

**Building Connections in a First-Year Student Program: A Mixed Methods Case Study on Program Changes and the Effects on Retention and Academic Success of First-Year Business Majors**

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## Abstract

Since the 1980's universities have been under pressure to increase degree attainment from both an economic and accountability standpoint. In response, learning communities have been developed to increase academic success and retention. Learning communities in part were a response from large institutions to create smaller more manageable communities to engage students. This current study added a perspective on the impact of learning communities at small colleges. The purpose of the study was to assess the business department's first-year student program via a case study analysis of the types of program in which business majors took part (general first-year seminar and Business Living-Learning Community). A second purpose was to assess the effectiveness of the Business Living-Learning community on the retention and academic success of first-year students. A case study analysis was used to answer the first research question: How did the business department's first-year student program change from a general first-year seminar to a living-learning community? An independent samples *t*-test was used to answer the second research question: To what extent does the average GPA of first-year, first-time students differ among those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community? Results showed a difference between the GPA of those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community, with those in the Business group earning higher GPAs. A chi-square test of independence was used to answer the final research question: To what extent is there a relationship between participation of first-year, first-time students in a general first-year seminar and in a Business Living-Learning Community and retention results? The data showed no

relationship between retention and participation in a general first-year seminar or the Business Living-Learning Community.

## **Dedication**

This study is dedicated to all of my students, past, present, and future.

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## **Chapter One**

### **Introduction**

For decades, colleges and universities have been under pressure to increase degree attainment from both an economic and accountability standpoint. In the early 1980s, the United States Department of Education called for the reform of higher education, including an increase in access to higher education, the quality of teaching, retention, and graduation (National Commission on Excellence, 1983). More recently in the United States Department of Education's (2006) report, *A Test of Leadership: Charting the Future of U.S. Higher Education*, concerns continued about the state of Higher Education in the United States. In the report, the United States Department of Education recommended six areas of improvement: access; cost and affordability; financial aid; learning; transparency and accountability; and innovation. As the cost of higher education continues to rise, institutions are pressed to demonstrate that they are meeting performance goals by retaining students. Economically, the United States has not kept up internationally. In 1990, the United States ranked first in the world in 4-year degree attainment for individuals aged 25-34 years; however, in 2012 the United States was ranked 14<sup>th</sup> (Organization for Economic Co-operation and Development, 2012). It is challenging to meet enrollment goals as many states have a lower participation rate, a decline in the college-aged population, and lower high school completion rates (Zumeta, 2012). As many institutions see flat and dropping enrollment rates, retention efforts have become imperative.

Institutions of higher education are challenged to find ways to increase retention under the restriction of ever decreasing budgets and increasing pressure on the quality of

teaching. According to the National Center for Educational Statistics (2013), in 2005 approximately 40% of students who began their pursuit of a degree at a 4-year college did not graduate within six years. The first-year is of particular importance for attrition as students begin integrating academically and socially. According to American Collegiate Testing (2014), approximately 25% of students who attend 4-year private institutions with traditional or liberal selectivity withdraw before their sophomore year. Retention factors that may affect first-year students include personal circumstances, inadequate academic preparation, lack of program offerings, lack of social adjustment, and negative experiences (Butler, 2011).

Peer and faculty interaction are important factors in new students' success. Researchers have made connections between community integration, engagement, and positive outcomes (Astin, 1993; Barthelemy & Fine, 1995; Inkelas & Associates, 2004, 2008; Inkelas et al., 2007; Inkelas & Weisman, 2003; Pascarella & Terenzini, 1980, 2005; Pike, 1999; Purdie & Rosser, 2011; Stassen, 2003). Learning communities are programs that have been developed to increase engagement through highly interactive collaborative learning environments. Residence halls are another environment that can be effective in assisting an increase in engagement. Institutions have found that opportunity embedded in residence halls offer social interaction and personal development. Astin (1984) stated, "Living in a campus residence was positively related to retention, and this positive effect occurred in all types of institutions and among all types of students regardless of sex, race, ability, or family background" (p. 524). Given the positive effects of learning communities and living on-campus, living-learning

communities combine these experiences and are one type of retention program that has gained popularity for engaging students and increasing student success.

Students are brought together in living-learning communities for opportunities of shared learning and engagement. Schroeder (2013) described living-learning communities as “one of the most low-cost but high-impact” retention strategies. He explained that “educationally purposeful activities” are key to student success (Schroeder, 2013, p. 45). Several researchers have stated living-learning communities have positive effects for students on areas including adjustment, personal growth, involvement, student success, and retention (Barthelemy & Fine, 1995; Inkelas & Associates, 2004, 2008; Inkelas et al., 2007; Inkelas & Weisman, 2003; Pike, 1999; Purdie & Rosser, 2011; Stassen, 2003). However, researchers also found that not all outcomes are positive or can be directly linked to living-learning communities (Inkelas et al., 2007; Pascarella & Terenzini, 1980). For example, researchers studied first-generation students and found that peer interactions had a positive effect on students’ transition to college. However, faculty interactions were found to have an adverse effect (Inkelas et al., 2007). Further research is needed to indicate which outcomes are positively affected and determine which results link directly to program initiatives. Living-learning community programs vary widely in institution size, academic area, and program structure and delivery. As living-learning communities become increasingly popular, there is a need to assess the effectiveness of programs as they relate to specific outcomes.

## **Background**

At the institution where the current study took place, the retention goals were to retain 75% of first-time, full-time students from their first to third semester. The rates were stable from 1999 to 2015, but during those years, only an average of 67% of first-time, full-time students was retained from first to the third semester (see Table A1 in Appendix A). Since 2003, several first-year students' programs were developed at the institution. First, the institution created a 3-day long first-year student orientation camp that began in 2003. The long-standing orientation camp has been assessed and developed over multiple years. Next, the institution developed a first-year seminar course in 2012. Although the standard institution-wide first-year seminar program was discontinued in 2014, several departments created discipline-specific first-year courses.

In the fall of 2014, at the recommendation of a senior associate consultant on retention, the institution's business department began a first-year student program. The program included a business-specific first-year seminar course. The department of residence life also began housing first-year students of the same major together. In 2015, the business department partnered with the residence life department to hire a community advisor for the residential component of the first-year student program. The changes in the first-year student program were made to help freshman students adjust to college through personal, social, and academic support. The two departments hoped that the program would increase students' academic success and persistence and institutional measurements of retention. The program developers selected business majors for the major specific first-year seminar and residential program based on data from the 2013



freshman cohort. There was a higher frequency of business majors who withdrew at the end of the 2013 fall semester than expected.

The business department and residence life department internally referred to the residential component of the first-year student program as the living-learning community. The living-learning community included all first-year business majors who resided on campus. Participants were housed together in a designated wing in both the male and female residence halls for first-year students. The program also incorporated faculty involvement, extra-curricular activities, and a residential student advisor. The residence life staff offered community building opportunities to living-learning community members but did not provide business specific programming. In 2015, the program added a cluster of courses, in which first-year business majors participated in class competitions and professional development presentations, community meals, and weekly interactions with a student organization team. The student organization was an international non-profit organization that encouraged students, faculty, and business leaders to engage in entrepreneurial actions. The clustered courses included a business first-year interest group, economics, and an entrepreneurial class. As the institution implemented this new living-learning community program, planned outcomes needed further assessment before developing the program further.

### **Statement of the Problem**

In the early 2000s, many institutions of higher education experienced increasing budgetary pressure combined with flat enrollment thus bringing retention goals to the forefront. Learning communities in part were a response from large institutions to create smaller, more manageable communities to engage students and improve educational

experiences (Dunn & Dean, 2013; Inkelas & Associates, 2008). Thus, prior research has focused on large institutions where students may otherwise be disengaged. For example, the 2007 National Study of Living-Learning Programs (NSLLP) only included one small college out of the 49 institutions sampled (Inkelas & Associates, 2008).

Astin (1993) noted a difference in engagement due to institution size. Small private residential colleges ranked highest on measurements of community, whereas larger public institutions had lower measurements of community. Tinto (1987), as well as Pascarella and Terenzini (1991), suggested that attending a private college tends to have a positive effect on retention and that smaller colleges provide greater contact with faculty and staff. However, small institutions are also attempting to increase retention through programming efforts. Small institutions with highly engaged students need to conduct further research to develop programs to increase retention and academic success.

As the application of living-learning communities at institutions of higher education grows, there is increased evidence that these specific programs increase retention and academic success outcomes (Astin, 1993; Barthelemy & Fine, 1995; Inkelas & Associates, 2004, 2008; Inkelas et al., 2007; Inkelas & Weisman, 2003; Pike, 1999; Purdie & Rosser, 2011; Schroeder, 2013; Stassen, 2003; Tinto & Goodsell-Love, 1993). However, specialized living-learning community structures and functions can vary widely. This growth, especially incorporating diverse communities, calls for program developers to unite efforts to assess, research, and improve initiatives.

### **Purpose Statement**

The purpose of this study was to assess the business department's first-year student program that was created to improve retention and student success via a case

study analysis of the type of program in which business majors took part (general first-year seminar or Business Living-Learning Community). A second purpose was to assess the effectiveness of the general first-year seminar and the Business Living-Learning Community on the retention and academic success of first-year students. The quantitative analysis included the variables of grade point average (GPA) and retention. GPA was used as a measure of academic success. The GPA data included the first fall semester's grade point average and did not include a cumulative average of any previously awarded grade points.

### **Significance of the Study**

The results of this study provided significant information on the development of first-year student programs and expanded research on retention and academic success. Information from the analysis of the business department's first-year student programs may help administrators make informed decisions about further program development and funding. The results from the study could also help administrators at the institution make decisions as to whether implementing similar living-learning communities in other departments would be beneficial.

Other higher education institutions with similar concerns about retention and academic success may find the results helpful in implementing new living-learning programs or evaluating the effectiveness of existing living-learning programs. Through the analysis of program changes, the results could assist the institution in determining the level of program implementation needed to create positive outcomes. This information may help other institutions decide on which changes to implement and how elaborate to make their living-learning programs.

Finally, this study added a perspective on the impact of living-learning communities at small colleges. Research on living-learning communities in small college campuses is lacking. The results of this study also added to research on retention and academic success at small institutions. Other small colleges may use the study results to make decisions about retention and academic success programs on their campus.

### **Delimitations**

This study was limited to a single institution's data from the 2012, 2013, 2014, and 2015 academic years. The study also was confined to the specific design and content of the learning community. The learning community was created explicitly for business majors with a residential component. The Business Living-Learning Community and subsequently this study only included first-year, first-time students. The program was designed to be the most intensive during the fall semester, so attention was given to fall semester outcomes.

The study was also limited due to the characteristics of the institution included in the study. The small, private, rural institution was unique from colleges and universities in previous studies on learning communities. The data were also limited due to the small first-year student cohort size and small course sizes. The first year seminar courses and business courses were limited to 30 students.

The study only included measurements of retention and student success as determined by enrollment status and GPA. Other outcomes of learning communities were not explored in this study.

### **Assumptions**

The first assumption was that members of the Business Living-Learning Community were actively participating in the program. Students were assigned a room in the living-learning wing of a residence hall, and it was assumed that they lived in that room. It was assumed that they attended classes and participated in extra-curricular activities organized for the living-learning community. It was assumed that enrollment and GPA data obtained from the institution's database were accurate.

### **Research Questions**

The following research question guided the case study analysis portion of this study:

**RQ1.** How did the business department's first-year student program change from a general first-year seminar to a living-learning community?

The following research question guided the quantitative portion of this study, following the case study analysis:

**RQ2.** To what extent does the average GPA of first-year, first-time students differ among those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community?

**RQ3.** To what extent is there a relationship between participation of first-year, first-time students in a general first-year seminar and in a Business Living-Learning Community and retention to the fall semester of the sophomore year?

### **Definition of Terms**

This study included the following terms and definitions to avoid any confusion. Introduced in this study was the concept of learning communities, specifically living-

learning communities. The following are definitions of these specific programs, program outcomes, and terms essential to theories on living-learning communities.

**Academic success.** Academic success was defined in this study as the successful adjustment to the intellectual demands of college, as represented by students' grades. Pascarella and Terenzini (1991) stated that college grades depend on factors including adjustment to college, work habits, intellect, and effort. Pascarella and Terenzini (1991) found academic performance was a predictor of college persistence and degree obtainment.

**Institutional experiences.** Institutional experiences include engagement inside and outside of the classroom. Experiences include classroom content, faculty interactions, extracurricular activities, and peer interactions.

**Involvement.** Involvement is the "time, energy, and effort students devote to the learning process" (National Institute of Education, 1984, p. 28).

**Living-learning community.** Living-learning communities are programs in which students live together in a specified area of campus housing and collectively participate in academic and extra-curricular programming (Inkelas & Associates, 2008). This definition allows for the inclusion of a wide variety of institutions and programs.

**Retention.** Retention is the institutional measure of student persistence from one semester to the next (National Center for Education Statistics, 2015). Specifically, retention is an objective of the institution, whereas, persistence is an outcome of students.

### **Organization of the Study**

The rationale for this study was introduced in chapter one and included an introduction and background on issues of retention, student success, and learning

communities. Information on the statement of the problem, purpose and significance of the study, delimitations, assumptions, research questions, and definitions was also provided in this chapter.

A literature review that begins with the history of residential life and living-learning communities is provided in chapter two. Information on the theoretical framework for learning communities and the types and structures of learning communities is described. The chapter concludes with an overview of research on the most commonly found topics on living-learning communities. These topics include the transition to college, student learning outcomes, and retention.

The methodology of the study including the research design, the selection of the participants, data collection, and the data analysis procedures is summarized in chapter three. The results of the study are included in chapter four. Interpretation of the results as well as implications and recommendations for future studies on this topic are presented in chapter five.

## **Chapter Two**

### **Review of Literature**

Four overarching topics are encompassed in this literature review of learning communities in higher education (a) historical background, (b) underlying theories, (c) types of learning communities, and (d) studies on living-learning communities. First, a historical context includes an overview of early years of residential living-learning communities to more modern living-learning communities. Next, a theoretical framework of three underlying theories is developed for learning communities and more specifically living-learning communities. These three college impact models of student change theories were selected to investigate students' responses to various institutional environments. Then the different types of learning communities are defined including first-year seminar or first-year interest groups, linked or clustered courses, team-taught courses, and finally living-learning communities. Lastly, the specific topic of this study, living-learning communities, is examined through a review of influential research. The areas of impact on living-learning communities discussed include the transition to college, student learning outcomes, and retention.

#### **Historical Background**

The idea of creating learning communities is not a new one. Many collaborative learning groups established in past years can be considered the predecessor of today's learning communities. Thelin (2004) argued that the basic notion of learning communities was first demonstrated in 1636 when the United States established Harvard University's residential colleges. Harvard was influenced by the Oxford-Cambridge system of higher education, where students lived together and collectively studied a



chosen subject. In the Harvard system, a community was formed between students and faculty through constant contact and engagement with common goals and concepts. Historian Frederick Rudolph argued that that the success of the colonial colleges was in part due to the recreation of this “collegiate way” (Thelin, 2004, p. 7) of the Oxford-Cambridge system. The collegiate way referred to the highly engaging collegiate community created in the residential colleges.

