than nonprogram participants.

Targeted Seminars

The University of South Carolina's successful implementation of a freshmen orientation seminar resulted in other schools quickly adopting its model. The original program was expanded and evolved as it went through varying reiterations to mesh with the differing campus cultures and climates. The importance of such programs to the recruitment and retention of students was soon heralded by admissions and registrar staff members who saw these efforts as a means of both making new students feel welcome and supporting and educating them on the skills and resources available to help them succeed (Gardner, 1986).

Cuseo (1990, 1991) offered a thorough review of the history, foundations, and components that make up a seminar course as well as discussion of potential models. Although the names of first-year seminar type courses vary widely by institution, from First-Year Experience, Freshmen Year Experience, University 1000, College 101, and others, the consistent purpose of such courses is to support and retain new students. A byproduct of freshmen seminars is the professional development of instructors, faculty, and administrative staff in the areas of relationship building, increased levels of interaction and communication, development of learning outcomes, and the reduction of barriers (Gardner, 1980).

The freshman seminar began taking on many different characteristics and was adapted to meet the individual needs of the host institution. Barefoot and Fidler (1991) found the most common seminar types to be those centered on the topic of transition issues or more of an orientation to university life model, or topical seminars based on one academic area of study, professional skill building, or study skills development. One third of the respondents indicated that their institution's seminar was a hybrid combining one or more of these topics. The institutions did report outcomes that appeared to be consistent among all types of courses. These

included the development of meaningful relationships among their peers, purposeful contact between the instructor and students, an attempt to support and encourage academic achievement, and building a skill set necessary for success.

Some universities require enrollment in a first-year seminar while others simply suggest, recommend, or encourage enrollment. Some seminars are for credit, others are either pass or fail, and others are entirely voluntary with no repercussions for not participating. Malik (2011) found that students participating in a voluntary first-year seminar were more likely to be successfully integrated into the social fabric of the campus. Student participation in the program was greatly influenced by the fact the course was not for credit and was voluntary.

At the beginning of their third decade of existence, the freshman seminar was examined and studied as its own entity, having taken on a life of its own. Fidler and Fidler (1991) surveyed 1,164 colleges and universities that had instituted seminars to determine the saturation level for the course and course components. Freshman seminar courses characteristically included topics such as adjustment and study skills aimed at improving the students' integration to the campus, comfort level at handling the stress of college, and campus resources in place to provide support. Some seminars were required of all new students, others for certain at-risk student populations, such as students enrolled in developmental or remedial courses, while still others were entirely optional as electives. Smith (1992) found that students required to participate in either a required course or in academic tutoring self-reported they found the requirement had a positive impact upon their aptitude for learning and upon course grades.

The effectiveness of the first-year seminar and the course's role in retention efforts has been continually assessed. Harroun (2005) studied the impact that such a course had on the retention of students at Baker College. Student academic records for first-year students and

course evaluations were reviewed and compared with the same information for students enrolled prior to the first-year seminar being introduced. First-year seminar instructors were also surveyed to determine what topics were covered in the course sessions. Harroun found that the first-year seminar's implementation had a significantly positive influence on retention and further noted that some discrepancies existed between which topics the faculty member found to be relevant compared to those the students considered important to their success. A similar study conducted at Urbana University (Weisgerber, 2005) also found a higher retention rate from freshmen to sophomore year amongst students who successfully completed the first-year seminar course, entitled University 101.

Tinto (1996) advocated for extending the freshman seminar beyond one course and linking a block of classes together creating cohorts of students or learning communities. Tinto argued this change would have little impact on faculty and could be accomplished with only minor changes in scheduling, while the impact on the academic experience of first-year students could be significant. Examination of these linked courses indicated that students in a freshman seminar tied to at least one course in an academic discipline were retained at a higher rate and had higher grades compared to students who did not participate in such linked courses (Dick, 1998).

Learning Communities

In an effort to undergird academic success and achievement of first-year students, many colleges and universities develop extracurricular opportunities aimed at increasing retention and offering additional means for student support. A learning community is one such program. In a learning community, similar to long standing residential college models at Oxford and Harvard,

students may be grouped by interest, major, career goal, or some other characteristic. In these cohorts the students participate in classes and/or programming aimed at boosting both academic and social integration. In a living learning community the students may also live together on a floor within a residence hall or in a designated building.

As the freshman seminar transitioned to a more holistic and encompassing approach to become a freshman program or first-year experience, it is easy to understand why one of the first substantial efforts beyond the seminar course began in the area of housing and residence life. Many institutions house hundreds to thousands of students with some requiring freshman residency. Regardless of the exact circumstances, any institution with a housing program was sure to have a significant first-year student population at its fingertips. This pool of freshman began being targeted with an array of both broad and precision programs (Zeller, 1991). These programs ranged from coordinated efforts at how freshman were placed in room assignments, to how they might be grouped into floors or halls as a new student community, and what types of training might be provided to the hall staff, mostly peers serving as Resident Advisors. Programming gained momentum and topics such as leadership, personal safety and decision making, career-planning, and multicultural and diversity awareness were all incorporated into wellness and/or holistic model approaches to student development.

Likewise, the jump from residence life programming and outreach activities to more concerted residence hall efforts like the Living Learning Community (LLC) was not a major leap but more of a slight realignment. Kahrig (2005) evaluated the residential learning communities at Ohio University. The Ohio programs were created on the principle of strengthening involvement and relationship through commonalities of their freshmen students. By building communities tied together by shared interests, the university hoped to build peer connections, increase

academic achievement and retention, improve the level of student satisfaction, and increase the level of interaction between the faculty and the study body. The most significant outcomes of the study were significant, positive effects between peer mentoring and engagement, academic engagement outside the classroom, and the level of student satisfaction in connection to the retention of first-year students.

The increased focus on the first-year experience and seminar and the resulting linkage created between the areas of student affairs and academic affairs as a result, continued to influence many other aspects of student services. Traditional notions of sole responsibility by one area began to be replaced with the idea that many offices and areas shared responsibility for student success. This became evident in more team or committee approaches to many aspects of student life, including academic advising. Upcraft (1995) collected stories of challenges and successes related to the advising of first-year students. The results indicated a greater awareness of student development theory and ideologies on transition. The role of technology was continuing to grow and was seen as untapped opportunity to enhance advising and student contact. The role of mentoring by faculty and in training and recognizing faculty for successes was explored, as was the idea of linking advising to other first-year initiatives like the Living Learning Community and programs targeting specific populations such as adult students.

Research specifically targeting underrepresented campus populations and their involvement with first-year program initiative has been conducted. One study of Latino students at a private university (Engstrom, 2008) examined student participation in a learning community. Students relayed that they enjoyed their involvement with the community. Some enjoyed the experience but found the high level of social interaction and engagement somewhat of a distraction. Overall, students did not feel their participation affected their retention to

sophomore year any more or any less. Pike (2011) found that students participating in a learning community achieved higher grades during their first semester than peers who did not participate. Pike examined themed learning communities in that students self-selected to participate because of a personal interest in the topic.

Early Warning/Early Alert Systems

Successful intervention during the first-year of college can have the biggest impact on student grades and retention (Pan, 2008). Along with improving classroom engagement, expanding tutoring services and other academic resources, and providing midterm grade reporting, the early alert systems are increasingly becoming a part of a plan to retain and graduate students (Powell, 2003).

Trying to impact student success and overcome challenges means addressing student issues as early as possible. Institutions continue to look at ways to reach out to students earlier and earlier in the academic term. Early alert systems are one growing mechanism for doing just that. Lorenzetti (2009) discusses one such program at Dakota State University where a web based system for referrals allows academic advisors to collect alerts and concerns via a web portal. The information is used in a targeted effort to intercede with the student early enough in the semester to make an impact and to generate positive change.

Early alert systems can target specific predictors of success such as class attendance. A study conducted at Florida A&M (Hudson, 2005-2006) examined the effectiveness of intervention based on absenteeism. Slightly more than 48% of the students submitted to the early alert system reported for excessive absences during the first 6 weeks of the semester went on to pass the course. Another 15% of the students dropped the courses for which they had been

reported for missing. Students were engaged by the process of being contacted and related they were not aware their attendance was being watched so carefully and were pleasantly surprised by the guidance they received.