Thelin (2004) explained that the University of Oxford and the University of Cambridge shared a common collegiate structure with a network of self-sufficient residential colleges. Although the university provided an overarching authority and awarded degrees, the individual colleges were privately funded and relatively self-governing. Each college offered instruction and extra-curricular activities as well as an environment for students to live and study together. These educational communities utilized architecture that incorporated quadrangles that were self-contained structures with interior courtyards.

Thelin (2004) stated that the colonial colleges in the United States were influenced by the Oxford-Cambridge system of residential colleges but were unable to fully recreate them. While the colonial colleges brought students together to promote learning and responsible citizenship in communities similar to the Oxford-Cambridge system, no American institution moved beyond creating a single college for more than two centuries. Early institutions in the United States did not have the funds to completely recreate the architecture of the quadrangle environment. Blattner, Cawthon, and Baumann (2013) found that Harvard, Yale, Princeton University, the University of Virginia, and the University of Chicago were among colleges that adopted the English

quadrangle model that included housing. Thelin (2004) described American colleges of the colonial era as “remarkable and complex, a hybrid of legacies, transplants, deliberate plans, and unintended adaptations” (p. 11).

Thelin (2004) described early colonial colleges in the United States as having an *in loco parentis* approach, where faculty and staff took the place of parents. Student housing allowed faculty and staff to have more control over students. Despite the attempt to create the united community of the Oxford-Cambridge system’s collegiate way, the close and constant contact in the United States residential colleges created tension between students and faculty. The nature of student unrest and misconduct increased as the character of the students changed. For example, in the mid-1700s, students were younger and demonstrated childish behavior; in later years, around 1770, students were older and challenged principles and politics of faculty, presidents, and provosts. Extracurricular activities such as athletics and student groups were not yet incorporated in college life, so close quarters and restrictions on student behavior led to student revolts. The model of *in loco parentis* continued until the Civil War.

Thelin (2004) explained that student housing became less popular after the Revolutionary War. During the post-Revolutionary War period, many colleges were small and did not have resources or the facilities to provide on-campus housing. Faculty also regarded housing and residential experience as separate from academic endeavors. “Students often had to fend for themselves, finding lodging off campus in private homes or boarding houses – a feature of campus life that thwarted the administration’s ability to control student conduct” (Thelin, 2004, p. 66).

Theelin (2004) noted that student conduct issues continued through the civil-war period and in the mid-1800s student conduct codes were developed. Honors codes were created by the students for the students, thus creating self-governing communities. Although students created honor codes encompassing their communities' expectations that they would develop into a responsible citizen, students often failed to follow these self-imposed societal rules. Behavioral issues were compounded because the sole role of the faculty was to teach, not to interact with students outside the classroom. Thus, faculty members were powerless in discouraging inappropriate behavior. This educational environment did not regulate student behavior nor did it offer an opportunity for students to express opinions or concerns, which eventually led to student uprisings.

There were instances of student demonstrations, revolts, and acts of sabotage, rebellious incidents in which students seemed to be expressing genuine dissatisfaction with archaic administration, disrespectful faculty, and a dull course of study irrelevant to the issues they would face as adults. (Theelin, 2004, p. 65)

Students' unrest with faculty and administrators led to students creating activities and organizations outside of the classroom. In the beginning, activities established by the students were created on impulse, were unorganized, and often short-lived. Eventually, faculty and administrators realized that these activities created an outlet for students' energy and engaged them outside of the classroom. In later years, as administrators began trying to regulate student behavior, they tried to control and formalize activities.

Extra-curricular activities also played an important role in developing the new modern American university environment near the end of the 19<sup>th</sup> century. Theelin (2004) explained that modern universities of the mid-nineteenth century struggled to attract both

students and donors. Thelin (2004) stated that historian James Axtell probed the conditions of universities from the 1880s and found “only twenty-six institutions (seventeen of them formally called “colleges”) had enrollment surpassing two hundred students” (p. 90). Institutions developed innovative curriculum, new programs, and extra-curricular components as a way to attract and retain students. At this time, institutions began to develop dean positions specifically with responsibility for students’ wellbeing outside of the classroom. In the latter half of the 19<sup>th</sup> century and the first part of the 20<sup>th</sup> century, student housing surged from both a demand from institutional presidents’ to create an engaging climate and from students’ desire to be closer to campus to participate in extracurricular activities. This period also involved other trends that positively affected the development of residence halls including enrollment of women and African Americans and the rapid growth of state and regional institutions.

As the growth of residence halls on college campuses continued, philosopher Alexander Meiklejohn, in 1925, introduced his idea for a new experimental college that paired academics and residence life in *Century Magazine*. His idea was in response to concerns about rising curricular fragmentation, disciplinary specialization, lack of general education, and neglect of greater social responsibility (Dunn & Dean, 2013; Smith, MacGregor, Matthews, & Gabelnick, 2004; Thelin, 2004). Two academic models were popular during this time. The Germanic model introduced specialized departments and majors that focused on teaching and research. The elective system, on the other hand, allowed students the ability to choose elective courses outside of their major area of study to explore topics of interest and provide a well-rounded education. According to Smith,

MacGregor, Matthews, and Gabelnick (2004), Meiklejohn felt that neither the Germanic model nor the elective system provided students a general education.

In the *Century Magazine* article, Meiklejohn introduced the idea of a program that incorporated two years of unified coursework, a living experience, and increased interaction between students and faculty. “This bulletin also contained the first reference to the concept of learning communities” (Smith et al., 2004, p. 29). Glenn Frank, the editor of *Century Magazine*, became the president of the University of Wisconsin and persuaded Meiklejohn into coming to Madison to put his idea in motion. Smith et al. (2004) explained that in 1927, Meiklejohn established the Experimental College at the University of Wisconsin-Madison, with the goal of providing anyone with a liberal education. Unlike other reform efforts that focused on specific demographics such as honors students, the Experimental College was open to all students.

Smith et al. (2004) described the Experimental College as focused on building relationships between students and faculty through a living-learning environment that built on shared interests. Courses were team-taught and included an interdisciplinary curriculum that focused on democracy. Coursework linked curricular and co-curricular experiences and called for active learning including tutorials, discussions, and writing assignments that applied theory into practice. Smith et al. (2004) found that Meiklejohn’s course assignments often required students to analyze contemporary problems. For example, students were asked to research their hometown during the summer between their freshman and sophomore year and produce a regional study of how their local governments functioned. These types of experiential learning exercises were not common at that time.

Smith et al. (2004) noted that the Experimental College ran from 1927 until 1932, enrolling 74 to 119 freshmen each year in a two-year program. The participants lived in a new men's hall that also housed faculty members' offices. Non-participants also lived in the new men's hall and operated under different rules and expectations as the Experimental College. Participants and non-participants were governed by different rules and expectations. Smith et al. (2004) argued that non-participants were said to be bothered by the Experimental College students who were destructive to property and behaved badly in the hall and dining facilities. Meiklejohn was given full control over the college, so the University student conduct system was not utilized. Meiklejohn did not try to control the behavior, as he saw it as an indication of non-conformity which he supported.

Smith et al. (2004) stated that there were controversy and skepticism over the Experimental College program. First, Meiklejohn lacked the support from fellow faculty. There was contention over his appointment, as his salary was the highest of any faculty member at the university. Also, it was promised that the Experimental College would be staffed internally, but Meiklejohn brought faculty in from his previous institutions. Additionally, some faculty and administrators felt it was unjust that the Experimental College was allowed special rules and privileges.

Secondly, there were skeptics due to the program's non-traditional curriculum and lack of grading. The curriculum was based on discussion and reflections on selected text, unlike the elective system's traditional course-based curriculum. Due to the non-traditional coursework participants only received a grade at the end of the two-year

program. However, parents did receive a letter from Meiklejohn after the first year that described the student's progress.

Thirdly, there was also controversy over the program participants. Smith et al. (2004) noted that the student demographics included nearly double the university's proportion of Jewish students and some of the participants had socialist political views. Students experienced anti-Semitism and stereotyping. Participants engaged in activism. As a result, the Experimental College gained a reputation as a radical movement. Advisors including Meiklejohn were also characterized as progressive activists. The participants dressed differently than other students and grew long hair and beards. They were seen as outsiders by other student groups on campus.

Lastly, community building was hindered due to competing outside values and opportunities. As the Experimental College attempted to create a unified environment, participants were distracted by living in a hall with non-participants. Participants were drawn to outside activities including sports, clubs, and Greek Life. In 1929 as the Great Depression began, some students also struggled to afford tuition. Institutional program funding was also threatened. The program was successful regarding student performance but it never met enrollment expectations. Ultimately due to declining enrollment, the Experimental College closed in 1932.

Thelin (2004) described specialized residential learning communities similar to Meiklejohn's that were created in 1928 and 1933 respectively at Harvard College and Yale University. Harvard referred to its communities as residential houses while Yale used the term residential colleges. Harvard and Yale's model of living-learning communities spread to other institutions creating specialized self-contained communities.

Although residential colleges and houses shared some of the main facilities, the actual communities were often self-sufficient. Faculty often lived in residence, and some residential colleges and houses were held in buildings with amenities such as lounges, dining halls, recreation facilities, and faculty advisor apartments. As for the community and its members, the institution allowed autonomy and the opportunity for individualized values, curricula, and missions. Smith (2013) argued although there were structural concepts common to residential colleges and houses, the terms residential college and house referred to a collaborating group of people and not an actual physical structure.

Variations of the residential college and Meiklejohn's concept of the Experimental College were implemented in following decades. In the 1960s, the higher education system expanded substantially, nearly doubling in size. This expansion led to experimentation and innovation in learning communities and student housing programs (Lenning & Ebbers, 1999; Smith, 2013). As institutions size grew, learning community programs increased as an attempt to create smaller more manageable communities (Smith, 2013).

At larger institutions learning communities developed close groups with more interaction. These environments also allowed for active learning opportunities compared to traditional lecture hall courses. These active learning opportunities helped engage students in critical thinking where they analyzed and synthesized information through reading, writing, discussion, and application in problem-solving activities. Eventually, learning communities and living-learning communities were used to increase student engagement and involvement at large institutions. Lenning and Ebbers (1999) found experimental colleges were created at the University of Wisconsin at Madison and Green



Bay, Eckerd College in Florida, the University of California at Berkeley and Santa Cruz, Evergreen State College in Washington, and New College at the University of Alabama.

The momentum for learning communities and innovative residence hall programming increased in the 1980s. In 1983, the National Commission on Excellence in Education published *A Nation at Risk*, a report that called for educational reform at the primary, secondary, and post-secondary levels in both private and public sectors. The commission assessed the quality of teaching and learning in United States schools, and the report made 38 recommendations in five categories including content, standards and expectations, time, teaching, leadership, and fiscal support. This report led to increased financial strain for institutions and pressure to improve access, learning, retention, and persistence (Dunn & Dean 2013; Inkelas & Associates, 2008; Stassen, 2003). Learning communities became a popular reform effort because they addressed multiple issues including student learning, retention, transition, growing diversity of students, academic performance, and social development. The creative design of these communities solved many problems as students engaged with their institution, faculty, and fellow students through active learning opportunities. Retention, graduation rates, and learning outcomes increased. The positive student outcomes from these programs including retention and graduation rates also helped ease financial strains.

Most program developers of learning communities in the 1970s and early 1980s acted independently and struggled to make it through formative years. Although learning communities were isolated from one another in these early years, developers shared a mission of interdisciplinary education and active learning. The increase in popularity of these programs made the term *learning communities* prominent. Leaders eventually

realized the role of learning communities in the larger education reform efforts. The increased popularity of learning communities also spurred the creation of the Washington Center for Undergraduate Education at Evergreen State College in 1985. The Center created support for learning communities, developed a common language, and provided examples of different models that could be adapted (Lenning & Ebbers, 1999; Smith, 2013).

Two studies in the 1980s contributed to early learning communities: *Involvement in Learning* (National Institute of Education, 1984) and *Integrity in the Curriculum* (Association of American Colleges, 1985). The state of decline in American higher education was assessed in each study. It was found in each study that significant student involvement was imperative to learning. These studies provided policy analysis and processes for reform as well as led the way for future research. Recommendations from these reports encouraged the creation of smaller learning communities to increase engagement and active learning.

Drawing from the National Commission on Excellence in Education's 1983 report, the National Institute of Education used a small advisory board or study group to create the report *Involvement in Learning*. It included suggestions for policy analysis, research, and recommendations for improving higher education. The report explained that the rapid growth of higher education and the following budget constraints created gaps in student learning, curriculum coherence, and academic standards (Shapiro & Levine, 1999).

In the *Involvement in Learning*, the National Institute of Education provided three major recommendations: increase student involvement, realize higher expectations, and

provide assessment and feedback. First, the National Institute of Education (NIE) suggested that institutions should strive to create learning environments that yield a greater opportunity for student involvement. More learning occurs when students are actively engaged in the learning process. The NIE suggested increasing involvement through increased faculty-peer interactions and curriculum that included field studies, group discussions, simulations, presentations, debates, and field studies. Next, the NIE described expectations as the educational outcomes sought by students and institutions. Outcomes are realized when the students and institutions expectations align. Matching expectations can be accomplished by sharing objectives and making them clear. Learning outcomes, program outcomes, and student goals should be communicated. Finally, the NIE explained that implementing regular assessment and feedback improves the teaching and learning environment. Assessment can enhance teaching methods and strengthen student-to-faculty relationships. There is a balance between assessment and feedback, realizing expectations, and increasing involvement. These recommendations contributed to the development of student involvement theories as well as the creation of smaller learning communities.

In 1985, the report *Integrity in the Curriculum* was created as part of the Association of American Colleges (AAC, 1985) project on *Redefining Meaning and Purpose of Baccalaureate Degrees*. The Association of American Colleges is now known as the Association of American Colleges and Universities (AACU). The AAC drew on national studies on campus practices and focused on the decline and devaluation of the undergraduate degree. However, instead of focusing on analyzing weakness as past reports had, the AAC focused on identifying ways to improve them. The AAC

identified the following as areas that could be enhanced: faculty responsibility and teaching, minimum curriculum requirements, in-depth study, and problems with accountability.

First, the AAC (1985) noted that commitment of faculty was imperative for curriculum reform and went on to note that the first obligation of a professor was to teach. Secondly, it was recommended that there should be a minimum curriculum that was not based on factual knowledge needs, but on creating an intellectual, aesthetic and philosophic experience. The AAC (1985) recommended a minimum curriculum should include the following experiences which are essential to education: “1. Inquiry, abstract logical thinking, critical analysis...2. Literacy: writing, reading, speaking, listening...3. Understanding numerical data...4. Historical consciousness...5. Science...6. Values...7. Art...8. International and multicultural experiences...9. Study in depth” (p. 15-23). The AAC called for a depth of study that included a complex structure of curriculum that is interrelated. It advised that a course of study should include a core theory, a progressive sequence of educational experiences, and a culminating project or thesis. The AAC (1985) encouraged establishing a community of learning with integrated curricular and co-curricular experiences, community service, political participation, and civic responsibility. Finally, the AAC called for more accountability on performance. It identified students, programs, and faculty as three areas to measure effectiveness. These three areas are interrelated, and effectiveness was linked to the measurements of opportunities for active learning and student and faculty engagement in a joint effort toward learning.