Part of the success of early alert warning systems is that they can take a holistic approach to student success and connect faculty, academic counselors, residence life, student life, student health, the counseling center, and other university constituencies in a unified response targeted to a particular student's needs. This communication between offices helps to break down any silos on the campus and increase communication and the sharing of academic performance, absences, extracurricular activities, social or judicial concerns, and financial, personal, family, or health issues impacting students and their academic performance. By looking at the big picture, the institution can work with students to look at options and determine a plan to help students through whatever issue(s) are impacting their life (Wasley, 2007).

Service Learning

After decades of what he saw as the crumbling fragility of higher education, Greenleaf (1977) developed a new concept of service and leadership. The idea is built on the notion that servant-leaders are first and foremost of service to others and put other people's needs before their own. The servant grows and develops knowledge and skills and inherently becomes a leader. The leader has the heart of a servant and puts the needs of others before his or her own in hopes of seeing those served become better individuals who are also intent on serving others (Greenleaf, 1977).

The Greenleaf idea of servant leadership quickly found advocates within the field of education. It was a natural fit. Those involved in education served others and were leaders.

They strived to model this behavior for their students. Taylor (1997) expounded the idea that service to others was of the highest precedence within education. The residual effects of service are significant and plentiful. Service yields a strong close knit community, a broad notion of cooperation and teamwork, and a sense of involvement and inclusiveness in the process.

Through their service, leaders are able to communicate and relate to those around them, build relationships and partnerships, seek to better each member of the group and to assist others in their own personal development. Servant leaders are forward in their thinking and serve as trustees who work in the best interest of both the organization and the individual to bring about positive change. Service learning in the first-year of college promotes student success and civic engagement resulting in increased persistence (Zlotkowski, 2002). This learning component can be successfully integrated into a first-year seminar experience or other required coursework.

Gardenhire (1996) identified the major reasons for student failure in the first-year as boredom with the academic program, adjustment issues with the transition to college, and a general lack of preparedness for college. Conversely, these obstacles could be positively affected through the first-year seminar or other first-year programs through such simple means as learning the names of the students in the class and engaging all students in classroom discussion. Other suggestions to breach the barriers to student achievement and a successful transition include creating a classroom environment where students collaborate and instruction methods are varied to meet all learning styles. The case is made for the significant role that mentoring and feedback, both short term and long, play in helping students reach their goals.

The mentoring by one's peers, another form of service learning, as opposed to that of professional staff members helps to engage first-year students and assists in creating an environment of support (Hamid, 2001). Peer mentoring also offers students who successfully

navigated the first-year of college the opportunity to develop and hone their own leadership skills by working with the institution's newest students. A peer mentor program relies heavily on recruiting students committed to the program and well aware of their obligations as well as training those students to meet the associated challenges.

A growing emphasis in higher education is linking a service learning component with the first-year seminar but some research has shown the strength of each is not necessarily multiplied when the two are combined. Stevens (2007) compared students in the same first-year seminar course who participated in service learning versus those who did not. What service learning and the first-year seminar had individually yielded separately in terms of engagement, retention, academic achievement, and satisfaction was not demonstrated when the two were merged. No significant differences between the two student populations were reported.

Some institutions incorporate service learning components into their first-year seminar, others simply promote opportunities for student involvement, and still others have developed first-year student courses centered on the topic of and active participation in service learning. A service learning course tends to integrate the social and academic experience of the student, build self-confidence, and strengthen the student's sense of belonging or connection to the institution, a by-product of which is increased persistence (Hutchinson, 2010).

Undergraduate Research

An increase in student success and retention rates indicates that colleges and universities have worked hard to engage students in the learning process, increase the number of students participating in undergraduate research, and have broadened traditional first-year experience programs to encompass an array of programmatic aspects (Spanier, 2009). Through participation

in research opportunities during the first-year, students are more likely to earn higher grades and be retained. The students are also more likely to confirm their choice of major (Marcus, 2010).

Research allows students the opportunity to gain insights into the field and to see the professional applications of their work. Students participating in undergraduate research have overwhelmingly indicated it was a positive experience from which they gained personal experience and professional understanding (Seymour, 2004). Various models for successful research have included partnering undergraduates with faculty members or graduate student mentors. One such program at the University of Kentucky pairs first- and second-year undergraduate students with graduate students. These partnerships have produced an increase in the amount of research and the number of resulting publications and served to successfully facilitate a large number of undergraduates into the research field (Hutchinson, 2004).

Undergraduate research has also been used as a tool to target various at-risk student populations. Conditionally admitted students at one university conducted research alongside a faculty mentor. The program was tied to a living and learning community so that participants lived and worked with peers involved in research projects as well. Students involved with the program had better academic records and improved socialization as well as higher rates of retention. The program's success was predicated on the fact students were able to visualize themselves as scholars and researchers (Ward, 2008).

The role of mentoring seems to play a huge role in the success of undergraduate research programs. The mentoring relationship helps students confirm their interest in a chosen major or career path and can generate enthusiasm in their chosen path. Faculty can achieve these results through research projects alone, but similar results can be achieved by incorporating research initiatives into the classroom (Karukstis, 2007). Undergraduate research also serves to add both

a real and perceived value to the student's educational experience. Colleges and universities can use research programs as a marketing and recruitment tool for both students and faculty members. Research programs raise the profile of the department or major and aid in retention (Randall, 2011).

Assessment

Tinto's model of student departure (Tinto, 1987, 1993) has been used as an overarching guide for developing and refining retention programs for first-year students. The model proposes that students must be successful in five areas (commitment, adjustment, social integration, academic difficulty, and congruence) in order to persist and be retained. At one private, 4-year, religiously affiliated, liberal arts university, Tinto's (1993) model of student departure was used to evaluate four different retention programs at the school. Students were surveyed and asked to evaluate the orientation program, first-year seminar, academic advising, and strengths-based student development all through the lens of each of the five components of Tinto's model. Results demonstrated that three of the four retention efforts produced effective results with the strengths based development not yielding positive results.

Tinto's theory of student departure (1993) was used alongside Astin's (1993) Inputs-Environments-Outputs model as a basis for comparison of the effectiveness of several institutional programs geared towards the retention of first-year programs. In this instance, this included living learning communities, interest groups for first-year students, and the first-year seminar course. Results for the campus indicated that students who participated in the interest group had higher grades than their peers and were retained at a rate of 18% higher than those participating in the university's other programs (Purdie, 2007).

The formation of guidelines for assessing the first-year experience is important (Gardner, 1986, 1990). Assessment should not only examine the seminar or other individual component but should examine the role of the faculty member as both a facilitator and mentor (Gardner, 1981). The first-year experience, especially the seminar, offers opportunities for increasing the effectiveness of instruction and of learning but must be evaluated and assessed so that best practices are shared and replicated (Gardner, 1980).

Tinto's (1993) theory of student withdrawal was used by the University of Northern Colorado to determine the effectiveness of the university's first-year experience program. The study's focus was on how the aspects of Tinto's theory impacted student participation and persistence in the first-year experience seminar course. The study looked at not just the seminar but if it was linked to other courses, related to any specific major, and what the size of the class was. Analysis indicated the program was effective in retaining students through to the spring semester but less effective in yielding an increase in retention numbers from fall to fall. The results also indicated that linking courses with a major or specific course of study strengthened retention. Recommendations were made to strengthen commitment through a higher level of student engagement with the institution, activities, and faculty and staff, as well as extending the seminar into a freshmen year long program. (Adam, 2008)

Summary

There are numerous first-year programs available to institutional administrators who oversee student retention and the goal of all of these first-year programs is to retain and matriculate students. First-year programs must take into account the varied and diverse population of the institution, the school's unique characteristics and opportunities, and the many

factors impacting first-year student retention. Much research has been conducted on student retention. Generally the focus is quite narrow and focused exclusively on one program or institution. Little research has been conducted on a cross-section of first-year programs to examine the effects of multiple first-year retention programs simultaneously. Furthermore, no existing research could be located in the literature related to student retention and first-year programs that target students at liberal arts colleges in the Mountain South. Thus, additional research is needed to examine the relationship between first-year program initiatives and retention rates at liberal arts colleges in the Mountain South.

CHAPTER 3

RESEARCH METHODOLOGY

The focus of this study is the first-year program attributes at six liberal arts colleges and their associations with fall-to-fall retention rates within the colleges. In this chapter, the population, research design, collection methods, and data analysis are described.

Research Questions and Null Hypotheses

A quantitative study was conducted to determine connections between program attributes with fall-to-fall retention rates of first-year students at six liberal arts colleges in the Mountain South. A quantitative study was chosen because it is the most appropriate approach when using postpositive statements for generating a greater understanding and using data that will result in statistical data (Creswell, 2003). Corresponding hypotheses were developed for this series of research questions:

RQ1: Is there a significant difference in the retention rates of institutions that have Summer Bridge Programs and the retention rates of institutions that do not have Summer Bridge Programs?

H₀1: There is no significant difference in the retention rates of institutions that have Summer Bridge Programs and the retention rates of institutions that do not have Summer Bridge Programs.

RQ2: Is there a significant difference in the retention rates of institutions that have Preterm Orientation and the retention rates of institutions that do not have Preterm Orientation?

H₀2: There is no significant difference in the retention rates of institutions that have Preterm Orientation and the retention rates of institutions that do not have Preterm Orientation.

RQ3: Is there a significant difference in the retention rates of institutions that have Outdoor Adventure Orientation and the retention rates of institutions that do not have Outdoor Adventure Orientation?

H₀3: There is no significant difference in the retention rates of institutions that have Outdoor Adventure Orientation and the retention rates of institutions that do not have Outdoor Adventure Orientation.

RQ4: Is there a significant difference in the retention rates of institutions that have Targeted Seminars and the retention rates of institutions that do not have Targeted Seminars?

H₀4: There is no significant difference in the retention rates of institutions that have Targeted Seminars and the retention rates of institutions that do not have Targeted Seminars.

RQ5: Is there a significant difference in the retention rates of institutions that have Learning Communities and the retention rates of institutions that do not have Learning Communities?

H₀5: There is no significant difference in the retention rates of institutions that have Learning Communities and the retention rates of institutions that do not have Learning Communities.

RQ6: Is there a significant difference in the retention rates of institutions that have Early Warning/Early Alert Systems and the retention rates of institutions that do not have Early Warning/Early Alert Systems?

H₀6: There is no significant difference in the retention rates of institutions that have Early Warning/Early Alert Systems and the retention rates of institutions that do not have Early Warning/Early Alert Systems.

RQ7: Is there a significant difference in the retention rates of institutions that have Service Learning and the retention rates of institutions that do not have Service Learning?

H₀7: There is no significant difference in the retention rates of institutions that have Service Learning and the retention rates of institutions that do not have Service Learning.

RQ8: Is there a significant difference in the retention rates of institutions that have Undergraduate Research and the retention rates of institutions that do not have Undergraduate Research?

H₀8: There is no significant difference in the retention rates of institutions that have Undergraduate Research and the retention rates of institutions that do not have Undergraduate Research.

RQ9: Is there a significant difference in the retention rates of institutions that have Assessment of the First-year Program and the retention rates of institutions that do not have Assessment of the First-year Program?

H₀9: There is no significant difference in the retention rates of institutions that have Assessment of the First-year Program and the retention rates of institutions that do not have Assessment of the First-year Program.

Sample

The nonrandom sampling technique of purposive sampling was used to select the colleges included in this study. Nonrandom sampling is appropriate for educational studies that

use colleges or programs as the unit of analysis (Sweetland, 1972). The sampling frame used for the study was the college database of The National Center for Education Statistics (NCES, 2013). The following criteria were used to generate the sample: (a) 4-year, liberal arts colleges, (b) located within a 250 mile radius of both the National Resource Center for The First-Year Experience and Students in Transition located in Columbia, South Carolina, and the John N. Gardner Institute for Excellence in Undergraduate Education located in Brevard, North Carolina, (c) located within the southern Appalachian Mountains identified by the Appalachian Regional Commission as the South Central subregion encompassing northeast Tennessee, southwest Virginia, and western North Carolina (ARC, 2012), (d) with undergraduate enrollment, retention, and demographic data from fall 2010 to fall 2011 listed on the database of The National Center for Education Statistics (NCES, 2013), and (e) with identified components of a first-year program.

Using a geographic cluster sampling strategy, two institutions from each state within the Appalachian Regional Commission's classification of the South Central subregion and meeting the criteria selected. Limitations for cluster sampling are naturally occurring variance in characteristics between samples such as political and cultural differences (Ray, 1983). Although the six colleges identified for this study are within three separate states, regionally the area shares many cultural and social similarities as denoted by the Appalachian Regional Commission in its classification of this area as the South Central subregion (ARC, 2012). The cluster sample area offers both a small-scale version of a larger population while maintaining regional similarities; being simultaneously and internally heterogeneous and externally homogeneous (Zelin & Stubbs, 2005). Advantages to cluster sampling are the ability to reduce confounding through isolation, an increased efficiency in generating the sample, and the ability to target naturally

occurring clusters within the population (Teddlie & Yu, 2007). Likewise, a geographic cluster sample means that the study can be replicated with ease.

Two colleges each from Tennessee, North Carolina, and Virginia that met the criteria were selected: Emory and Henry College, Mars Hill College, Milligan College, Tusculum College, University of North Carolina Asheville, and the University of Virginia's College at Wise. Demographic data describing the make-up of the student body including age, gender, and race, as denoted in The National Center for Education Statistics' database were included in the study.

Instrumentation

The data for this study were housed in the database of The National Center for Education Statistics, a center of the Institute of Education Services (IES, 2012), which is the research arm of the United States Department of Education (DOE, 2012), and collected via instrument from the six colleges. The longevity of the system undergirded validity as the collection of data by NCES is highly standardized. Using NCES data aids in the reduction of bias as most instances occur during the collection of data (Good & Hardin, 2003).

Data Collection

In addition to the demographic and retention data collected from NCES, first-year program attribute data were collected via instrument. The instrument measured the presence or absence of nine different first-year program initiatives at each institution. The instrument was developed by the researcher to identify the most common aspects of first-year programs based on

research and the literature review (See Appendix A). Upon collection the data were transmitted to the Statistical Package for Social Sciences (SPSS), version 20.0

Data Analysis

The data were analyzed using appropriate statistical techniques for the hypotheses under consideration as shown in Table 1. The criterion variable was retention, which was defined as continued enrollment for first-year students from entry in their first fall semester through to continued enrollment in the following academic year. A preliminary data analysis to ascertain descriptive statistics was conducted. The data were analyzed using Chi Square test of independence (two-way contingency table). The .05 level of significance was used as the alpha level to test each hypothesis.

Table 1

Analysis Method

Research Question	Type of Data	Coding	Statistical Tests
RQ 1 – RQ9 (there are nine Research questions in this study)	Ordinal (0, 1)	Present = 1 Absent = 0	descriptive statistics Chi Square

CHAPTER 4

RESULTS AND ANALYSIS OF DATA

The strengthening global market has made attaining a postsecondary degree an important accomplishment for the recipient, the degree granting institution, and the regions in which both student and institution are located. Efforts to grow the number of adults with postsecondary degrees are twofold, increase accessibility of potential students and the retention of current students (Madgett & Belanger, 2008). Earning a postsecondary degree has socioeconomic, health, and financial benefits. In 2010 at least one third of the available jobs in the United States required a postsecondary degree (Bureau of Labor Statistics, 2010). Many universities are continually assessing programs and factors that may aid in increasing student retention (Copeland & Levesque-Bristol, 2010). The purpose of this study was to investigate if any associations existed between the absence or presence of nine first-year programs and the retention rate of new students in an effort to provide information to those working with retention and persistence initiatives at institutions of higher education.