Tinto's (1987) research impacted theories of retention and involvement following the late 1980s. Tinto (1987) introduced the "student departure" model that provided theories and concepts on how more engaging environments such as learning communities could increase students' development, performance, and persistence. In the 1990s Tinto became a leading researcher for the National Center for Postsecondary Teaching, Learning, and Assessment, tested his theory in several studies and made recommendations for creating learning environments that foster student involvement (Smith et al., 2004). Tinto's studies covered a variety of institutional types and differing subjects and structures. "Although his previous work suggested that student involvement was key, his landmark learning community study carefully described how student involvement could be fostered through collaborative learning" (Smith et al., 2004, p. 58).

In the 1990s several other influential research studies followed Tinto's work including Astin (1993) and Pascarella and Terenzini (1991). Much like Tinto's efforts, Astin, and Pascarella and Terenzini's research continued to describe challenges in higher education and provided theories and concepts for more successful learning environments. Astin (1993) introduced the "involvement" model and Pascarella and Terenzini (1991) also supported student involvement theories.

By 2000, learning communities had spread nationally. "More than five hundred institutions, public and independent, urban and rural, residential and commuter, two-year and four-year, had adopted the learning community approach, and they are continuing to adapt it to their purposes and needs" (Smith et al., 2004, p. 56). As learning communities spread, residential living-learning communities have been implemented in a variety of

areas and interest groups to address a broad range of institutional concerns and objectives.

In 2007, the NSLLP found that living-learning communities were a thriving and popular innovation at institutions. However, the study showed that the majority of programs were new and not long standing (Inkelas & Associates, 2008). Thus, there is a call for more understanding and development of such programs. The following section describes the theoretical framework that has been incorporated into design and research of many learning communities and specifically living-learning communities.

### **Impact Models: Student Departure and Involvement**

Learning communities are a growing area of interest for researchers. Unlike other programs that focus on either academic or social integration, learning communities link both socialization and academic environments. Theories concerning environmental factors that affect student success and persistence have provided a framework for learning communities. As institutions seek to increase retention and student success, these models guide the creation of programs that positively impact students. Pascarella and Terenzini (2005) suggested the use of college impact models to study the origins and processes of student change.

Impact models were selected in support of learning communities versus student development theories because they focus less on students' individual traits and more on how students respond to environmental factors developed by institutions. These models view environmental factors such as programs, policies, institutional and program structure, culture, interactions, and social system as origins of impact. Lenning and Ebbers (1999) noted that these models support living-learning community initiatives.

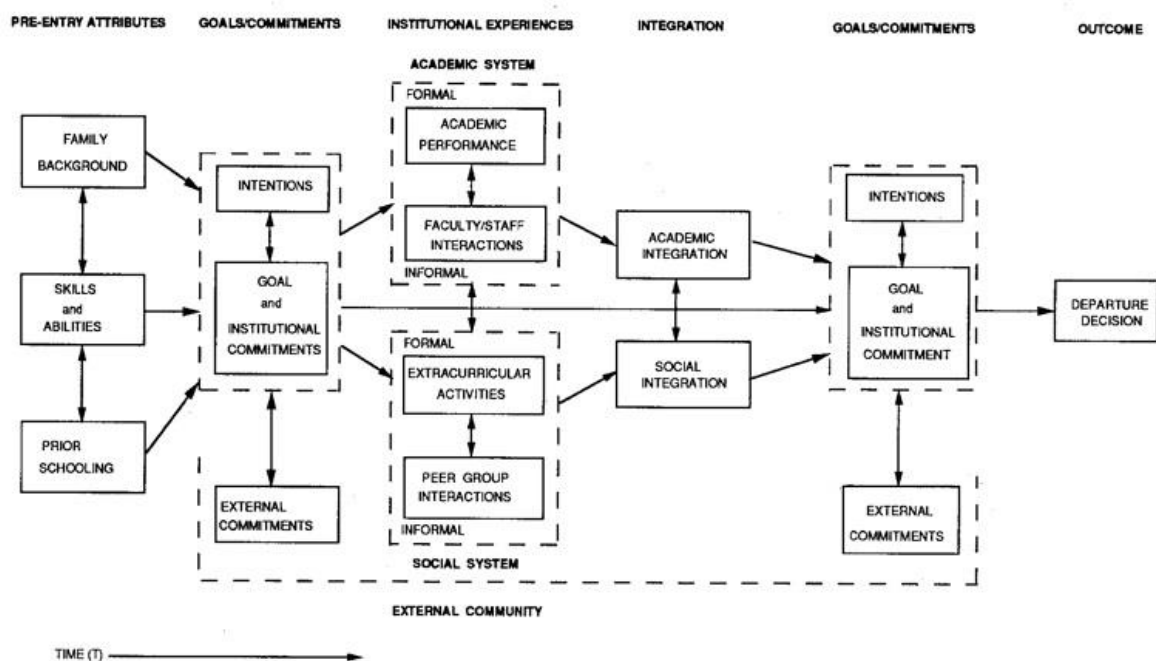
These models suggest that learning communities should increase students' development, achievement, and persistence through encouraging the integration of social and academic lives within a college or university and its programs, and through quality interaction with peers, faculty members and the campus environment. (Lenning & Ebbers, 1999, pp. 49-50)

This section will describe college impact models of student change including Tinto's theory of student development, Astin's I-E-O model and theory of involvement, and Pascarella's general model for assessing change and how these theories have applied to research on learning communities.

**Tinto's theory of student departure.** Before 1970, research on retention was limited to descriptive models. Pascarella and Terenzini (2005) explained that descriptive models only described conditions in which dropout was more likely to occur and could not predict institutional environments that would help prevent dropout. Descriptive models lacked accuracy. As higher education retention programs grew, effective assessment tools were necessary to determine which retention efforts worked. Tinto's retention research created a model that moved beyond previous descriptive models and accounted for individuals' background characteristics, educational disposition, and motivational nature. Tinto's model helped to identify institutional program elements that affected student persistence and departure (Tinto, 1975). Departure was defined as when a student no longer persists at the institution of initial enrollment.

As illustrated in *Figure 1*, students enter college with pre-entry attributes (i.e., prior education, social skills, academic ability, family background, gender, and race) and levels of intentions, goals, and commitments to college attendance and personal goals.

These intentions and commitments are modified by a series of interactions between the student and the institution's academic and social environment over time. Tinto's research found that of the multiple pre-entry attributes, goals and institutional commitments, when



negatively affected, were the primary roots of departure (Stassen, 2003).

*Figure 1.* Tinto's longitudinal model of institutional departure. Adapted from "Leaving College: Rethinking the Causes and Cures of Student Attrition" by V. Tinto, 1987, p. 114. Copyright 1987 by the University of Chicago Press. Reprinted with permission.

Tinto's (1987) research showed that high pre-college goals and institutional commitments led to higher academic performance and faculty interactions as well as greater social interactions. However, highly engaging institutional experiences, both socially and academically, also increased students' goals and institutional commitments during college. Tinto's theory asserted that students were more likely to remain at an institution if they are given opportunities to become integrated socially and academically



with the institution (Stassen, 2003). Thus, Tinto's research supported institutions developing learning communities as a method to assist students in increasing engagement, find support for goals, and build commitments to the institution.

"Institutions can employ learning communities to promote student involvement and achievement in settings where such involvement is not easily attained" (Tinto, Goodsell-Love, & Russo, 1994, p. 17). Tinto explained that participation in a collaborative learning group allowed students to develop peer support which helped students engage more fully socially and academically (Tinto et al. 1994).

Tinto (1988) further described student persistence in three longitudinal stages. The first phase consisted of separation, physically and socially from the students past communities, including friends and families. Students who live at home or close to home may experience less change and subsequent stress during this stage. However, they may have problems progressing to later stages. The second phase was a period of transition, where students try to make new associations and integrate into their new communities. The transition stage can be stressful when some students do not have the skills, resources to adjust or lack strong commitments and goals for a college education or to the institution. The final stage was integration into the new community. In this stage, students establish membership in the community and adopt social norms. According to Tinto's model, social and academic interactions with peers, faculty, and staff are imperative in establishing integration and student persistence in college (Tinto, 1988).

Tinto's theory of student departure is one of the most widely used frameworks. His work supported by 775+ estimated citations in the early 2000s has guided research investigating students and their college experiences (Pascarella & Terenzini, 2005).

Tinto's model has been used to research institutional programs and their effects on student integration into academic and social systems. Tinto explained although content and structure of learning communities vary, all include a collaborative environment of shared knowledge. "This form of classroom organization requires students to work together in some form of collaborative group and to become active in, and indeed responsible for, the learning of both group and classroom peers" (Tinto, 2000, p. 2).

As Tinto studied learning communities, he asked if collaborative learning programs make a difference and if so, how. He used both quantitative and qualitative data from community colleges and 4-year public institutions. He sampled first-year learning community program students and non-program students. He found that participation in a collaborative group helped students engage socially, academically, and with the institution at large. The group interactions extended outside of the classroom and helped "bridge the academic-social divide that typically confronts students in these settings" (Tinto & Goodsell-Love, 1993, p. 5). Students in these settings had greater academic performance and persistence than those in more traditional settings (Inkelas & Associates, 2008; Tinto & Goodsell-Love, 1993; Tinto et al. 1994). Furthermore, Tinto (2003) noted that learning communities helped students transition to college life by requiring participants to assume personal responsibility to contributing to the acquisition of knowledge and the community.

Tinto's findings on learning communities also appear to support the specific area of living-learning communities. Using Tinto's framework, Stassen (2003) identified that living-learning community participants demonstrated higher academic success, retention rates, and involvement than non-participant residents. These studies reinforced Tinto's

idea of integration and the importance of engaging students in improving student success and retention. Tinto (2000) suggested “What is needed now is not merely more such programs but the establishment of institutional assessment strategies that will provide and institutionalize those efforts over time” (p. 12).

**Astin’s I-E-O model and theory on involvement.** Astin (1993) proposed one of the most influential impact models, the input-environment-outcomes (I-E-O) model. Astin used the elements of input, environment, and output to explain how students develop through becoming involved. First, Astin’s model asserted that students arrived at college with previous input characteristics including demographics, backgrounds, and experiences. Next, these inputs interacted with the college environment, including faculty, staff, peers, programs, policies, and activities, whether on or off campus. These interactions shaped the way the students engaged with the college environment and helped explain students’ growth and characteristics after college. If educators are aware of students’ pre-college characteristics and demographics, more effective educational strategies and programs may be developed to guide students to learning outcomes.

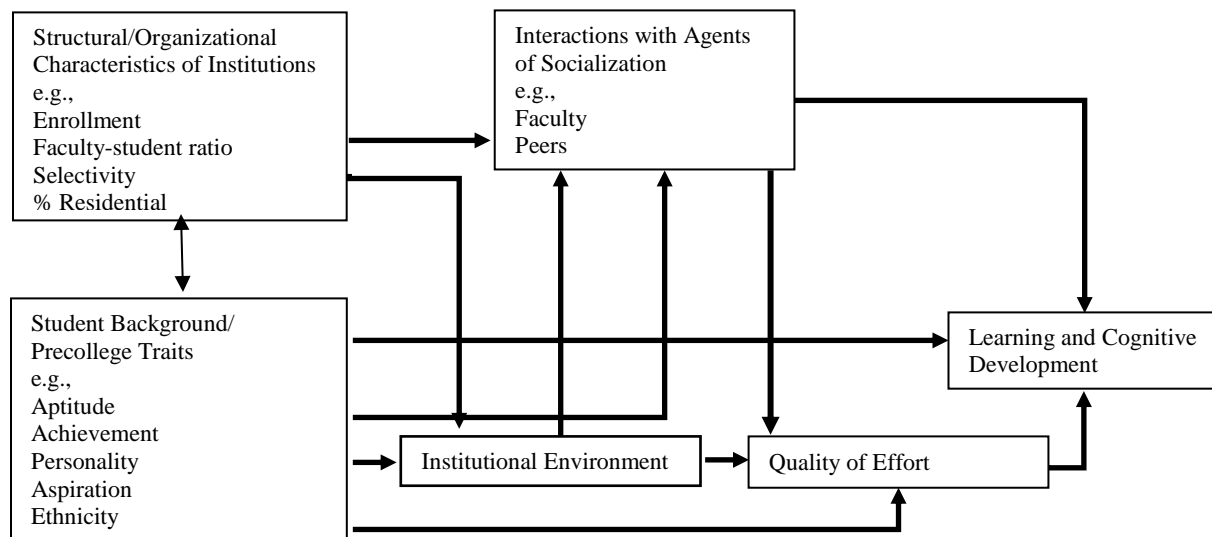
Astin (1993) investigated how the environments created by college programs affected college students’ development. His theory emphasized students as active participants in learning instead of the passive collectors of knowledge. Astin proposed that student learning is proportionate to the quality and quantity of student involvement. “Thus, development or change is not merely the consequence of college’s impact on a student but rather a function of the quality of student effort or involvement with the resources provided by the institution” (Pascarella & Terenzini, 2005, p. 54). Astin (1993) defined student involvement as the amount of physical and psychological energy a

student invests in an academic experience. Therefore, effective programs or curricula must elicit student interest and effort. The implications of this framework have encouraged the development of learning communities. The framework has provided empirically grounded evidence of learning communities creating effective collaborative learning environments and increasing positive influences on students.

Astin (1984, 1993) noted that among the results from several forms of college involvement opportunities, living on campus and interacting with peers had a significant impact on most college outcomes. Astin (1993) identified the place of one's residence and involvement with peers as the first two types of institutional experiences which can be related to academic success and retention. Astin (1984) found that students who lived on campus had greater levels of satisfaction with experiences outside of the classroom, stronger graduation rates, higher levels of faculty satisfaction, and increased retention rates. Students who lived on campus also showed gains in cultural awareness, leadership skills, interpersonal skills, job skills, artistic interests, liberalism, and self-esteem. Further, Astin (1993) conducted a study at the Higher Education Research Institute and found student on student interactions and student peer groups had an influence on academic success and persistence rates. Relationships between students, such as those formed in living-learning communities, were found to improve leadership, public speaking, interpersonal skills, and academic skills.

**Pascarella's general model for assessing change.** Tinto was primarily concerned with influences within the institution on students; however Pascarella (1985) suggested that consideration must also be given to both an institution's structural characteristics and its environment. Pascarella's (1985) general causal model for

assessing change looked to the effects of different environments on student learning. He suggested that there were five main variables that directly or indirectly affected student growth. As illustrated in *Figure 2* the first two variables, students' backgrounds and precollege traits and the structural and organizational characteristics of an institution, together create the third set of variables, institutional environment. The first three sets of variables (students' background, institutional structure and organization, and institutional environment) influence the fourth set of variables, interaction with agents of socialization. The students' background and the institutional variables affect how much interaction and the type of interaction students have with faculty and peers. The last set of variables, quality of effort, is shaped by the students' background, the institutional environment, and through social interactions. Finally, the act of change or learning and



cognitive development is the product of the students' background, social interactions, and the quality of effort.

*Figure 2.* A general causal model for assessing the effects of differential environments on student learning and cognitive development. Adapted from "How College Affects

Students: a Third Decade of Research” by E. T. Pascarella & P. T. Terenzini, 2005, p. 57. Copyright 2005 by Jossey-Bass. Reprinted with permission.