The population consisted of six liberal arts colleges with first-year programs located in the Mountain South area or Southern Appalachian region of the United States of America and listed on the database of The National Center for Education Statistics. Retention data for this study were housed at The National Center for Education Statistics (NCES, 2013). The time period and retention rate used in the study was the rate of first-year students enrolling in fall 2010 and persisting to the subsequent fall 2011 semester. The national average of retention rates for students enrolling at 4-year public and private institutions in 2010 and returning for fall 2011 was 68.2% (ACT, 2010).

Nine research questions were developed to direct the study, and nine corresponding hypotheses were tested. A preliminary analysis of the data was conducted and descriptive statistics are reported on those data. The Chi Square test of independence was used to determine if there was an association between each variable (each of the nine first-year programs) and fall-to-fall retention.

The chapter is divided into three primary sections. The first section provides an overview of the six institutions and indicates which of the nine programs are offered at each institution. The second section provides the results of analysis for the research hypotheses. The third section summarizes the results.

Institutional Demographic Overview

Descriptive information for each of the colleges in the study is provided below.

Emory and Henry College

Emory and Henry College is a private, coeducational, liberal arts college, affiliated with the United Methodist Church and located in rural Emory, Virginia. The college was founded in 1836 and is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In 2011 Emory and Henry College's undergraduate enrollment was 939 students. The average cost of attending Emory and Henry College in 2011 was \$18,613 with 48% of students receiving federal grants and 73% receiving federal student loans. In-state students comprise 56% of the student body and out-of-state students make up 44%. Women comprise 48% of the enrollment and men 52%. Full-time students encompass 96% and part-time students 4% of the student body. Based on self-reports, the college's student body is 9% Black or African American, 2% Hispanic/Latino, 82% White, 2% Multiracial, 5%

unknown, and 2% Non-Resident Alien. The retention rate for first time, full-time students from fall 2010 to fall 2011 was 73% (NCES, 2013).

Mars Hill College

Mars Hill College is a private, coeducational, liberal arts college located in a rural setting in Mars Hill, North Carolina. Founded by those of the Baptist faith, the college has no religious affiliation, although it does partner with the Cooperative Baptist Fellowship of North Carolina and provides some scholarship through the Baptist State Convention of North Carolina. The college was founded in 1856 and is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In 2011 Mars Hill College's undergraduate enrollment was 1,281. The average cost of attending Mars Hill College in 2011 was \$18,807 with 53% of students receiving federal grants and 78% receiving federal student loans. In-state students comprise 63% of the student body, out-of-state students make up 34%, and international students 3%. Women comprise 50% of the enrollment and men 50%. Full-time students encompass 92% and part-time students 8% of the student body. Based on self-reports, the college's student body is 2% American Indian or Native Alaskan, 1% Asian, 17% Black or African American, 3% Hispanic/Latino, 71% White, 3% unknown, and 4% Non-Resident Alien. The retention rate for first time, full-time students from fall 2010 to fall 2011 was 60% (NCES, 2013).

Milligan College

Milligan College is a private, coeducational, liberal arts college maintaining an active relationship with the Christian Churches/Churches of Christ and located in Milligan College, Tennessee. The college was founded in 1866 and is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In 2011 Milligan

College's undergraduate enrollment was 984 students. The average cost of attending Milligan College in 2011 was \$15,840 with 34% of students receiving federal grants and 60% receiving federal student loans. In-state students comprise 58% of the student body and out-of-state students make up 42%. Women comprise 60% of the enrollment and men 40%. Full-time students encompass 92% and part-time students 8% of the student body. Based on self-reports, the college's student body is 1% Asian, 5% Black or African American, 3% Hispanic/Latino, 85% White, 2% Multiracial, and 2% Non-Resident Alien. The retention rate for first time, full-time students from fall 2010 to fall 2011 was 80% (NCES, 2013).

Tusculum College

Tusculum College is a private, coeducational, liberal arts college located in Greeneville, Tennessee. The college was founded in 1794 by Presbyterians, maintains a relationship with the Presbyterian Church, and is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In 2011 Tusculum College's undergraduate enrollment was 1,914 students. The average cost of attending Tusculum College in 2011 was \$15,689 with 74% of students receiving federal grants and 88% receiving federal student loans. In-state students comprise 64% of the student body, out-of-state students make up 34%, and international students 2%. Women comprise 58% of the enrollment and men 42%. Full-time students encompass 96% and part-time students 4% of the student body. Based on self-reports, the college's student body is 1% Asian, 13% Black or African American, 2% Hispanic/Latino, 81% White, 2% unknown, and 2% Non-Resident Alien. The retention rate for first time, full-time students from fall 2010 to fall 2011 was 59% (NCES, 2013).

University of North Carolina at Asheville

The University of North Carolina at Asheville is a public, coeducational, liberal arts college located in an urban setting in Asheville, North Carolina. Founded in 1927 as the Buncombe County Junior College, it joined the University of North Carolina system in 1969. The college is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In 2011 the University of North Carolina Asheville's undergraduate enrollment was 3,814 students. The average cost of attending the University of North Carolina Asheville in 2011 was \$9,131 with 33% of students receiving federal grants and 45% receiving federal student loans. In-state students comprise 84% of the student body, out-of-state students make up 16% and international students comprise 1%. Women comprise 56% of the enrollment and men 44%. Full-time students encompass 82% and part-time students 18% of the student body. Based on students self-reports, the college's student body is 1% Asian, 3% Black or African American, 4% Hispanic/Latino, 85% White, 2% multiracial, 3% unknown, and 1% Non-Resident Alien. The retention rate for first time, full-time students from fall 2010 to fall 2011 was 80% (NCES, 2013).

University of Virginia's College at Wise

The University of Virginia's College at Wise is a public, coeducational, liberal arts college located in a rural setting. The college was founded in 1954 as Clinch Valley College of the University of Virginia and is regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). In 2011 the University of Virginia's College at Wise's undergraduate enrollment was 2,067 students. The cost of attending the University of Virginia's College at Wise in 2011 was \$10,774 with 51% of students receiving federal grants and 56% receiving federal student loans. In-state students comprise 96% of the student body and

out-of-state students make up 3%. Women comprise 56% of the enrollment and men 44%. Full-time students encompass 73% and part-time students 27% of the student body. Based on students self-reports, the college's student body is 1% Asian, 9% Black or African American, 2% Hispanic/Latino, 82% White, 4% unknown, and 1% Non-Resident Alien. The retention rate for first time, full-time students from fall 2010 to fall 2011 was 62% (NCES, 2013).

Table 2 details all nine programs and all six schools indicating which programs are present or absent at each institution. Institutional enrollment and retention information for undergraduates is reported in Table 3.

Table 2

Program Presence or Absence by Institution

Program	Emory & Henry	Mars Hill	Milligan	Tusculum	UNC Asheville	UVa-Wise
Summer Bridge Program	Present	Absent	Absent	Present	Present	Absent
Pre Term Orientation	Present	Present	Present	Present	Present	Present
Outdoor Adventure Orientation	Absent	Absent	Absent	Absent	Present	Absent
Targeted Seminar	Absent	Present	Absent	Present	Present	Present
Learning Communities	Absent	Absent	Absent	Present	Absent	Absent
Early Warning/ Early Alert	Present	Present	Present	Present	Present	Present
Service Learning	Present	Present	Present	Present	Present	Present
Under-graduate Research	Absent	Absent	Present	Present	Present	Present
Assessment	Absent	Present	Present	Present	Present	Present

Table 3

Institutional First-Year Enrollment and Retention Analysis

School	First-Year Students Enrolled Fall 2010	First-Year Students Retained Fall 2011	Retention Rate	Number of Programs
Emory & Henry	248	180	73%	4
Mars Hill	273	164	60%	5
Milligan	176	141	80%	5
Tusculum	354	208	59%	8
UNC Asheville	593	473	80%	8
UVa-Wise	399	249	62%	6

Programmatic Variables Analysis

Programmatic variables were researched in order to determine if the retention rates of students varied by institution based on the absence or presence of nine first-year program initiatives. The demographic variables researched were Summer Bridge Programs, Preterm Orientation, Outdoor Adventure Orientation, Academic/Transition Seminars, Learning Communities, Early Warning/Academic Alert Systems, Service Learning, Undergraduate Research, and Assessment.

Research Question 1: Summer Bridge Programs

Is there a significant difference in the retention rates of institutions that have Summer Bridge Programs and the retention rates of institutions that do not have Summer Bridge Programs?

H₀1. There is no significant relationship in the retention rates of institutions that have Summer Bridge Programs and the retention rates of institutions that do not have Summer Bridge Programs.

A two-way contingency table analysis was conducted to evaluate the null hypothesis that there is no association in retention between institutions with Summer Bridge Programs and those without such programs. The analysis indicated that the association between Summer Bridge Programs and first-year student retention was not significant, $X^2(1, N = 6) = .67, p = .41$; therefore, the null hypothesis was retained. Table 4 indicates program frequency, associated percentages, standard deviation, and range.

Table 4

Summer Bridge Program Analysis

Summer Bridge Program	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	2	66.7	1	33.3	70.67%	10.693	59% - 80%
Absent	1	33.3	2	66.7	67.33%	11.015	60% - 80%

Research Question 2: Preterm Orientation

Is there a significant difference in the retention rates of institutions that have Preterm Orientation and the retention rates of institutions that do not have Preterm Orientation?

H₀2: There is no significant difference in the retention rates of institutions that have Preterm Orientation and the retention rates of institutions that do not have Preterm Orientation.

Preterm Orientation was a constant and was present at all six institutions; therefore, the data did not lend itself to the planned analysis. The program frequency, associated percentages, standard deviation, and range are reported in Table 5.

Table 5

Preterm Orientation Analysis

Preterm Orientation	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	3	50	3	50	69%	9.879	59% - 80%

Research Question 3: Outdoor Adventure Orientation

Is there a significant difference in the retention rates of institutions that have Outdoor Adventure Orientation and the retention rates of institutions that do not have Outdoor Adventure Orientation?

H₀3: There is no significant difference in the retention rates of institutions that have Outdoor Adventure Orientation and the retention rates of institutions that do not have Outdoor Adventure Orientation.

A two-way contingency table analysis was conducted to evaluate the null hypothesis that there is no association in retention between institutions with Outdoor Adventure Orientation and those without such programs. The analysis indicated that the association between Outdoor Adventure Orientation and first-year student retention was not significant, $X^2(1, N = 6) = 1.2, p = .27$; therefore, the null hypothesis was retained. Table 6 indicates program frequency, associated percentages, standard deviation, and range.

Table 6

Outdoor Adventure Orientation Analysis

Outdoor Adventure Orientation	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	1	100	0	0	80%	-	-
Absent	2	83.3	3	16.7	66.80%	9.257	59% - 80%

Research Question 4: Targeted Seminar

Is there a significant difference in the retention rates of institutions that have Targeted Seminars and the retention rates of institutions that do not have Targeted Seminars?

H₀4: There is no significant difference in the retention rates of institutions that have Targeted Seminars and the retention rates of institutions that do not have Targeted Seminars.

A two-way contingency table analysis was conducted to evaluate the null hypothesis that there is no association in retention between institutions with Targeted Seminars and those without such programs. The analysis indicated that the association between Targeted Seminars and first-year student retention was not significant, $X^2(1, N = 6) = 3.0, p = .08$; therefore, the null hypothesis was retained. Table 7 indicates program frequency, associated percentages, standard deviation, and range.

Table 7

Targeted Seminar Analysis

Targeted Seminar	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	1	25	3	75	65.25%	9.912	59% - 80%
Absent	2	100	0	0	76.50%	4.950	73% - 80%

Research Question 5: Learning Communities

Is there a significant difference in the retention rates of institutions that have Learning Communities and the retention rates of institutions that do not have Learning Communities?

H₀₅: There is no significant difference in the retention rates of institutions that have Learning Communities and the retention rates of institutions that do not have Learning Communities.

A two-way contingency table analysis was conducted to evaluate the null hypothesis that there is no association in retention between institutions with Learning Communities and those without such programs. The analysis indicated that the association between Learning Communities and first-year student retention was not significant, $X^2(1, N = 6) = 1.2, p = .27$; therefore, the null hypothesis was retained. Table 8 indicates program frequency, associated percentages, standard deviation, and range.

Table 8

Learning Communities Analysis

Learning Communities	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	0	0	1	100	59%	-	-
Absent	3	60	2	40	71%	9.592	60% - 80%

Research Question 6: Early Warning/Early Alert System

Is there a significant difference in the retention rates of institutions that have Early Warning/Early Alert Systems and the retention rates of institutions that do not have Early Warning/Early Alert Systems?

H₀6: There is no significant difference in the retention rates of institutions that have Early Warning/Early Alert Systems and the retention rates of institutions that do not have Early Warning/Early Alert Systems.

Early Warning/Early Alert Systems was a constant and was present at all six institutions; therefore, the data did not lend itself to the planned analysis. The program frequency, associated percentages, standard deviation, and range are reported in Table 9.

Table 9

Early Warning/Early Alert Analysis

Early Warning/ Early Alert	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	3	50	3	50	69%	9.879	59% - 80%

Research Question 7: Service Learning

Is there a significant difference in the retention rates of institutions that have Service Learning and the retention rates of institutions that do not have Service Learning?

H₀7: There is no significant difference in the retention rates of institutions that have Service Learning and the retention rates of institutions that do not have Service Learning.

Service Learning was a constant and was present at all six institutions; therefore, the data did not lend itself to the planned analysis. The program frequency, associated percentages, standard deviation, and range are reported in Table 10.

Table 10

Service Learning Analysis

Service Learning	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	3	50	3	50	69%	9.879	59% - 80%

Research Question 8: Undergraduate Research

Is there a significant difference in the retention rates of institutions that have Undergraduate Research and the retention rates of institutions that do not have Undergraduate Research?

H₀8: There is no significant difference in the retention rates of institutions that have Undergraduate Research and the retention rates of institutions that do not have Undergraduate Research.

A two-way contingency table analysis was conducted to evaluate the null hypothesis that there is no association in retention between institutions with Undergraduate Research and those without such programs. The analysis indicated that the association between Undergraduate Research and first-year student retention was not significant, $X^2(1, N = 6) = .00, p = 1.00$; therefore, the null hypothesis was retained. Table 11 indicates program frequency, associated percentages, standard deviation, and range.

Table 11

Undergraduate Research Analysis

Under-graduate Research	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	2	50	2	50	70.25%	11.325	59% - 80%
Absent	1	50	1	50	66.50%	9.192	60% - 73%

Research Question 9: Assessment

Is there a significant difference in the retention rates of institutions that have Assessment of the First-year Program and the retention rates of institutions that do not have Assessment of the First-year Program?

H₀9: There is no significant difference in the retention rates of institutions that have Assessment of the First-year Program and the retention rates of institutions that do not have Assessment of the First-year Program.

A two-way contingency table analysis was conducted to evaluate the null hypothesis that there is no association in retention between institutions with Assessment and those without such programs. The analysis indicated that the association between Assessment and first-year student retention was not significant, $X^2(1, N = 6) = 1.20, p = .27$; therefore, the null hypothesis was retained. Table 12 indicates program frequency, associated percentages, standard deviation, and range.