Pascarella’s (1985) general model for assessing change influenced Pascarella and Terenzini’s 1991 book, *How College Affects Students: Findings and Insight from Twenty Years of Research*, and their 2005 book, *How College Affects Students: A Third Decade of Research*. The 1991 book covered research from 1969 to 1991, and included more than 3,000 studies and the 2005 book encompassed more than 2,000 studies from 1990 to 2005 (Shapiro & Levine, 1999). Provided in both books was an analysis of how college environments affect student outcomes. Among the many variables Pascarella and Terenzini investigated, they found links between students’ place of residence and student change. Pascarella and Terenzini (2005) found evidence that students who lived on campus were more likely to persist and graduate than those who live off campus. The persistence and graduation rates of on-campus students were found to be consistent even when taking into account a wide array of precollege characteristics. Residential students were also found to be more socially engaged, participated in more extracurricular activities, and tended to be more satisfied with their college experience, which had a positive influence on persistence. The acquisition of knowledge was not found to be directly related to living on or off campus. However, living on campus appeared to indirectly foster change through opportunities for increased engagement (Pascarella & Terenzini, 2005).

The strongest evidence of positive residence hall influences was found in living-learning communities. Pascarella and Terenzini (2005) noted “academically rich residential settings that included faculty participation and academic and cultural

programs, as well as academic advising, mentoring, and on-site classes, would be more educationally potent environment than the environments found in conventional residence halls” (p. 421). Learning communities in general, including residential and non-residential models, were found to have a significant and positive effect on student persistence into the second semester and second year. To some extent, the positive impacts of learning communities were linked to students’ perception of community size. It was found that institutional size did not have a direct impact on student change, but it indirectly influenced the opportunity for interpersonal relationships. Smaller groups of students found in arrangements including co-curricular activities, academic organizations, housing arrangements, and learning communities increased students’ opportunity for engagement and reduced the perception or the psychological size of an institution.

Pascarella and Terenzini (2005) found that cooperative environments of learning communities promoted both social and academic engagement. Learning communities increased social development and created a supportive peer group which aided decisions about persisting. The social and academic elements of learning communities helped link students’ academic and nonacademic lives. Classroom activities, especially those that incorporated active learning strategies were found to relate positively to persistence. Active instructional techniques, especially those requiring critical thinking, were directly and indirectly linked to institutional commitment and intent to return.

To better understand the existing research on learning communities and how impact theories have played a role their research and development, it is important to comprehend the different types of learning communities. This study is specific to a program that included clustered courses and a residential component. However, there are

different types of learning community structures that can stand alone or be paired to create a program. For example a first-year seminar alone can be considered a learning community or the first-year seminar can be linked with another course to create a learning community. The following section describes the variety of learning community structures found in institutions today and some of the instructional techniques adopted by each.

### **Types of Learning Communities**

Learning communities, by nature are not rigid or generic programs. Program developers intentionally create programs that meet the needs of students and take advantage of available resources. Much like the student participants, educators involved in learning communities take ownership of the collaborative learning process that happens in these programs. Some institutions have robust learning community programs that span across different forms and content. Other institutions have only one or two learning communities or have a low level of implementation. The breadth of learning community development often depends upon the levels of participation of the institution, departments, faculty, and staff. Learning communities share a goal of bringing students together for a collaborative learning experience, however each program is unique in its structure. Smith et al. (2004) identified four major types of learning communities: (a) first-year seminar or interest groups, (b) linked or clustered courses, (c) team-taught courses, and (d) living-learning communities. Described in the following sections are the categories and subcategories of learning communities.

**First-year seminar or interest groups.** The first category involves students taking two or three courses that are unmodified and an additional course that is exclusive



to the cohort members (Smith et al., 2004). Often the additional course is a first-year experience course either focusing on a specific interest area or general orientation to the first year. General first-year seminar courses offer students an orientation to the institution, an introduction to institutional resources, and sometimes offer a culminating project like community service or a field trip. Often programs that focus on a specific area are called first-year interest group and provide an introduction to a specific subject in addition to the general first-year seminar content. These courses may be taught by a combination of faculty, graduate assistants, advisors, and student affairs professionals. They are often team-taught and sometimes include peer advisors.

Integrated seminar learning communities have the same structure as first-year interest groups in which two or three unmodified courses are paired with an additional seminar course. The integrated seminar course is used to draw connections between the courses through reading, discussions, research, and culminating projects (Smith et al., 2004). Similar to first-year interest groups, integrative seminar programs use service projects, field trips, and out of classroom meetings or study groups to further facilitate learning and community building. These programs range from a single semester to multiple years and include courses exclusive to participants as well as courses open to non-program participants (Smith et al., 2004).

**Linked or clustered courses.** The second category involves linking classroom content between courses. Students take two or more courses where faculty members have collaborated to make links between the classes, and make the connections within each class (Smith et al., 2004). These courses are often introductory skill-building courses such as composition and speech. “Linked courses or clusters also might become

foundation courses for a major, a platform of courses for study in a minor, or a set of general education courses linked around an interdisciplinary theme” (Smith et al., 2004, p. 77). When two classes are paired, they are referred to as linked classes or paired classes, but when three or four classes are offered together, they are called a cluster. Most linked or clustered learning communities create a cohort exclusive to members although some accept other students at the end of registration to fill seats. Smith et al. (2004) recommended that learning community planners and teaching teams avoid broken cohorts and only let other students in if it cannot be avoided, as it can hinder course integration and community building. “Links and clusters provide a better opportunity to delve deeper into content and build community than when groups of student “block-register” in several unconnected classes” (Smith et al., 2004, p. 81).

**Team-taught courses.** In the third category, teams of faculty coordinate to create the equivalent of two to four courses in one team-taught program. These programs are designed so students can explore interdisciplinary concepts. The programs often go by a name that describes the theme of courses, but the design links content to traditional courses for transcript purposes (Smith et al., 2004). Linking these creative programs to traditional courses allows the programs to meet degree requirements and for credits to be transferred to other institutions. Similar to other learning community types, curriculum often includes reading, writing, discussions, problem-based projects, service learning projects, and even debates. Some team-taught groups meet in a large cohort for some sessions and breakout into smaller working groups, which is important for socialization in larger learning communities (Smith et al., 2004). Sometimes each faculty member

takes a designated group for small group work and mentoring. Many team-taught programs offer only part of a student's course load, whereas some offer full-time credits.

**Living- learning communities.** The last category of learning communities, the focus of this study, includes both academic and residential components. Residential learning communities, or living-learning communities as they are more commonly called, combine the structural with functional. Living-learning communities offer co-curricular arrangements that expand on the three previous learning community categories. Living-learning communities share the goals of learning communities as they work to link social and academic components of the college experience. They are rooted in theories of student involvement and engagement as tools to improve student adjustment, retention, and academic success.

...in a careful assessment of living-learning programs at University of Massachusetts-Amherst, Martha Stassen (2003) shows that even if the classes that students share are not intentionally integrated, when they live and learn together it can be very effective in improving student adjustment and engagement, retention, and academic success. (Smith et al., 2004, p. 90)

In some communities, faculty members reside with students in a faculty-in-residence capacity, whereas other groups include intentional academic programmings such as peer education events, tutoring, study sessions, advising, group projects, field trips, and guest lectures. Some residential facilities even offer classroom space to facilitate living-learning courses. Students involved in these programs are intentionally enrolled in specific coursework and are housed in dedicated living spaces. The residence life staff partners with faculty members to promote the academic values and learning

outcomes. Shapiro and Levine (1999) explained that living-learning communities encompass a holistic design that links in and out of class learning. “For this reason, they may be the most radical of the four learning communities approaches...because they challenge and require change within multiple university systems: curriculum, teaching, and housing” (Shapiro & Levine, 1999, p. 37). The following section describes research that has impacted this particular learning community approach.

### **Studies on Living-Learning Communities**

Research on living-learning communities is a relatively recent endeavor, starting in the late 1970s and gaining momentum in the 1990s. Most research has been limited to a single institution or even a single program. Fortunately, in 2004 and 2007 the NSLLP was conducted and offered the first multi-institutional longitudinal study on living-learning communities (Inkelas & Associates, 2004, 2008). The following provides an overview of living-learning community research including topics on the transition to college, student learning outcomes, and retention.

**Transition to college.** Earlier studies revealed that living-learning communities have a positive effect on facilitating students’ transition to college (Barthelemy & Fine, 1995; Inkelas et al., 2007; Inkelas & Weisman, 2003; Pascarella & Terenzini, 1980). Past research investigated the role that living-learning communities played in first-year student outcomes. While the transition to college is multifaceted, the majority of measures included outcomes of academic and social adjustment.

Early research on living-learning communities acknowledged the role of the collaborative learning environment on student’s transition to college. Pascarella and Terenzini (1980) examined student-peer and faculty-peer relationships in living-learning

communities. The study considered the quality of mentor relationships and the effects on student development and freshman year outcomes. The results verified that the living-learning communities increased freshman year persistence through measures of intellectual and personal growth, and sense of community. In addition, this study demonstrated that the quality of relationships that residents have with faculty and peers directly influenced college outcomes.

Later research continued to examine the relationship between residence hall environments and transition. Barthelemy and Fine (1995) examined the relationship between residence hall climate and college adjustment. Although their study did not involve living-learning communities, they looked at interactions and the overall climate of residence hall living and the effect on students transition to college. Barthelemy and Fine developed a residence hall climate survey and used a student adaptation to college questionnaire to measure adjustment. Personal support and group cohesiveness were found to be positively related to students' experiences of transition to college. Environments with high levels of conflict were negatively related. As suggested by Tinto's (1988) theory, supportive institutional environments fostered better student transitions, enhanced institutional integration and commitment, and therefore increased student success, engagement, and retention.

The concept of transition to college was a reoccurring theme in Shapiro and Levine's (1999) book on creating learning communities. The book provided a summary of studies on learning communities and included their research on student and faculty reflections. They proposed that designing and creating learning communities should be intentional and should bring faculty and students together to create a coherent and

collaborative learning environment. During one survey they found a need for consistency in quality of curriculum and support for students. Levine stated, “Simply enrolling students in common courses does not create learning communities” (Shapiro & Levine, 1999, p. 193). Their findings demonstrated that living-learning communities were more effective at enhancing learning experiences if programs encouraged engagement and dedication of faculty, staff, and most importantly students.

As Shapiro and Levine (1999) summarized studies, they noted that students in learning communities adapted more quickly and were more likely to participate in a range of academic and social activities. During a focus group research on participants in Temple University’s Learning Communities, students reported that they asked their classmates for help on problems and had a sense of camaraderie through talking about coursework (Shapiro & Levine, 1999). While introducing academic and social development outcomes that are commonly noted in living-learning research, Shapiro and Levine described a concept called the “Bradley Buffer” (Shapiro & Levine, 1999, p. 174). Researchers studying the Bradley Learning Communities in the Bradley Residence Hall at the University of Wisconsin, Madison, found that participants experienced less of a decline in academic self-esteem and self-efficacy than other first-year students. They felt that the living-learning experience provided a buffer or support to detour common transitions setbacks. The Bradley Learning Community goals included promoting a successful transition from high school to college and encouraging collaborative learning between faculty, staff and students.

Inkelas and Weisman (2003) added to research on living-learning communities’ effects on transition. They found that students participating in living-learning

communities reported a smoother academic transition than those living in traditional residence hall settings. Living-learning environments helped aid academic and social transition. It was found that positive effects can be obtained through academically and socially supportive residence hall environments, discussions of academic issues with faculty, and through study groups with peers.

Inkelas et al. (2007) expanded on this research by examining the influence of living-learning communities on first-generation students' academic and social transition to college. They used survey data from the National Study of Living-Learning Program (Inkelas & Associates, 2004) from first-generation students from 33 four-year institutions. The results indicated that first-generation students in living-learning communities reported perceptions of higher academic success and improved social adjustment to college than first-generation students in traditional residence halls. The findings noted that peer interactions, on an informal basis, did not directly relate to a smooth adjustment to college. However, it was noted that structured residence hall interactions like peer counseling, study groups, and hall events were beneficial.

**Student learning outcomes and retention.** Through innovative curriculum and programming opportunities, living-learning communities offer the ability to engage students in active learning. Studies (Inkelas et al., 2007; Inkelas & Weisman, 2003; Pike, 1999; Purdie & Rosser, 2011; Stassen, 2003) have found that students who participate in living-learning communities experienced positive outcomes in learning outcomes and retention. As institutions are under pressure to increase the quality of education and improve retention, these findings have made living-learning communities a popular solution for many institutions.

Pike (1999) contributed to research on student learning outcomes through a study that examined the effect of different living-learning communities on the learning and intellectual development of first-year students as measured by the College Student Experience Questionnaire. This study questioned if students who participated in living-learning communities experienced more engagement and academic success than residential students who had not participated in learning communities. The study included participants from three different types of learning communities.

Pike found that living-learning community participants were more involved on campus (in clubs, organizations, arts and performing arts) and had a significantly higher level of interaction with others including faculty and peers. It was found that these higher levels of interactions and involvements through living-learning programs had a direct positive effect on students' college experience. Although Pike found effects of significant integration of course information, integration of information in conversations, and greater gains in general education, he could not directly link these effects to living-learning community experiences. Pike suggested that although gains may not be directly linked to program participation, they are due in part to an increase in peer and faculty interactions.

This leaves a question of what truly causes these positive learning outcomes. Future studies may help examine if the effects may be directly linked to living-learning communities or to factors such as background characteristics. Inkelas and Weisman (2003) and Inkelas et al. (2007) noted the difficulty of relating outcomes directly to programs due to students' preexisting abilities and motivations that may lead them to self-select such programs. In this study, participants of the living-learning community



included all first-year business majors. Program participants were not self-selected, which may lead to different findings than programs with participants who self-selected a program.

Stassen (2003) conducted a study that measured academic performance, as well as retention. The study also examined the effects of modestly constructed living-learning communities. The study measured outcomes through longitudinal student database information and an end-of-first-semester survey. During the study, Stassen considered the role of student self-selection in living-learning communities as well as a variety of program implementations. Through comparing academic performance and one-year retention, the results indicated that even in limited or underdeveloped living-learning communities, students demonstrated positive outcomes in student experiences, GPA, and retention. The researcher suggested that even a basic program that facilitates student interactions focusing on academic work, even without faculty involvement, can have a positive effect on students' preparation levels. However, Kuh, Kinzie, Schuh, Whitt, and Associates (2005) stated that simply offering a basic program would not promote student success. They argued that institutions should implement high-quality programs that are "...customized to meet the needs of students they are intended to reach, and firmly rooted in a student success-oriented campus culture" (p. 556).

Purdie and Rosser (2011) examined the academic performance as well as retention specific to first-year students in two types of living-learning communities and a non-residential first-year experience course. The living-learning communities included an academic theme floor and a first-year interest group. The academic floor had an educational or academic discipline theme and was lead by faculty, staff, and students.

This program did not include courses; rather it focused on academically related extra-curricular experiences. The first-year interest group was also centered on academic themes but offered four linked courses, including one focusing on freshman transition. The first-year interest group was facilitated by faculty members and upperclassmen who also served as academic mentors who lived with freshmen in the residence hall. Purdie and Rosser found that participation in the academic themed floor or first-year experience programs did not improve grades or retention. Students participating in the first-year interest group with both linked courses and residential components earned nominally higher GPAs and experienced an 18 % increase in retention. These findings suggest that student success and retention can be improved when faculty members and student affairs professionals collaborate to create programs that incorporate both highly engaging curricular and residential experiences that encourage interaction with faculty and peers.