Table 12

Assessment Analysis

Assessment	Above National Average		Below National Average		Mean Retention	Standard Deviation	Range
	N	%	N	%			
Present	2	40	3	60	68.20%	10.826	59% - 80%
Absent	1	100	-	-	73%	-	-

Summary

Chapter 4 included nine research questions along with associated hypotheses. Also included were the analyses of the data and the related tables. Chapter 5 contains the summaries and interpretations of the findings and the conclusions based upon the analysis. Chapter 5 also includes limitations of the study, recommendations for practice, and recommendations for further research.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS, IMPLICATIONS FOR PRACTICE, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Summary of the Study

The retention of students has been a focus of research within higher education for decades. Information about the influence of first-year programs toward the retention of first-year students is important to consider in institutional planning processes. The effectiveness of these first-year programs' investments has enduring effects on budgets, retention, and enrollment. Compounding the issue, however, is the variance in first-year program make-up and offerings from institution to institution. The preponderance of research in the field of first-year programs focuses exclusively on one program component. Researchers may examine one aspect at one institution over a period of time or perhaps the one program attribute at several divergent institutions. Limited research exists that focuses exclusively on liberal arts institutions, less so those in a similar geographic area, and no empirical studies could be identified that compared multiple program types to retention.

The objective of this study was to provide recommendations to the six participating liberal arts colleges and to the greater body of knowledge regarding the association of first-year experience program attributes and the related association with retention for the purpose of continuous improvement and to offer recommendations for future research.

Summary of the Findings

The following section delineates the findings of the data analysis conducted to address the nine research questions.

Research Question 1: Summer Bridge Program

Is there a significant difference in the retention rates of institutions that have Summer Bridge Programs and the retention rates of institutions that do not have Summer Bridge Programs?

The mean retention rate for the three schools with Summer Bridge Programs was 70.67% in a range of 59% to 80% while the mean retention rate for the three schools without the program was 67.33% within a range of 60% to 80%. Schools with Summer Bridge Programs averaged a retention rate that was 3.34% higher than those without the program. A Chi Square indicated that there was no significant association between the retention of students at schools with or without the program. The presence of Summer Bridge Programs at three institutions tends to support research (Stuart, 2010) that colleges are increasingly using earlier and earlier intervention programs. Summer Bridge Programs allow institutions to target at-risk students in an attempt to impact their academic success as early as possible in hopes of a positive impact on retention. Ackermann (1990) found that participants in Summer Bridge Programs were retained at a higher rate and were more successful academically. Likewise Strayhorn (2011) found Summer Bridge Programs had a significant impact on academic grade point average. Professional literature in this area has established a positive association between participating in a Summer Bridge Program and academic performance. Less clear is if Summer Bridge Programs are impactful on first-year student retention. Additional research on the various components and types of Summer Bridge Programs is recommended to determine what program aspects most significantly impact academic performance and which are most influential to first-year student retention.

Research Question 2: Preterm Orientation

Is there a significant difference in the retention rates of institutions that have Preterm Orientation and the retention rates of institutions that do not have Preterm Orientation?

All six institutions in the study indicated that Preterm Orientation was present as part of their first-year program initiatives. The mean retention rate for the six schools was 69% with a range of 59% to 80%. The presence of the program at all six schools speaks to the presumptive importance of the program in assisting in the transition of students to college (Disbro, 1995) and facilitating their incorporation into the social fabric of the campus community (Robinson, 1996). The presence of Preterm Orientation at all six institutions is also indicative of the 25 plus years in which higher education has had to respond programmatically to combat the issues addressed by the 1989 report from The Carnegie Foundation for the Advancement of Teaching and the American Council on Education (Boyer, 1990). A major impact of Preterm Orientation on new students stems from the influence it has on a student's feelings about their own personal campus experience (Hodum, 2007) and the student's ability to apply realistic expectations (Krallman, 1997). Preterm Orientation allows extra time for student and staff interaction and the development of personal relationships resulting in increased retention (Swanson, 2006) and the successful completion of more credit hours (Brown, 2008). No matter the format, online or on ground, or the length of the program, the ultimate aim of Preterm Orientation is to increase retention (Lorenzetti, 2002) through the formation of individual connections between student and college personnel. Scagnoli (2001) found that Preterm Orientation increased the sense of connection to the institution resulting in increased retention. Lehning (2008) found that orientation participants were retained at a higher rate and had higher grade point averages than nonparticipants. The literature to date is conclusive that orientation programs have a positive

impact. The areas of impact, however, vary by institution and include increased grade point average, retention, and/or number of credit hours successfully complete. Given the variance in impacts, additional research is warranted in this area to identify the program aspects common to each area of student success.

Research Question 3: Outdoor Adventure Orientation

Is there a significant difference in the retention rates of institutions that have Outdoor Adventure Orientation and the retention rates of institutions that do not have Outdoor Adventure Orientation?

The retention rate for the one school with an Outdoor Adventure Orientation was 80% while the mean retention rate for the five schools without the program was 66.80% with a range of 59% to 80%. The institution with the program had a retention rate 13.2% higher than the retention average of those five schools without the program. A Chi Square indicated that there was no significant association between the retention of students at schools with or without the program. The presence of an Outdoor Adventure Orientation program at only one school coincides with 2012 figures which show only 185 such programs reported by schools in the United States (Outdoor, 2013). The low percentage of schools offering Outdoor Adventure Orientation programs could be a result of the expenses related to special equipment, staff training, and the assumption of additional institutional risk and liability related to conducting such programs with small program size, an overnight component, and related travel (Bell, et al., 2010). The experiential, hands on learning that occurs in Outdoor Adventure Orientation programs helps participants develop a strong sense of connection to their peers and to the institution (Wolfe, 2011). The small cohort nature of the programs offers great flexibility in addressing the personal interests and needs of each student. The outdoor adventure component

appeals to those with a natural affinity for the great outdoors but may not be an enticement to those with other interests. Brown (1998) found that students who elected to participate in an Outdoor Adventure Orientation were retained at a higher rate. The continued growth in the number of programs and participants indicates that institutions see value in Outdoor Adventure Orientation programs (Outdoor, 2013). The exact nature of the program's value is unclear and future research is necessary to identify why students elect to participate in such programs and what benefits are realized or perceived.

Research Question 4: Targeted Seminar

Is there a significant difference in the retention rates of institutions that have Targeted Seminars and the retention rates of institutions that do not have Targeted Seminars?

The mean retention rate for the four schools with Targeted Seminars was 65.25% with a range of 59% to 80% while the mean retention rate for the two schools without the program was 76.50% with a range of 73% to 80%. A Chi Square indicated that there was no significant association between the retention of students at schools with or without the program. A review of the literature and the presence of Targeted Seminars at a majority of the schools indicated the prevalence of such programs nationwide. However, that the two institutions without such a program averaged a retention rate 11.25% higher than those with the program indicate that the program's presence in and of itself does not result in an automatic increase in the retention of students. Perhaps the inconsistencies in course content and topics that are covered influences the impact the course has upon retention (Hunter & Linder, 2005; Jessup-Anger, 2011). Course content can vary greatly from institution to institution as well as between instructors within the same college (Harroun, 2005). Malik (2011) found that student success in targeted seminars was directly impacted by whether the course was for credit and required or was purely a voluntary

elective. Required courses produced higher grades (Smith, 1992). Targeted Seminar courses linked to other courses and specifically tied to academic disciplines also increased student retention and yielded higher grades (Tinto, 1996). Institutional goals for hosting a Targeted Seminar course can vary greatly including developing connections and relationships between faculty, staff, and students and undergirding academic success and persistence through skills building (Barefoot & Fidler, 1991). Given the range of variables associated with Targeted Seminars and the inconclusive nature of which variables have an association with retention, further research is necessary.

Research Question 5: Learning Communities

Is there a significant difference in the retention rates of institutions that have Learning Communities and the retention rates of institutions that do not have Learning Communities?

The retention rate for the one school with Learning Communities was 59% while the mean retention rate for the five schools without the program was 71% within a range of 60% to 80%. Schools without the program averaged a 12% higher retention rate. The one school with Learning Communities reported the lowest retention rate of all six institutions. A Chi Square indicated that there was no significant association between the retention of students at schools with or without the program. Conversely, a review of the literature indicated that the presence of Learning Communities promoted academic and social excellence (Mahoney & Schamber, 2011). All six institutions are small, liberal arts colleges, while the research to date has focused on larger universities where the niche of a Learning Community may be much more impactful on building community, peer connections, achievement, and retention (Kahrig, 2005). Strengthening faculty and student relationships and mentoring through Learning Communities is an effort to increase academic engagement in and out of the classroom and thereby retention

(Upcraft, 1995). Engstrom (2008) noted a vicarious by-product for some students participating in a community was a feeling of being overwhelmingly due to the high degree of social interaction and resulting in students not feeling the Learning Communities had a positive influence on retention. Pike (2011) found that students in a Learning Community had higher grades but cited the student's personal interest in the topic and election to participate in the program as a significant indicator of success. Learning communities are not limited to those linked with academic courses. They may be residential Living Learning Communities or themed to an issue or interest rather than an academic course. The number of institutions reporting no linked Learning Communities may be indicative that other types of communities are being explored or that limited resources or other factors have prohibited their formation. The research to date remains inconclusive and additional research is recommended on the topics or theme variations within Learning Communities to determine which are most significant for first-year student retention.

Research Question 6: Early Warning/Early Alert

Is there a significant difference in the retention rates of institutions that have Early Warning/Early Alert Systems and the retention rates of institutions that do not have Early Warning/Early Alert Systems?

All six liberal arts colleges in the study indicated that an Early Warning/Early Alert program was present. The mean retention rate for the six schools was 69% with the range being between 59% and 80%. The presence of the program at all six institutions indicated that raising an alert about a student's performance early enough in the semester for the college to take immediate and decisive action was viewed as important (Lorenzetti, 2009). Pan (2008) found that intervening during the first-year of college had the greatest impact on academic performance

and retention. As indicated by its presence at all six schools, more and more institutions see Early Warning/Early Alert Systems as another tool in the college's retention plan (Powell, 2003). Early Warning/Early Alert Systems may target specific characteristics of concern such as class absences (Hudson, 2005-2006) or may take a more rounded, holistic approach by bringing together all aspects of a student's career, from faculty, academic advisor, club advisor, financial aid, student health, student life, and residence hall staff (Wasley, 2007). Because of the limited research in this area, additional research should be conducted which focuses on which aspects of the Early Warning/Early Alert Systems are most impactful to retention.

Research Question 7: Service Learning

Is there a significant difference in the retention rates of institutions that have Service Learning and the retention rates of institutions that do not have Service Learning?

All six of the institutions in the study reported the presence of Service Learning programs. The mean retention rate for the six schools was 69% with the range being between 59% to 80%. The review of the literature indicates that direct and applied experiences such as those offered through Service Learning affords students the opportunity to put theory into practice and increase learning and skills development (Sheffield, 2005). Less clear is a direct linkage between Service Learning programs and increased retention. The Greenleaf (1977) idea of servant leadership is focused on personal development and growth through service to others. Taylor (1997) found that Service Learning was a natural fit with higher education and yielded dividends such as a strong sense of connection and inclusion with the campus community. Zlotkowski (2002) found Service Learning during the freshman year promotes student success and civic engagement yielding increased persistence. Gardenhire (1996) identified the collaboration and mentoring resulting from Service Learning as a way of overcoming some of

the many obstacles that students face. Peer mentoring is a direct form of Service Learning (Hamid, 2001) that may be incorporated into a first-year program or seminar. While both Service Learning and a seminar may generate positive results aimed at student retention, combining such programs does not multiply the positive effect and may in fact diminish both. Stevens (2007) examined this conflict and found those in a seminar course who participated in Service Learning and those who did not saw no significant differences in retention. Students enrolled in a Service Learning course do see an increase in their sense of belonging and an increase in persistence (Hutchinson, 2010). Perhaps the positive sense of connection and community that Service Learning seems to produce does not translate into increased institutional retention but varies depending on where and how the Service Learning piece is incorporated be that in a first-year seminar, as another course component, or in a stand-alone course all to itself. The findings are unclear and more research is needed on Service Learning and how the way in which it is delivered can impact retention.

Research Question 8: Undergraduate Research

Is there a significant difference in the retention rates of institutions that have Undergraduate Research and the retention rates of institutions that do not have Undergraduate Research?

The mean retention rate for the four schools with Undergraduate Research was 70.25% with a range of 59% to 80%. The mean retention rate for the two schools without the program was 66.50% with a range of 60% to 73%. Schools with the program averaged a retention rate 3.75% higher than those without Undergraduate Research. A Chi Square indicated that there was no significant association between the retention of students at schools with or without the program. A review of the literature indicated that Undergraduate Research opportunities during

the first-year increased student success and retention (Spanier, 2009) as well as yielded higher grades and helped solidify the student's choice of major (Marcus, 2010). Residual benefits included being able to translate theory and in-class learning to practical applications while gaining personal and professional insight into the field of study (Seymour, 2004). Likewise, the university may see residual benefits through increased enrollment and research and the resulting notoriety and raised profile through conferences presentations and journals (Hutchinson, 2004). Undergraduate Research can be a stand-alone entity or done in tandem with other initiatives such as Learning Communities where Ward (2008) found participating students did better academically, were more connected and integrated to the larger campus community, and were retained at a higher rate. Likewise, the program's success may depend on other factors such as the role that faculty play in mentoring student researchers and whether the research is directed as part of a class or as a stand-alone project (Karukstis, 2007). The impetus for faculty member involvement may be that the resulting research can raise the department profile and assist in the retention of students (Randall, 2011). The higher retention rate established by the study and the preponderance of the literature associated only positive benefits for Undergraduate Research; however, further research is recommended to expand the body of available information characteristics common to those students who participate in Undergraduate Research.

Research Question 9: Assessment

Is there a significant difference in the retention rates of institutions that have Assessment of the First-year Program and the retention rates of institutions that do not have Assessment of the First-year Program?

Five of the liberal arts colleges reported the presence of Assessment with a mean retention rate of 68.20% and a range of 59% to 80%. One institution without the program had a

retention rate of 73%. The one institution without Assessment therefore indicated a retention rate that was 4.8% higher than the average of those reporting they had the program. A Chi Square indicated that there was no significant association between the retention of students at schools with or without the program. Program assessment and continuous improvement is an important part of the institutional accreditation process (SACSCOC, 2013). Assessment provides accountability and documents learning outcomes (CAS, 2013). Instituting a protocol for assessing first-year student program attributes is important (Gardner, 1986, 1990) so that results may be shared and successes replicated (Gardner, 1980). Various models may provide the framework for assessment. Tinto's (1993) theory of student withdrawal was the basis for an assessment of Targeted Seminars with results showing that linking a seminar course to a major course strengthened retention (Adam, 2008). Tinto's (1987, 1993) model of student departure has been used to develop programs targeting the retention of first-year students as has Astin's (1993) Inputs-Environments-Outputs model. Purdie (2007) examined three first-year program initiatives through the lens of these theories and found that one of the programs produced higher grades and retention at a significantly higher rate. Such assessment results are critical in the decision-making process when deciding where to put human and fiscal resources. Assessment is an essential component of first-year programs and additional research is warranted to identify the methodology used to assess various programs and the collective first-year experience.

Implications for Practice

The findings of this study can help guide the decision-making process at the six liberal arts college concerning resource allocation, best practices, benchmarking, and first-year program attributes all as they relate to retention. The implications of the study were that the most

common programs are Preterm Orientation, Early Warning/Early Alert Systems, and Service Learning programs that were each in place at all six institutions and produced a range of retention rates from 59% to 80%. This finding should be reviewed in conjunction with research indicating that Preterm Orientation assists with student integration to the academic and social fabric of the campus (Robinson, 1996) and to develop more realistic expectations for their collegiate experience (Krallman, 1997). Research on Early Warning/Early Alert Systems indicated that early intervention can provide the most influential bearing on first-year students' grades and retention (Pan, 2008). Likewise, Service Learning created a sense of community caring and support (Hamid, 2001) and social and academic integration (Hutchinson, 2010) yet may not yield a direct association with retention (Stevens, 2007). The findings indicate that colleges operate many different first-year programs, each influencing the individual student in a different manner. The combination of programs and the resulting interconnectivity of those programs were not studied. All of the new student programs yield positive benefits that may influence student success but may not directly translate into increased student retention for the host institution.