**National study of living-learning programs.** The 2004 and 2007 NSLLP (Inkelas & Associates, 2004, 2008) represented the most comprehensive studies to identify the effects of living-learning communities. These two studies supported earlier research through subsequent investigation of some of the most commonly found topics of study associated with living-learning communities including transition to college, student learning, and retention. The conceptual framework for both NSLLP studies (Inkelas & Associates, 2004, 2008) was based on Astin's (1993) input-environment-outcomes college impact model.

In 2001 Inkelas collected data from 34 institutions (Inkelas & Associates, 2004). The 2004 NSLLP report noted that there have been many studies on curriculum based learning community programs including several national studies (Inkelas & Associates,

2004); however there have been few studies on residential learning communities and there have been no multi-institutional or national studies on this topic. At the study's completion nearly 24,000 students had responded and provided information on almost 300 living-learning programs. Student participants completed a 275 question survey called the Residence Environment Survey (RES) that included questions about the student's demographics, pre-college expectations, college experience, and perceived growth on a number of learning outcomes. Program administrators completed a 30 question survey called the Living-Learning Program Survey (LLPS) that asked questions about program goals and objectives, institutional characteristics, staffing, academic offerings, and co-curricular opportunities.

In 2007, the NSLLP initiated a follow-up study that is the largest and most comprehensive study of living-learning communities in the United States (Inkelas & Associates, 2008). Findings from the 2007 NSLLP were noted in a 2008 report from Inkelas and Associates. The longitudinal follow-up study included over 1,500 first-year students from the 2004 study from 16 different institutions. It also included baseline data from a new cohort of over 22,000 students from all class levels from 46 institutions. Living-learning research commonly focuses on the first year of program participation. The NSLLP is the first of its kind to examine the long-term effects of living-learning programs. The 2007 study included data from 613 living-learning programs that took place at the participating institutions. It focused on student impacts including faculty and peer interactions, involvement, and academic and social support. Finally, the study concentrated on outcomes including transition, academic success, self-confidence, appreciation of diversity, civic engagement, and persistence.

One significant impact of the NSLLP (Inkelas & Associates, 2008) was the comparison of outcomes from living-learning community participants to traditional residence hall students. Prior research suggested that living-learning community participants had higher outcomes in involvement with their college environments and learning and development than non-participants. The NSLLP revealed statistically significant differences in a variety of environments and outcomes between program participants and non-participants. Program participants were found to be more likely to embrace liberal education pursuits such as appreciation of arts, music, and different cultures. However, there were no significant differences between participants and non-participants in their perceptions of their growth in cognitive complexity or personal philosophy. Higher levels of academic self-confidence were found in participants, but there was no significant difference in interpersonal self-confidence. Expressions of appreciation of racial/ethnic diversity and positive views of racial and ethnic diversity on campus were found at higher levels in participants. Participants had a more positive perception of residence hall climates and were more likely to use residence life resources. There was a higher level of mentoring relationships with faculty among participants; however this did not cross over to interactions with course-related matter. Participants reported higher scores on intellectual outcomes, including critical thinking/analysis abilities, application of knowledge abilities, and enjoyment of challenging intellectual pursuits (Inkelas & Associates, 2008).

By maintaining a broad definition of living-learning communities, the NSLLP was designed to set a foundation for future studies. The broad definition allowed for a vast amount of data on program variables including size, ownership/partnership by

faculty and/or student affairs, resources, physical location, academic components, and co-curricular programming. However, Soldner and Szelényi (2008) argued that creating a more specific definition of what constitutes a living-learning program would be beneficial in researching which program elements are most effective in facilitating student outcomes. With that being said, the NSLLP was useful in identifying the vast programmatic and structural characteristics of living-learning communities, as well as student outcomes. Most importantly, the NSLLP provided a foundation for future research through a nation-wide, longitudinal study.

### **Summary**

This chapter reviewed the history, theories, types, and research of learning communities. The historical review demonstrates that many living-learning communities are new. However, living-learning programs are gaining momentum. The impact of student involvement and engagement experience in learning communities on student adjustment, retention, and academic success was explained through the theoretical frameworks. Common language, structures, and objectives of learning communities were introduced in the description of living-learning community types. Finally, an overview of research on various types of programs at different kinds of institutions introduced commonly found topics on living-learning communities including the transition to college, student learning outcomes, and retention. The current study continues the line of inquiry on student learning outcomes and retention while adding information from the perspective of a small institution. Living-learning communities at small institutions have previously been a neglected area of study. Chapter three includes the methodology of the

study including the research design, the selection of the participants, data collection, and the data analysis procedures.

## **Chapter Three**

### **Methods**

The purpose of the study was to assess the business department's first-year student program created to improve retention and student success via a case study analysis of the type of program in which business majors took part (general first-year seminar or Business Living-Learning Community). A second purpose was to assess the effectiveness of the general first-year seminar and the Business Living-Learning Community on the retention and academic success of first-year students. The quantitative analysis included the variables of grade point average (GPA) and retention. The methodology is presented in chapter three and includes the following sections: research design, selection of participants, measurements, data collection procedures, data analysis, and limitations.

#### **Research Design**

The research design of this study was mixed and included both qualitative and quantitative research methods. This design allowed for both case study research and casual comparative research. A case study analyzed changes in the business department's first-year student program as it transitioned from a general first-year seminar to a living-learning community. Creswell (2014) defined case studies as a design in which researchers evaluate a case through an in-depth analysis, often of "a program, event, activity, process, or one or more individuals" (p. 14). The case study was conducted through a review of institutional documents and correspondence with program facilitators.

According to Creswell (2014), the casual comparative approach is appropriate to compare a cause that has already happened in two or more groups. Two groups are the focus of this study: the 2012 and 2013 cohort of first-year, first-time business students who participated in a general first-year seminar course and the 2014 and 2015 cohort of first-year, first-time business students who participated in a Business Living-Learning Community. For the quantitative portion of the current study, participation status was the independent variable, defined as the type of program in which the student participated (general first-year seminar or Business Living-Learning Community). The dependent variables included GPA and retention. GPA was used as the measure of academic success.

### **Selection of Participants**

Data for the current study were collected from a small, rural, private, 4-year institution. The institution has multiple campuses; however, data from the main residential campus were the focus of this study. During the 2015-2016 academic year, there were approximately 600 undergraduate students on the main campus with approximately 350 residential students.

Purposeful sampling was used to determine a sample of first-year, first-time business students and documents were collected from first-year program developers in the business department. Purposefully selecting participants means specifically choosing individuals because data provided by their participation could be used to understanding the research problem or questions (Creswell, 2014). The student sample came from first-year, first-time business students in the fall semesters of 2012, 2013, 2014, and 2015. In 2012 and 2013, all first-year, first-time business students, participated in a first-year



seminar course which was not specific to their major. In 2014 and 2015 all but one first-time business students participated in the Business Living-Learning Community that included a first-year seminar specific to the business major. In 2015, all first-year, first-time business students participated in a cluster of courses, including a first-year interest group, an economics course, and an entrepreneurial course.

### **Measurement**

A mixed methods approach allowed investigation of both the changes in first-year student programs and the effects of these changes on academic success and retention. This method also provided a more reliable analysis of the small sample size, which was limited due to the type of institution. A case study was performed which included document analysis of both first-year student programs. The case study was followed by a quantitative analysis of GPAs and retention status.

**Document analysis.** For the case study, a document analysis was performed to develop a comprehensive view of program changes. Institutional documents included syllabi, curricula plans, teaching guides, and course descriptions from 2012, 2013, 2014, and 2015 first-year student programs. Program facilitator e-mails and other correspondence were also included in the document analysis

**Validity and reliability.** In the case study analysis, strategies were employed to ensure validity and reliability. Creswell (2014) described qualitative validity as procedures used by researchers to check for accuracy, while qualitative reliability refers to approaches that are consistent across different researchers. Validity was supported through the use triangulating data, member checking, and the use of rich descriptions. Triangulating data incorporated collecting multiple forms of data, including syllabi,

curricula plans, teaching guides, course descriptions, and personal correspondence to build a comprehensive analysis of the first-year programs. Member checking was used to check the accuracy of the document analysis process. First-year program facilitators were contacted after document analysis to provide clarification. Creswell (2014) described this member checking approach as an opportunity to improve accuracy regarding interpretations of the researcher's perspectives. A detailed description of the program changes including curriculum, instruction, logistics, and facilitator perspectives was included in the findings of the document analysis. Creswell (2014) explained that a good qualitative researcher is more detailed in describing findings which add to the validity.

Three processes were utilized to ensure reliability during the case study. A case study protocol was developed to define the focus of the case study and the context for data collection. The data collection and analysis process was documented in detail and reported to allow others to follow the process (Creswell, 2014). Codes were defined and data were compared with code definitions to prevent a shift in the meaning of codes during the process of coding (Creswell, 2014).

**Quantitative analysis.** For the quantitative analysis, archival data were collected on first-year, first-time students' GPAs from their first fall semester. Retention data were analyzed to determine if each first-year, first-time student enrolled in full-time hours for the following fall semester.

GPA was used as a measure of academic success. For this study, academic success was defined as the successful adjustment to the intellectual demands of college, as represented by students' grades. GPA was determined as a measurement of academic

success because college grades represent student factors including adjustment to college, work habits, intellect, and effort. Pascarella and Terenzini (1991) found that academic performance was a predictor of college persistence and degree obtainment. Bacon and Bean (2006) further found that GPAs relate to student motivation, personality, individual learning, academic performance, and achievement striving.

GPAs were collected for first-time first fall semester business students in 2012, 2013, 2014, and 2015. GPAs were calculated by dividing the total amount of grade points earned by the total amount of credit hours attempted. The GPA was determined by final grades at the conclusion of each student's first fall semester.

Enrollment data were used as a measure of retention. Enrollment status was determined by the subsequent fall semester of each cohort: 2012 cohort enrolled for fall of 2013, 2013 cohort enrolled for fall of 2014, 2014 cohort enrolled for fall of 2015, and the 2015 cohort enrolled for fall of 2016. Student departure or non-retained status was determined when a student was not enrolled in any hours for any one semester. Students who were enrolled for more than 12 hours were considered to have a full-time enrollment status. No participants were reported as having a part-time enrollment status in subsequent fall semesters.

**Validity and reliability.** In the quantitative analysis, GPA was used as a measure of academic success. Bacon and Bean (2006) studied the validity of GPA measures in business courses. They found the correlation between first year GPA and second year GPA to be strong and statistically significant ( $r = .74$ ), and first year GPA and fourth year GPA to be statistically significant ( $r = .60$ ). They stated that "GPA does exhibit strong predictive validity of individual measures of academic performance, especially when that

performance is reliably measured and reflects an individual's ability and effort" (Bacon & Bean, 2006, p. 40). Bacon and Bean also found the overall reliability of GPA to be strong at the end of students' first year ( $r = .84$ ) and at the end of the fourth year ( $r = .94$ ). They noted schools assigning straight letter grades instead of incorporating a plus/minus system may experience a lower GPA reliability. The institution in this study has a grading scale that includes a plus/minus system, however some instructors opt to assign straight letter grades.

### **Data Collection Procedures**

An Institutional Review Board (IRB) form was submitted in July of 2016 to Baker University to gain permission to conduct the study (see Appendix B). The Baker University IRB approval letter is located in Appendix C. The participating institution did not require an approval review. Instead, in September 2016, a participation consent form was submitted to the provost at Institution A and approved (see Appendix D).

For the case study, first-year student program documents were collected after the completion of the 2015 fall semester. Program facilitators were contacted via e-mail and were asked to share any documents or correspondence about the structure, curriculum, or the change between 2012, 2013, 2014, and 2015 first-year student programs. Program facilitators were specifically asked for syllabi and teaching guides. The institution's website was accessed for more information on first-year student programs and to collect class descriptions for all first-year student program courses for 2012, 2013, 2014, and 2015 academic years.

Archival data were collected on GPA and enrollment status after the completion of the 2016 spring semester. The archival data were stored in the college's data

management system. These data were already collected by the college and were not collected specifically for this study. The Institutional Research department was contacted by e-mail with a request to retrieve data from the college's data management system. Departmental personnel were asked to remove any identifying information and replace it with a randomized unique identifier. The data were provided in an Excel spreadsheet.

### **Data Analysis and Hypothesis Testing**

A case study was performed to analyze changes in the first-year student programs. The following research question guided the qualitative portion of this study and were developed to examine how two programs (general first-year seminar and Business Living-Learning Community) changed over time.

***RQ1.*** How did the business department's first-year student program change from a general first-year seminar to a living-learning community?

Data were collected from institutional documents and correspondence with program facilitators and compiled to describe the changes to the first-year programs. Before data were collected a protocol was developed. The protocol included developing data collection procedures and guiding questions for collecting documents from program developers. The data collection procedures included identifying contacts, creating an e-mail to contact program developers, estimating the amount of time commitment for visits with program developers, and creating a list of documents to request. The guiding questions included inquiries about each course or program component and reasons for program changes. After documents were collected, data were read, organized by type, and then coded. Coding, according to Creswell (2014), is a process used to generate a description of people, places, or events, as well as categories or themes for analysis. In

this study, coding was developed as information emerged. Categories were created by reviewing each document for common concepts or frequently used language. As suggested by Lunenburg and Irby (2008), each program (general first-year seminar and Business Living-Learning Community) was analyzed separately, then compared and contrasted for a cross-case analysis. This analysis created a chronological narrative including themes and subthemes. Interpretations began with larger, general themes and moved to establishing significant findings. Themes and findings were linked to the theoretical framework of living-learning communities.

The following research questions guided the quantitative portion of this study and was developed to address how the program changes affected student success and retention.

**RQ2.** To what extent does the average GPA of first-year, first-time students differ among those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community?

**H1.** There was a change in the average GPA of first-year, first-time students who participated in a general first-year seminar as compared to those who participated in a Business Living-Learning Community.

A independent samples *t*-test was conducted to address H1. Independent samples *t* tests are appropriate to determine if one group is significantly different from another group on a given variable (Tanner, 2012). The independent samples *t*-test compared the dependent variable of GPA for students who participated in the general first-year seminar and those who participated in a Business Living-Learning Community. Participation status was the independent variable. The level of significance was set at .05.

**RQ3.** To what extent is there a relationship between participation of first-year, first-time students in a general first-year seminar and in a Business Living-Learning Community and retention results?

**H2.** There is a relationship between participation of first-year, first-time students in a general first-year seminar and in a Business Living-Learning Community and retention results.

A chi-square test of independence was conducted to address H2. “Chi-square tests of independence determine whether two nominal variables are correlated” (Tanner, 2012, p. 448). The observed frequencies were compared to those expected by chance. The level of significance was set at .05.

### **Limitations**

The limitations of this study included:

1. This study did not include data on extra-curricular activities. The institution in this study has a high percentage of students who participate in extra-curricular activities. Members of the entire 2015 first-year cohort, except for two students, were awarded an activity scholarship for participating in a sport, club, or organization. Most students were likely to be already engaged in extra-curricular activities other than the living-learning community. Extra-curricular activities may have affected retention and student success.
2. The retention data for this study only included enrollment status; no explanation was provided as to why a student was not retained. Reasons for departure vary and may be outside the areas of impact provided by learning communities.

3. The data on retention and GPA does not provide information on enrollment in specific courses. Outside courses taken at the same time as the business department's first-year student program courses may have affect students' academic experience, GPA, and retention results.
4. This study included data from general first-year seminar courses in 2012 and 2013, business first-year interest group courses in 2014 and 2015, and an entrepreneurship course in 2015. There were multiple general seminar courses in 2012 and 2013 that were taught by different pairs of faculty and staff. The faculty varied between the general seminar courses, the business first-year interest group course, and the entrepreneurship course. Different teaching methods and faculty interactions could produce results that influence the study.
5. This study did not control for pre-college characteristics. The cohorts of first-year, first-time business students used in this study varied in composition. Differences in students' demographics, academic abilities, and motivations could produce results that influence the study.

### **Summary**

The research design, the selection of the participants, data collection, and the data analysis procedures were presented in this chapter. The mixed methods research design included a case study and casual comparative research. The case study was used to assess changes in first-year programs over time, while an analysis of qualitative data was used to address how the program changes affected variables of student success and retention. The results of the study are presented in chapter four.



## **Chapter Four**

### **Results**

The purposes of the study were to analyze changes in the business department's first-year student program and to assess the effectiveness of the general first-year seminar and the Business Living-Learning Community on the retention and academic success of first-year students. Program documents and archival data of GPA and enrollment status were collected for 2012, 2013, 2014, and 2015 first-time, first-year business major cohorts to examine program changes and the affected variables of student success and retention. Chapter four contains a historical narrative in case study format of the development of the business department's first-year student program. Following the narrative, themes are described that arose from the case study. A quantitative analysis of GPA and retention concludes the chapter.

### **Case Study**

The business department at Institution A, the site of this study, developed a first-year student program in 2014 and 2015 in response to a retention assessment. Through this assessment of retention, administrators determined that initiatives should be developed to increase focus on academic majors and careers. The business department's first program development for first-year students was to modify an existing general first-year seminar course to a business specific first-year interest group. The business department also partnered with the residence life department to create a living-learning community where all first-year business students lived together with an upperclassman community advisor. The following year the business department enrolled all first-year

business students in three clustered courses to create a collaborative learning environment. These first-year student program changes occurred during the span of two years. The following case study was conducted to answer the following research question:

**RQ1.** How did the business department's first-year student program change from a general first-year seminar to a living-learning community?

**General first-year seminar.** In 2012 a general first-year seminar course was created at Institution A. The 2012 course, designated for all first-time, full-time students was:

...designed to help students to transition both academically and socially into college life. The curriculum is centered in the areas of academic success, campus connections, and career exploration. It sets the stage for a holistic learning experience and prepares students to maximize their use of college resources.

(Institution A, 2012, p. 1)

The course was designed and coordinated by the Associate Academic Vice President for Advising. The course met once a week for one hour and was team taught by a faculty member and a student affairs staff member. The course combined lecture, group discussions, and required attendance to extracurricular learning events including a service opportunity and campus speakers. Course outcomes included identifying personal strengths and career interests, recognizing personal learning styles, articulating academic policies, and understanding how things work on campus (Institution A, 2012). Students were evaluated through weekly reflection papers, workbook assignments that incorporated assessments of personal strengths and learning styles, and a comprehensive

final exam. Students were asked to respond to questions about the events they had attended outside of class in weekly reflection papers. The students also completed a reflection paper in which they investigated a career of interest (Institution A, 2012). The general first-year seminar was the first step in an academic component for the institution's first-year student program. The general first-year seminar was not specific to any academic department and the course remained as a general orientation requirement for all first-time, first-year students until the fall of 2014.

**Consultation outcomes.** Institution A, in the spring of 2013, created a retention self-assessment in preparation for an external consultant's review. In the self-assessment, Institution A's retention committee described a reliance on recruiting students into activity programs, especially athletics, which is reflected in students' "lack of focus on academic majors and intended careers" (Institution A, November 2013, p. 27). The retention committee asked for recommendations on ways to improve retention of athletes, especially through the sophomore year. In the self-assessment the retention committee argued:

If, by that time, the sophomore athlete has not committed to an academic major, started to work toward an intended career path, or begun to grow an alternative identity at the college he or she is very unlikely to stay at the college. (Institution A, November 2013, p. 7)

The 2013 retention committee also listed three goals and objectives: developing an academic performance feedback loop for students and coaches, increasing academic support for student athletes, and improving the link between first-year seminar course curriculum with residence hall programming.

In the late fall of 2013 and the early spring of 2014, a senior associate consultant on retention conducted two initial visits to Institution A, met with stakeholders, and gathered information on retention strategies. The consultant presented data for review by the retention committee. These data included information that influenced changes in the business department's first-year student program. The consultant noted that "first-year students in Business have the lowest fall to spring retention rate which is 69.6%" (Institution A, March 24, 2015, p. 3). Following the initial visit, the President of Institution A addressed the institution's employees in an e-mail describing follow-up actions on retention strategies. Listed among the actions was a change in the delivery of some first-year seminar courses. The President explained one pilot course would be a business first-year interest group that would be "less generic and more discipline-and career-specific for participating students" (personal communication, February 28, 2014).

**First-year interest group on business.** In the fall of 2014 and 2015 all first-time, first-year business students were enrolled into a business first-year interest group which provided an introduction to business communication, basic computer application skills, and career exploration. The business first-year interest group differed from the general first-year seminar because, in addition to orientating new students to the campus, it added components designed specifically for business students. During a business division meeting (Institution A, January 27, 2015), the department reflected on the course and discussed that business communication and computer literacy curriculum had been incorporated into the 2014 and 2015 courses, as it was not covered sufficiently in other course offerings.

The syllabus for the first-year interest group described the class as a “true transition course” (Institution A, 2014) that gave opportunities to explore college life while learning life-long skills. The first-year interest group syllabus stated:

The student will explore career options based on proven personality and career surveys, learn time management, study and test-taking skills, Microsoft Office basics, and investigate real world scenarios such as taxes, loans, house hunting, car buying, relationships, marriage, and spiritual identity. (Institution A, 2014, p. 1)

The course met twice a week on Tuesday and Thursday for an hour and ten minutes and it was determined that there would be one class with a maximum of thirty students. During the first half of the semester, the instructor introduced concepts of business communication. Students worked on grammar and proper use of English language in communication, understanding varied audiences, and the application of appropriate professional communication. In the second half of the semester, the instructor introduced practical computer literacy on Microsoft Office applications including Excel, PowerPoint, and Word. Course outcomes were evaluated through quizzes, homework assignments, online modules on Microsoft Office, a mid-term exam, and a comprehensive exam. Students were also required to present to the class about a current event for one assignment (Institution A, 2014). Throughout the course, students explored career options and concepts of personal responsibilities through guest speakers, group discussions, and current event presentations.

**Addition of business cluster courses and residential component.** In 2014 the department of residence life began housing first-year students of the same major together.

First-year business majors were housed in a designated wing in both the male and female residence halls for first-year students. In March of 2015, the senior associate consultant on retention visited Institution A for a third time to track progress and make additional suggestions. Subsequently, the consultant provided a report that highlighted recommendations. Among his suggestions was the creation of a business residential living-learning community for the 2015 school year. He stated, “This is a very important initiative because the lowest retention rates by academic division occur in Business and this program should improve them” (Institution A, March 24, 2015, p. 2). It was proposed that the first-year business student program would continue the new business specific version of the first-year seminar but with the addition of a cluster of first-semester business courses and a residential component. The consultant suggested for the residential component that first-year business students live together in a residence hall along with a resident assistant who is also a business major (Institution A, March 24, 2015). Resident assistants are student staff members who work in residence halls to provide resources for residents and assist residents in building community.

In summer 2015, the business department and the residence life department collaborated to create a residential component for first-year business students. The business department and the residence life department internally referred to the residential component as a living-learning community. However, the living-learning community was not marketed to the larger campus community or to students before their arrival. The learning community concept was introduced to first-year students during an entrepreneurial course that was included in the cluster of first semester courses.

The business department and the residence life department worked together to create and fill a community advisor position. The two departments stated in the community advisor position description (Institution A, 2015a) that the student advisor would interact with first-year students in the residence hall and through a student organization for business majors. The student organization interactions included weekly meetings to discuss group projects and group competitions. In 2015 an upperclassman student was hired to live with the first-year business students and serve as a student advisor. The advisor was housed in the women's residence hall.

In the fall of 2015, all first-year business majors were housed together in a designated wing in both the male and female residence halls for first-year students. Due to roommate requests, there were some residents on the designated wings that were not business majors. In the community advisor position description (Institution A, 2015a), program creators noted an objective to create a unique living environment with an engaging culture similar to those found in sports and other activities. The program creators also described the community as the first part of a two-part plan in which a sophomore residential community would be launched and would likely recruit participants that were previously in the freshman living community.

In addition to the residential component, in the fall of 2015, first-year business students were enrolled in a common cluster of courses. Students were enrolled in the first-year interest group course, an economics course, and an entrepreneurial course. Since the business major degree plan for the first semester during all three years of this study included the economics course, most participants took economics with a general or

business specific first-year seminar course. In 2015, academic advisors enrolled students in an additional entrepreneurial course as one of their general electives.

The entrepreneurial course was structured as one weekly classroom meeting led by a business professor and one weekly student organization meeting facilitated by multiple business professors and led by student leaders. The instructor of the entrepreneurial course stated in the syllabus (Institution A, 2015b) that the course would give students the opportunity to use knowledge and skills obtained in the classroom and apply them to an entrepreneurial setting through experiential learning. During the weekly class meetings, students took the Strong Interest Inventory, a career planning tool that incorporated personality types and occupational themes. Business students had been encouraged to take the Strong Interest Inventory in 2014, but it was not required until the entrepreneurial course. The 2015 cohort took the online assessment and attended an individual thirty-minute interpretation session with the course instructor.

The course instructor (personal correspondence, September 11, 2016) noted that the data from the Strong Interest Inventory were beneficial for students as well as the business division. The inventory helped the division identify if course content covered occupations of interest. It also helped to identify if first-year students' personalities were well suited for a career in business. The course instructor found these data helpful in considering questions about why students selected a business major and why they might leave the institution. For example, 2014 and 2015 students scored highest in enterprising occupational themes. These data supported the idea that students were in a major that matched their personalities. The course instructor assumed the reason for departure might not be related to bad fit between interests and major, but to sports or other extra-



curricular activities. The inventory also identified which workstyles and learning environments individuals preferred. Students' 2014 scores encouraged the division to base the entrepreneurial course content on team oriented, project based, and experiential learning opportunities.

During the weekly class meetings, the instructor introduced professional development topics, hosted group challenges, and led discussions on entrepreneurial group projects. During the weekly student sessions led by upperclassmen student leaders, first-year students were introduced to the international non-profit entrepreneurial student organization and were offered opportunities to get involved in the student activities. In an annual report (Insitution A, 2016) the student organization described how students were also asked to join projects that encompassed missions of social change and sustainability through entrepreneurial action. For example, in 2015 these projects included hosting an event for individuals with disabilities, partnering with a local business to raise funds for a local food drive, and installing water bottle filling stations around campus. The student organization was also responsible for operating the institution's store that sells apparel and accessories. In the annual report, the student organization noted that students "...make decisions on marketing techniques, purchasing merchandise, and accounting procedures" (Insitution A, 2016). Each student in the entrepreneurial course was required to complete two hours of work outside of the classroom each week. The weekly hours could be acquired through working on a team project, working in the student-run merchandise store, or serving time on a business student organization event such as Homecoming.

The following sections analyze changes in the business department's first-year student program that were presented in the previous narrative. Reasons for program changes were analyzed and themes presented. Themes and findings were linked to the theoretical framework of student impact models.

### **Emerging Themes**

Tinto's (1987) longitudinal model of institutional departure formed the framework of the study. Tinto's (1987) longitudinal model of institutional departure was selected to explain the reasons for changes in the business department's first-year student program. Tinto stated that institutions could develop and influence experiences that impact student success and retention. Tinto's model included four themes of institutional experiences: (a) academic performance, (b) faculty interactions, (c) extracurricular activities, and (d) peer group interactions. According to Tinto's (1987) model of institutional departure, individuals entered institutions of higher education with prior attributes, skills, and experiences which directly affected the formation of individual intentions, goals, and institutional commitments. The model claimed that students' experiences and interactions within the college impacted retention (Tinto, 1987). The following describes the emerging themes of institutional experiences found in changes of Institution A's first-year business student program that were intended to increase retention and academic success.

**Academic performance.** Tinto's (1987) theory asserted that students were more likely to be academically successful if they integrated into academic systems as well as social systems. The general first-year seminar course provided an overview of academic policies and offered opportunities for general major and exploration. To further first-year

students' integration into academic systems the business department created the first-year interest group on business and then the Business Living-Learning Community. The program changes placed emphasis on division-specific education and academic support.

In 2014, the business department implemented the first-year interest group that focused on major and career specific education. The department continued to build content to strengthen business skills and prepare students for future careers through the creation of the Business Living-Learning Community in 2015. The 2015 cluster of first-semester courses included content on career building skills. Examples of linked career content from the clustered courses included developing a career plan in the economics course, listening to speakers on career options in the first-year interest group, and gaining hands-on work experience in the entrepreneurial course.

Tinto (1987) stated that retention programs should not focus solely on retention. Education should be the goal of all programs with fundamental objectives of developing students socially and intellectually. The general first-year seminar incorporated developmental objectives including outcomes of identifying personal strengths, recognizing personal learning styles, and understanding how things work on campus (Institution A, 2012). The first-year interest group implemented in 2014 incorporated content to support first-year students in their transition to college and included additional objectives on building introductory skills for business majors. The course provided an introduction to business communication and basic computer application skills. The instructor (personal communication, 2016) noted that many first-year students did not possess the basic communication skills needed to complete the program, let alone a career in business. It was also found that students in a previous computer course needed

an introduction to computer literacy. Along with skills needed for the business program, the course provided transferable skills to aid students in the transition to college. These skills included financial literacy, time management, and study skills.

Tinto indicated that support, especially academic support, is critical during the first year of college. Tinto (2012) noted that support is especially needed in the classroom where new students should have the opportunity to acquire skills and knowledge needed to complete their program of study. Though these efforts cannot eliminate academic failure, they provided students an opportunity to acquire the skills for success.

**Faculty interactions.** Tinto's (1987) theory argued that of all student experiences while attending an institution, interactions with the campus community are primarily related to student retention. "Interactive experiences which further one's social and intellectual integration into the academic and social life of the college are seen to enhance the likelihood that the individual will persist within the institution until degree completion" (Tinto, 1987, p. 115). Tinto explained that beyond the importance of these interactions for social and intellectual integration, students used these contacts to understand expectations and evaluate institutional fit. Changes in the business department first-year student program aimed to increase faculty interactions, and subsequently improve student transition, feelings of institutional commitment, and clarity of institutional expectations.

In a study of faculty-student interactions, Wilson, Gaff, Dienst, Wood, and Bavry (1975) argued interpersonal interactions are often influenced by institutional design and institutions might improve educational experiences through maximizing occasions for

teacher and student interactions. For this reason, the business department sought to increase opportunities for faculty-student interaction outside of the classroom to support students as they transitioned into new communities. The general first-year seminar did not facilitate opportunities for faculty-student interactions outside of the classroom. The general first-year seminar course was taught by a faculty member and a student affairs staff member. Students may have had interactions with the student affairs staff member outside of the classroom due to the nature of the staff member's position but this was not an intended outcome of the course design.