Recommendations for Policy and Practice

The focus of this study was six liberal arts colleges in the mountain south area including northeast Tennessee, southwest Virginia, and western North Carolina. The results should not be generalized to a broader population of higher education institutions. Others are encouraged to initiate similar studies aimed at a greater number of liberal arts colleges, at liberal arts colleges in another geographic area, or at other colleges and universities on a larger scale. Studies targeting a larger population of liberal arts colleges may assist in generalizing the results to all liberal arts

institutions. No matter the type, scale, or target of the study, further research is merited to advance the study of first-year program attributes and associated student retention.

Recommendations for additional research are listed below:

1. Research first-year program attributes and the association between the total number of programs and retention rates.
2. Expand the current research model to determine how long each program attribute was present at each institution and the association to retention rates over time.
3. Research individual student participation and combination variations among first-year program attributes and the association to retention rates.
4. Develop an expanded model for program attributes taking into account variations within each defined area.

Institutions hosting Summer Bridge Programs should explore a cohort model that can transition students from a summer experience directly into the fall semester. Most Summer Bridge Programs seem to target at-risk student populations. A similar concept could be employed to target higher achieving students around career-themed pathways. Current models for Preterm Orientation do not vary greatly and most commonly include grouping students by major for advisement and registration. Colleges should examine the possibility of grouping students by areas of interest and allowing them to focus on general core classes while exploring potential majors during the first-year. Such a model allows students with and without thoughts on a major to focus on a successful transition and to work with one advisor throughout the critical first-year of college. Extending the Preterm Orientation experience into the academic year through cohorts that transition into a Targeted Seminar course built around the same areas of interest assists in connecting the classroom, the larger campus, and the academic community.

An independent Outdoor Adventure Orientation program for new students generally attracts only those students with an affinity for outdoor activity. By incorporating Outdoor Adventure activities into orientation or seminar courses it expands and challenges participants through new and shared experiences. A Targeted Seminar could and should serve as the cornerstone of first-year experience retention efforts. A new focus for seminar courses and Learning Communities could include expanding beyond academic commonalities, to focus on student involvements, interests, and passions such as athletics, politics, and service.

All of the components of a first-year program should be formally linked together to strengthen results. The more linkage the better the ability of college personnel to more closely monitor student success and struggles and to more precisely intervene with support and resources. Such a model would yield clearer and stronger Early Alert/Early Warning Systems. Stronger still would be requiring the student to appear in person in response to an alert for a one-on-one or small group advisement session.

Undergraduate Research and Service Learning opportunities should be expanded so that all students in all fields can participate. Stand-alone opportunities for participation outside of the classroom offer the continued opportunity for involvement and connection while freeing students to go outside of their own field of study or regular sphere of contact to the broader campus and community.

Technology and social media offer increased accessibility and communication opportunities. Important information can be sent electronically to a student's smart phone at critical and targeted times during the semester. Likewise, online resources such as a refresher module on the advisement and registration process can be required of new students prior to meeting with an academic advisor. A mechanism or rubric for program Assessment should be

used to examine the totality of the first-year programs on the campus. This includes the continued Assessment of each first-year program independently while more closely examining program integration to gain insight into what association exists between student success and retention on each campus.

Policies should strive to make program participation universal rather than optional or by application. Additional costs should be kept to a minimum and incorporated into tuition and fees when possible, certainly when the program is for credit. Policies or programs that target only subpopulations should be reviewed to reach to greatest number of students. For example, a learning community that limits itself to honors students has lost the opportunity for positive peer mentoring that could occur between students at different levels.

A goal for first-year programs should be to produce common and shared experiences among the students. The structure of the program should facilitate interaction and the building of relationships between faculty, staff, and students in one-on-one and small group settings and should provide opportunities for celebrating milestones. Program connectivity and integration is the key to reiterating themes and to connecting new students to the larger campus community.

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APPENDICES

Appendix A: *Institutional Reporting Instrument*

Present 2010- 2011	Absent 2010- 2011	Programs Defined
		<p>Summer Bridge Programs — Programs providing an important head start to college by offering an opportunity for new students to become comfortable within the new environment through intensive academic instruction typically lasting four to five weeks and usually encompassing remediation as needed, low cost, a residential option, and peer mentoring resulting in increased confidence and performance (Adams, 2012).</p>
		<p>Preterm Orientation — A program geared at helping new students, and sometimes their parents and family members, adjust to college life through interaction with faculty, staff, and students during programming, activities, tours, and advising (Disbro, 1995).</p>
		<p>Outdoor Adventure Orientation — A type of college orientation program that brings together small groups, typically 15 or less, first-year students and uses adventure experiences happening out of doors in a wilderness setting with at least one overnight component (Bell, Holmes, Marion & Williams, 2010).</p>
		<p>Academic/Transition Seminars — An academic course that aims to enhance the academic and social integration of first-year students by bringing together a variety of new student specific topics, essential skills for college success, and selected processes (Jessup-Anger, 2011; Hunter & Linder, 2005).</p>
		<p>Learning Communities — Learning communities integrate course content/curriculum by linking one or more academic courses with a student cohort in order to promote learning and foster personal development in a supportive environment enhanced by peer interaction (Mahoney & Schamber, 2011).</p>
		<p>Early Warning/Academic Alert Systems — A flagging system to alert a student and the faculty/academic advisor(s) on scholastic performance or classroom issues, early enough in the timeframe of the class so that appropriate referrals can be made to intervene and assist the student as needed (Lorenzetti, 2009).</p>
		<p>Service Learning — A service-learning opportunity allows students to apply classroom skills and learning to a community problem in a hands on manner resulting in increased knowledge, deeper understanding, and skill refinement through the solving of the problem and through interaction with a diverse group of stakeholders (Sheffield, 2005).</p>
		<p>Undergraduate Research — Defined as an investigation by an undergraduate that makes an original intellectual or creative contribution to a discipline. Regardless of the nature of individual undergraduate research programs, such research gives students an insight into the scientific enterprise that is unrivaled by any other part of the curriculum. It is important that undergraduate research is fun and engaging and that it endows students with commitment and proprietorship of their own projects (Halstead, 1997, pg. 1390)."</p>
		<p>Assessment (of new student/first-year programs) — "Programs and services must have a clearly articulated assessment plan to document achievement of stated goals and learning outcomes, demonstrate accountability, provide evidence of improvement, and describe resulting changes in programs and services (CAS, 2013)."</p>

Appendix B: *Institutional Review Board Approval*



East Tennessee State University
Office for the Protection of Human Research Subjects • Box 70565 • Johnson City, Tennessee 37614-1707
Phone: (423) 439-6053 Fax: (423) 439-6060

May 9, 2013

Jeff Howard
Student Affairs, ETSU

Dear Mr. Howard,

Thank you for recently submitting information regarding your proposed project "A Comparison of New Student Retention and First Year Programs at Liberal Arts Colleges in the Mountain South."

I have reviewed the information, which includes a completed Form 129.

The determination is that this proposed activity as described meets neither the FDA nor the DHHS definition of research involving human subjects. Therefore, it does not fall under the purview of the ETSU IRB.

IRB review and approval by East Tennessee State University is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities are human subject research in which the organization is engaged, please submit a new request to the IRB for a determination.

Thank you for your commitment to excellence.

Sincerely,
Chris Ayres
Chair, ETSU IRB



VITA

JEFF S. HOWARD

- Education: Doctor of Education, Educational Leadership, East Tennessee State University, Johnson City, Tennessee, 2013
Master of Arts in History, East Tennessee State University, Johnson City, Tennessee, 2002
Bachelor of Science in History and Political Science, East Tennessee State University, Johnson City, Tennessee, 1997
- Professional Experience Acting Dean of Students, East Tennessee State University, Johnson City, Tennessee, 2013-present
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Director of Student Affairs, The University of Virginia's College at Wise, Wise, Virginia, 2003-2004
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