Faculty interactions are crucial during students' first-year transition, while students try to integrate into the institution's academic and social communities and understand institutional expectations. Tinto suggested that personal contact with students should move beyond formal classroom spaces. Successful educational environments are much like families as their members connect and support one another in a collective learning community (Tinto, 1987).

To increase faculty interactions and aid transition, the business program's entrepreneurial course involved weekly student organization meetings and career advising outside of formal classroom time. Multiple business instructors facilitated the weekly student organization meetings. The instructor from the first-year interest group, the entrepreneurial course, and the student organization advisor, partnered to assist student leaders in running each meeting. The informal student-led structure allowed for a quicker feedback loop on student academic needs and interests and an open forum for students to voice questions or concerns. Through this structure students and faculty applied classroom concepts to real world applications outside of the classroom. Tinto

(1987) theorized that rewarding interactions between students and faculty outside the classroom may lead directly to academic growth and success and indirectly to higher levels of performance in formal academic systems.

Faculty interactions were also increased to impact students' goals and institutional commitments. As students gained skills and resources needed to adjust to college through faculty interactions, they may also have strengthened their institutional commitments. Students used experiences, including interactions, to judge the fit between their goals and commitments and the institution's characteristics. Tinto (1987) suggested that plentiful and positive out of classroom interactions with faculty should increase the likeliness that students feel a fit between their goals and commitments and the institution. However, contact alone does not ensure a match between the student and institution, but contact may increase the likelihood of a match due to effect of changing an individual's values (Tinto, 1987).

The business program incorporated widespread, reoccurring faculty interactions in the first-year program. It did so through the team facilitated weekly group meetings. It included one-on-one interactions during the entrepreneurial course, as the instructor gave individual career counseling for the Strong Interest Inventory. Students also had the opportunity to work alongside the business student organization's advisor while working at the institution's merchandise store. These interactions allowed students to interact with faculty outside of the classroom through experiences related to career development. These faculty interactions may have assisted students to build connections with the campus community while investigating their goals and institutional commitments.

The business first-year program also expanded the opportunities for faculty to communicate both formal and informal expectations of college and career paths. Tinto (2012) explained that student retention and graduation is impacted by the communication of expectations about what is required to succeed. Institutions should provide a clear and consistent message of formal and informal expectations of the institution's academic and social systems to help new students transition to college. Expectations are typically expressed in a classroom setting or through faculty interactions but staff and peers also share this information. Expectations should include formal institutional requirements as well as informal expectations of college, social communities, and intellectual communities, as content on informal information is often overlooked or understated (Tinto, 1987).

The general first-year seminar course introduced formal expectations of student responsibilities during course work. The course spent one class period discussing tools of the trade including an overview of the student e-mail system, the online course platform, and the student portal which included enrollment and billing functions. The course also included an assignment that entailed creating an academic plan which incorporated results from a time management exercise, the learning styles inventory, and the College Student Inventory (CSI).

The first-year interest group also introduced formal expectations of student responsibilities but included further expectations specific to degree requirements and career expectations. For example, in the syllabus (Institution A, 2014) for the first-year interest group course, the instructor outlined responsibilities for checking institutional e-mail, reading assignments on time, plagiarism, exhibiting professional behavior, and

appropriate dress. The first-year interest group and entrepreneurial course both involved further informal discussion of degree requirements and career expectations. Speakers, group projects, student organization meetings, career advising, and class trips allowed faculty to facilitate additional conversations about expectations. The student organization advisor (personal communication, 2016) noted that students in the entrepreneurial course and those involved in the student organization had the option to attend conferences, career fairs, and to learn about industry standards. The student organization advisor stated that previous first-year business students did not have these opportunities.

Additionally, the instructor of the general first-year seminar course and first-year interest group presented informal institutional expectations including campus resources students could access. The general first-year seminar course spent one class session completing a library orientation. First-year students were introduced to other resources and offices on campus that provide support and assistance through classroom discussions in both the general first-year seminar course and the first-year interest group. Tinto (1987) claimed that students' ability to obtain information needed to be academically successful is "dependent on their having established personal, nonthreatening contact with the persons and agencies which provide that information" (p. 146). Creating these connections with faculty, staff, and other student resources early in a student's degree program is important in laying the foundation for social and intellectual development.

**Extracurricular activities.** Extracurricular activities provide an important experience, not only to connect students to the institution's social system but as a support to academic systems as well (Tinto, 1987). Tinto (1987) described these experiences as involvement, though these experiences are also commonly referred to as engagement.



Tinto argued that involvement leads “not only to social affiliations and the social and emotional support they provide, but also to greater involvement in educational activities and the learning they produce” (Tinto, 2012, p. 240).

The general first-year seminar course encouraged students to engage in a variety of extracurricular activities through attendance requirements at campus events and reflective journal assignments about event attendance. These extracurricular activities included the institution’s opening convocation, a campus lecture, and a community service opportunity. Classroom discussions also facilitated students’ individual experiences with these extracurricular activities.

While the general first-year seminar required individual participation requirements for extracurricular experiences, the Business Living-Learning Community was based on a collaborative learning environment. In this collaborative environment students lived, learned, and studied together. This model encouraged a supportive network where students learned from each other and supported each other socially and academically. Tinto (1987) spoke specifically of learning communities as a vehicle for institutions social and academic systems to not only exist side by side but to enhance each other. Learning community experiences inside and outside of the classroom can link both academic and social engagement. In 2015, the business department incorporated a learning community structure through clustering courses and adding a residential component.

While the general first-year seminar was based on lecture and classroom discussions, the Business Living-Learning Community included opportunities for involvement and active learning. The program included extracurricular activities such as

team competitions, team projects, and class trips. Astin (1993) emphasized the positive effects of active learning. Astin proposed that student learning is proportionate to the quality and quantity of student involvement. The student projects during the entrepreneurial course allowed students to give preference to their project and workgroup. Students were required to work a number of hours in the merchandise store and on their projects outside of class but had flexibility on the number of working hours between the two. For this course, students were actively involved in a semester-long project that encompassed many hours of hands-on learning.

**Peer group interactions.** Developing a new peer group is one of the many challenges for first-year students. Positive peer interactions are an important experience during a student's first year and may aid the transition to college and social integration. Astin (1993) found that student-on-student interactions and student peer groups had a positive influence on academic success and persistence rates. The business department implemented changes in the first-year program to increased participants' interactions with peers, including the addition of extracurricular activities and a residential component.

The entrepreneurial course added an extracurricular component to the first-year program. The course included weekly student organization group meeting, projects, competitions, and class trips. The extracurricular activities allowed students opportunities to interact with their fellow first-year students as well as upperclassmen business majors. The student organization advisor (personal communication, 2016) hoped that upperclassmen would mentor the first-year students and encourage them to stay involved in the student organization in future years. The student organization advisor further noted that of the 16 participants in the 2015 entrepreneurial course, five

students joined the business student organization the following year. The student organization assisted with facilitating the course for first-year students. The program's cohort model created a shared learning environment where students experienced the cluster of courses and residential component together. Program participants worked collectively on projects and at the institution's merchandise store, as well as living with fellow program participants.

The residential component housed all first-year business students together in the same wing of the residence halls for first-year students with an upperclassman appointed as a student advisor. According to the student organization advisor (personal communication, 2015), students were required to interact with the student advisor at least once a week. Astin (1993) identified the place of one's residence and involvement with peers as the first two types of institutional involvements which can be related to academic success and retention. Through his research of college dropouts, Astin (1984) found that students who lived on campus had greater levels of satisfaction with campus life, higher rates of graduation, higher levels of faculty satisfaction, and increased retention rates. In a later study Astin (1993) came to the conclusion that students' peer groups were the most influential component of their college careers.

Tinto suggested that institutions can employ collaborative learning groups during new students' first-year to aid social and academic transition as well as promote involvement (Tinto et al. 1994). He further proposed that belonging to learning communities reduced academic stress, influenced academic performance, and allowed students to share knowledge with their peers (Tinto, 2012). Finally, Tinto (2012)

theorized a sense of belonging enhanced students' commitment to the institution, thus increasing retention.

### **Case Study Summary**

Tinto's (1987) theory on student departure, specifically his findings on incorporating institutional experiences to influence student success and retention, supports the changes in the business department's first-year student program. The business department created a first-year student program that included a major and career focused first-year interest group, a cluster of first-semester business courses, and a residential component. These components of the first-year student program provided more opportunities for academic performance, faculty interactions, extracurricular activities, and peer group interactions than what was occurring in the general first-year seminar. The following section provides results on the quantitative analysis of how program changes affected student success and retention.

### **Descriptive Statistics**

Data were collected from first-year, first-time business students in the fall semesters of 2012, 2013, 2014, and 2015. Two groups were the focus of this study: the 2012 and 2013 cohorts of first-year, first-time business students who participated in a general first-year seminar course and the 2014 and 2015 cohorts of first-year, first-time business students who participated in a Business Living-Learning Community. Table 1 describes frequency and percentages of the number of participants for each group. There were 95 business students who participated in first-year programs from the fall of 2012 to the fall semester of 2015. Only fall semester data were included in this study.

Table 1

*Descriptive Frequencies and Percentages for the Number of Participants in First-Year Programs*

Year	Number of Participants	Percentage
General	56	59%
Business LLC	39	41%
Total	95	100%

Table 2 displays the retention percentages of each participation group. Retention status was determined as retained if students enrolled in full-time hours for the following fall semester. The two first-year programs had a similar number of students who were not retained for the following fall semester, 17 students for the general first-year seminar and 16 for the Business Living-Learning Community. However, the general first-year seminar had a larger percentage of retained students at 65.5% than the Business Living-Learning Community at 60%.

Table 2

*First-Year Program Participation – Retention Percentages*

Participation Groups	Retention status	
	Percentage Retained	Percentage Not Retained
General 2012 - 2013	65.5%	34.5%
General 2012	75%	25%
General 2013	52.1%	47.9%
Business 2014 - 2015	60%	40%
Business 2014	47.8%	52.2%
Business 2015	76.5%	23.5%

## Hypothesis Testing

Presented next are the research questions, hypotheses, and the results of the analysis of each quantitative research question.

**RQ2.** To what extent does the average GPA of first-year, first-time students differ among those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community?

**H1.** There was a difference in the average GPA of first-year, first-time students who participated in a general first-year seminar as compared to those who participated in a Business Living-Learning Community.

Levene's Test is not significant ( $F = 2.17, p = .144$ ), so the variance of the two groups are equal. The results of the independent samples  $t$ -test indicated a statistically significant difference between the two means,  $t = 2.30, df = 93, p = .024$ . The sample mean for the Business Living-Learning Community ( $M = 2.86, SD = .85$ ) was significantly higher than the sample mean for the general first-year seminar ( $M = 2.42, SD = .98$ ).

Table 3

*Descriptive Statistics for the Results of the Test for H1*

Groups	<i>M</i>	<i>SD</i>	<i>N</i>
Business	2.86	.85	40
General	2.42	.98	55

**RQ3.** To what extent is there a relationship between participation of first-year, first-time students in a general first-year seminar and in a Business Living-Learning Community and retention to the fall semester of the sophomore year?

**H2.** There was a difference in the retention results of first-year, first-time students who participated in a general first-year seminar as compared to those who participated in a Business Living-Learning Community.

The results of the  $\chi^2$  test of independence indicated no difference between the observed and expected values,  $\chi^2 = .269$ ,  $df = 1$ ,  $p = .586$ . See Table 4 for the observed and expected frequencies. The results of the  $X^2$  test did not support the hypothesis that retention was related to participation in either the general first-year seminar or the Business Living-Learning Community.

Table 4

*Observed and Expected Frequencies for Hypothesis 2*

Participation		Retention status	
		Yes	No
Business	Observed	24	16
	Expected	25.3	14.7
General	Observed	36	19
	Expected	34.7	20.3

## Summary

Chapter four addressed the research questions which focused on first-year student program changes and the effects on retention and academic success. In this chapter, outcomes were presented via a case study and through hypothesis testing. The case study presented findings on how changes in the business department's first-year student program incorporated institutional experiences. Independent samples  $t$ -test conducted for **H1** revealed there was a significant difference between the GPA of those who participated in the Business Living-Learning Community and those who participated in

the general first-year seminar. The Business Living-Learning Community participants had a higher mean GPA than the general first-year seminar participants. A chi-square test of independence was conducted for  $H2$  and revealed there was no difference between participation in the two program groups and retention. There was no difference between the observed and expected frequencies on retention status for either first-year student program participant group. Chapter five provides a summary of the study, major findings, implications for future actions, and recommendations for future studies on this topic, and conclusions.



## Chapter Five

### Interpretation and Recommendations

Chapter one of this study gave an introduction and background on issues of retention, student success, and learning communities. Information on the statement of the problem, purpose and significance of the study, delimitations, assumptions, research questions, and definitions were also provided in this chapter. Chapter two provided a literature review that began with the history of residential life and living-learning communities. The chapter also presented information on the theoretical framework for learning communities and the types and structures of learning communities. Chapter two concluded with an overview of research on living-learning communities. The methodology of the study, in chapter three, included the research design, selection of participants, data collection, and data analysis procedures. Chapter four contained a case study that provided a historical narrative of the business department's first-year student program. Themes that arose from the case study were described. Results from a quantitative analysis of GPA and retention concluded chapter four. Chapter five provides a review of the study, major findings, implications for future actions, and recommendations for future studies on this topic.

#### Study Summary

**Overview of the problem.** In the early 2000s, many institutions of higher education experienced decreasing budgets with increased pressure on the quality of teaching and degree completion. Learning communities, in part, were a response from large institutions to create smaller more manageable communities to engage students and improve educational experiences (Dunn & Dean, 2013; Inkelas & Associates, 2008).

Thus, prior research focused on large institutions where students may otherwise be disengaged. Living-learning communities at small institutions have previously been a neglected area of research. However, small institutions also attempted to increase retention through learning communities. Astin (1993) noted small private residential colleges ranked higher on measurements of engagement than larger public institutions. Small institutions with highly engaged students need to conduct further research to develop programs to increase retention and academic success.

**Purpose statement and research questions.** The purpose of the study was to assess changes in the business department's first-year student program via a case study analysis of the types of program in which business majors took part (general first-year seminar or Business Living-Learning Community). A second purpose was to assess the effectiveness of the general first-year seminar and the Business Living-Learning Community on the retention and academic success of first-year students. Three research questions guided this study.

**RQ1.** How did the business department's first-year student program change from a general first-year seminar to a living-learning community?

**RQ2.** To what extent does the average GPA of first-year, first-time students differ among those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community?

**RQ3.** To what extent is there a relationship between participation of first-year, first-time students in a general first-year seminar and in a Business Living-Learning Community and retention to the fall semester of the sophomore year?

**Review of the methodology.** The research design of this study was mixed and included both qualitative and quantitative research methods. Two groups were the focus of this study: the 2012 and 2013 cohort of first-year, first-time business students who participated in a general first-year seminar course and the 2014 and 2015 cohort of first-year, first-time business students who participated in a Business Living-Learning Community. For the qualitative portion of the current study, a case study analyzed changes in the business department's first-year student program as it transitioned from a general first-year seminar to a living-learning community. For the quantitative section of the study, participation status was the independent variable, defined as the type of program in which the student participated (general first-year seminar or Business Living-Learning Community). The dependent variables included GPA and retention. The GPA data included the first fall semester grade point average and did not include a cumulative average of any previously awarded grade points. An independent samples *t*-test compared the GPA of students who participated in the general first-year seminar and those who participated in a Business Living-Learning Community. A chi-square test of independence was conducted to analyze the difference between participation in the two program groups and retention.

**Major findings.** An independent samples *t*-test was completed to determine to what extent the first fall semester GPA of first-year students differed among those who participated in a general first-year seminar and those who participated in a Business Living-Learning Community. There was a statistically significant result indicating that the first fall semester GPAs differed between students participating in the general first-

year seminar and those who participated in a Business Living-Learning Community. Those who participated in the Business Living-Learning Community had an average first fall semester GPA of 2.86, while those participating in the general first-year seminar had an average first fall semester GPA of 2.42.

A chi-square test of independence was conducted to determine if there was a difference between first-year student program participation and retention. The results determined there was not a statistically significant difference between type of program participation and retention. Although there was no difference between participation and retention, in 2012 during the first year of the general first-year seminar, participants met Institution A's goal of retaining 75% of first-year students into their third semester (Institution A, 2013). In 2015, the Business Living-Learning Community achieved the highest retention rate 76.5% (Table 2). This retention rate exceeded all third semester retention rates reported by Institution A for the entire first-year student body from 1999 through 2014 (Table A1 in Appendix A). The 2015 Business Living-Learning Community retention rate exceeded Institution A's goal of retaining 75% of first-time students from their first to third semester. Through the four years of the study, the general first-year seminar participants experienced higher retention rates at 65.5% percent compared to the 60% percent of Business Living-Learning Community participants (Table 2).

### **Findings Related to the Literature**

The current study was designed to extend knowledge about living-learning communities. A review of literature was conducted prior to data collection to examine previous research on living-learning communities. The current study added to this

research by examining the impacts of living-learning communities on retention and academic success. The findings related to the research questions are discussed and connected to existing research.

Pike (1999) found that students who participated in living-learning communities experienced more engagement and academic success than residential students who had not participated in learning communities. Pike also found effects of significant integration of course information, integration of information in conversations, and greater gains in general education. However, he could not directly link these effects to living-learning community experiences. Pike suggested that although gains may not be directly linked to program participation, they are due in part to an increase in peer and faculty interactions. The current study supports Pike's research. Students who participated in a Business Living-Learning Community earned higher GPAs than students in a general first-year seminar. The case study indicated that Business Living-Learning Community participants experienced increased peer and faculty interactions. The current study extended Pike's research by examining a living-learning community at a small institution. Pike conducted his research at a large, public, research university.

Stassen (2003) conducted a study that measured academic performance, as well as retention of student participants of modestly constructed living-learning communities. The results indicated that even in limited or underdeveloped living-learning communities, students demonstrated positive outcomes in student experiences, GPA, and retention. The researcher suggested that even a basic program that facilitates student interactions focusing on academic work can have a positive effect on students' preparation levels. The current study's findings on GPA support Stassen's research on modest programs.

The Business Living-Learning Community had a positive effect on participants' GPAs. The case study indicated that the institution was small, class size was limited, few faculty members were involved in the learning community, and the program was not marketed to incoming students. The program did facilitate a collaborative learning environment that had a positive effect on participants. However, the current study does not support Stassen's findings on retention, as it failed to find a difference between retention and participation in the Business Living-Learning Community.

Purdie and Rosser (2011) found that participation in the academic themed floor or first-year experience programs did not improve grades or retention. However, students who participated in the first-year interest group with both linked courses and residential components earned nominally higher GPAs and experienced an 18 % increase in odds of being retained. These findings suggested that student success and retention can be improved when faculty members and student affairs professionals collaborate to create programs that incorporate both highly engaging curricular and residential experiences that encourage interaction with faculty and peers. The current study's findings on GPA support Purdie and Rosser's research on academic success in a first-year program that included a first-year interest group, clustered courses, and a residential component. However, this study did not find a direct difference between retention and type of first-year program participation.

## **Conclusions**

Participation in a first-year student Business Living-Learning Community positively affected academic success, as measured by first fall semester GPA. Quantitative data supported the changes to the business department's first-year student

program, described in the case study. The case study indicated that the business department increased focus on major and career preparation and the data analysis found students who participated in the major specific program received higher GPAs than those who participated in a general first-year seminar. There was no difference in retention based upon program type.

**Implications for action.** Results from this study could help administrators in higher education make informed decisions when looking for ways to increase academic success for first-year students. These results may especially help similar small institutions make decisions about implementing living-learning communities with academic components. Results from this study indicated that first-year programs that focus on major and career preparation and use active learning in a collaborative environment increase academic success. Students should consider living-learning communities as an option to increase their institutional experiences and academic success while in college. Higher education institutions could find these results beneficial while making decisions about expanding first-year student initiatives to other academic departments.

The retention results indicated that Institution A may need to increase retention efforts in the first-year program and other areas. Feedback from the business department and retention committee during the case study indicated that students often withdrew due to experiences within the activity that recruited them to the institution, which is often athletics. The results on retention may help other small institutions, especially those who have a high percentage of athletes, make decisions about retention efforts. It is imperative for all institutions of higher education to assess student experience and its

effect on retention before investing in retention efforts. Tinto (2012) suggested, “One way to do so is to employ detailed data on student progression, through the institution, stratified by student attributes, with data on student experience...(p.83)” Institution A should consider the further assessment of the student experience and its effect on retention. If assessment confirms that athletic experience is an area of concern, then additional retention efforts should be implemented.

The retention results may also help the residence life department and business department determine that the residential component should be further developed. The case study indicated that the residential component consisted of one student advisor and housing students together. Increasing the opportunity for further peer interactions may increase engagement and institutional commitment creating a positive impact on retention. Business themed residence hall programming could increase participant engagement. Residence hall staff could also incorporate faculty into programs to increase faculty interactions outside of the classroom.

Another implication to consider is this study was conducted during the first and second year of the Business Living-Learning Community program. As the program continues upperclassmen interactions could increase, and leadership roles of past participants could positively affect future cohorts. The program offered mentoring and engagement opportunities with upperclassmen business majors through the student organization meetings and the merchandise store. In the future, the business department may want to consider how to incorporate past participants. Incorporating past participants may offer opportunities to continue the positive effects of the program beyond the fall semester.



Finally, institutions may consider creating a vision or mission to align programs and services that support first-year students. The results could help higher education administrators make informed decisions about aligning actions between first-year programming areas. The Business Living-Learning Community had a positive impact on academic success, but participation did not result in retention that differed significantly from the retention of students who participated in a general first year seminar or Business Living-Learning Community. Many experiences are necessary during a student's first-year to provide the support for a successful transition. A living-learning community or a first-year seminar course cannot stand alone in efforts to support first-year students. The retention and academic success of first-year students on each campus start with the admissions process and include many stops along the way including advising, orientation, residence life experiences, extracurricular activities, and first-year programs.

**Recommendations for future research.** Several recommendations for future research emerged from the results of this study. The current study could be expanded to include multiple sources of evidence through incorporating students' perspectives on the Business Living-Learning Community. Interviewing or surveying student participants may give a better assessment of the student experience and impact on retention. The current study could be extended to other small colleges to collect a wider range of data. Future studies could also collect data for a longer period of time. It could be beneficial to collect data again after the program has been active for several years, to see if the program is more effective than prior assessments.

A future study may include students' perspectives on departure. Students' perspectives on departure could answer questions about why students leave the institution

and aid in decisions about retention efforts. Future studies may also include additional variables like the effects of program participation on career placement and graduation rates. Program developers noted the need to track retention within the department, to see if students are changing their major. Future studies could examine the impact of living-learning communities on upperclassmen leadership roles. Studies on upperclassmen engagement could be especially interesting for the institution of study as they consider creating a sophomore living-learning community.

**Concluding remarks.** The purpose of the study was to assess changes in a first-year student program and the effects those changes had on retention and academic success of first-year business majors. The case study indicated that the business department took steps to increase the following institutional experiences through the Business Living-Learning Community: academic focus, faculty interaction, extracurricular activities, and peer interactions. The study demonstrated a statistically significant difference between the first fall semester GPAs of business students who participated in a Business Living-Learning Community and business students who participated in a general first-year seminar. The study did not find a difference between type of first-year program participation and retention.

The academic success and retention of first-year students are major concerns for institutions of higher education and higher education administrators. Institutions have the opportunity to positively impact first-year students through increasing institutional experiences. The findings of the study suggested that the Business Living-Learning Community and similar living-learning communities have value in increasing first-year students' academic success.

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## Appendices

**Appendix A: First-Time Full-Time Freshman Retention Rates**

Table A1

*First-Year Student Retention Rates as a Percentage by Semester*

Year	S 2	S 3	S 4	S 5	S 6	S 7	S 8	S 9	S 10	S 11	S 12
1999	92	72	66	58	58	56	52	17	13	3	1
2000	83	64	56	48	47	47	42	11	7	1	
2001	83	68	62	50	48	46	43	11	8	2	1
2002	92	71	60	56	54	50	44	16	11	7	6
2003	82	65	60	49	49	45	42	21	15	3	1
2004	85	71	62	56	55	52	46	14	8	2	1
2005	82	68	63	57	57	54	49	8	5	1	1
2006	81	65	61	56	56	53	49	11	5	1	1
2007	79	69	62	56	56	55	52	12	9	3	1
2008	84	70	65	62	60	54	51	11	6	1	
2009	87	64	60	49	46	43	40	8	4	3	3
2010	89	63	55	47	48	43	38	6	4	1	0
2011	88	60	54	46	45	44	39	8	4		
2012	89	66	61	55	52	50	48				
2013	87	66	61	47	45						
2014	91	65	54								
2015	89										

*Note.* S = semester.

**Appendix B: IRB Form**



Date: \_\_\_\_\_  
IRB PROTOCOL NUMBER \_\_\_\_\_  
(IRB USE ONLY)

**IRB REQUEST**  
**Proposal for Research**  
**Submitted to the Baker University Institutional Review Board**

**I. Research Investigator(s)**

**Department(s)**      **School of Education Graduate Department**

Name	Signature	
1. Dr. Marie Miller	_____	Major Advisor
2. Dr. Li Chen-Bouck	_____	Research Analyst

Principal Investigator: Sarah Hallinan  
Phone:  
Email:  
Mailing address:

Faculty sponsor: Marie Miller  
Phone:  
Email:

Expected Category of Review:  Exempt  Expedited  Full

**II: Protocol:**

Building Connections in a First-Year Student Program: A Mixed Methods Case Study on Program Changes and the Effects on Retention and Academic Success of First-Year Business Majors

**Summary**

**In a sentence or two, please describe the background and purpose of the research.**

At the institution where the current study will take place, first-year student programs experienced curriculum changes during the 2012, 2013, 2014, and 2015 academic years. In 2015, three first-year courses were linked and a residential component was created for first-year business students to increase students' academic success and institutional measurements of retention. The purpose of this study is to analyze changes in the business department's first-year student program and examine how the program changes affected variables of student success and retention.

**Briefly describe each condition or manipulation to be included within the study.**

There is no manipulation in the study.

**What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy.**

Measurements for the study include an analysis of institutional documents and archival data of grade point averages (GPA) and enrollment hours from the 2012, 2013, 2014, and 2015 academic years.

**Will the subjects encounter the risk of psychological, social, physical, or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.**

The subjects will not encounter psychological, social, physical, or legal risk.

**Will any stress to subjects be involved? If so, please describe.**

The subjects will not be exposed to any stress in the study.

**Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.**

The subjects will not be misled in the study.

**Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.**

There will be no requests for personal or sensitive information. Historical data collected for the study will not include identifying information.

**Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.**

Subjects will not be presented with materials that might be considered to be offensive, threatening, or degrading.

**Approximately how much time will be demanded of each subject?**

There will not be any time demands of subjects.

**Who will be the subjects in this study? How will they be solicited or contacted? Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.**

The study participants include first-time, first-year undergraduate students from the 2012, 2013, 2014, and 2015 cohort years. Data on the first-year students is historical and is contained in institutional records. The participants will not be solicited or contacted.

**What steps will be taken to insure that each subject's participation is voluntary? What if any inducements will be offered to the subjects for their participation?**

Subject participation is not required. All the data requested for this study is historical and is already contained in institutional records. Inducements will not be offered to subjects for participation.

**How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.**

Subject participation is not required. All the data requested for this study is historical and is already contained in institutional records.

**Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.**

Data will not be made a part of any permanent record and no identifying information will be contained in the requested data.

**Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher or employer? If so, explain.**

Subject participation in the study will not be part of any permanent record.

**What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with it after the study is completed?**

All historical student data will be collected by the institution's research office and provided to the principal researcher with identifying information removed and replaced with a randomized unique identifier. All documents and data will be kept on the computer of the principal researcher. This computer is password-protected and is solely accessible to the principal researcher. All written materials will be kept in a locked filing cabinet in the home of the principal researcher. Published reports will not include any individual identification. The documents, data, and written material will be destroyed 3 years after the completion of this research study.

**If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?**

There are no risks involved in the study and there are no offsetting benefits to the subjects or society.

**Will any data from files or archival data be used? If so, please describe.**

Institutional documents including syllabi, curricula plans, and course descriptions from the 2012, 2013, 2014, and 2015 first-year student programs will be used for this study. Archival data from the institution's data management system on the 2012, 2013, 2014, and 2015 first-time, first-year student program participants' GPA and retention status will be retrieved.



**Appendix C: IRB Approval**



*Baker University Institutional Review Board*

September 1, 2016

Dear Sarah Hallinan and Dr. Miller,

The Baker University IRB has reviewed your research project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at [emorris@BakerU.edu](mailto:emorris@BakerU.edu) or 785.594.7881.

Sincerely,

*Erin R, Morris PhD*  
Chair, Baker University IRB

Baker University IRB Committee  
Susan Rogers PhD  
Nate Poell MA  
Joe Watson PhD  
Scott Crenshaw

**Appendix D: Data Analysis and Document Analysis Consent**

## Consent for Voluntary Participation in Doctoral Research

**Researcher:** Sarah Hallinan

Contact Information:

Phone number:

Email:

**Working Title:** Building Connections in a First-Year Student Program: A Mixed Methods Case Study on Program Changes and the Effects on Retention and Academic Success of First-Year Business Majors

**Purpose of the Study:** The purpose of the study was to analyze changes in the business department's first-year student program and examine how the program changes affected variables of student success and retention.

**Procedures of the Study:** To provide a chronological narrative of how first-year student programs changed, program facilitators will be contacted to share documents or correspondence about the structure, curriculum, or the change between the 2012, 2013, 2014, and 2015 first-year student programs. To examine the affected variables of student success and retention, archival data will be requested for GPA and enrollment status for the 2012, 2013, 2014, and 2015 first-time, first-year business major cohort from the college's data management system. Departmental personnel were asked to remove any identifying information and replace it with a randomized unique identifier.

**Confidentiality:** Your name and your institution's name will not be recorded or used in the results of this study. You will be contacted after the data collection to review the case study and descriptive statistics to ensure anonymity for the institution and student participants.

**Participation:** Participation in the case study is voluntary and you can decide to withdraw as a participant at any time. No inducements will be offered to subjects.

**Consent:** By signing below, you acknowledge that you have been informed about the purpose of this study and have had the opportunity to ask questions about this research study. You acknowledge that you have received a copy of this consent form and that you agree to participate in this study.

Name of participant: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_