Learning Community Impact On Low-Socioeconomic Student Success In A 4-Year Public University

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Learning Community Impact on Low-Socioeconomic Student Success in a 4-Year Public University

A Dissertation
Presented in partial fulfillment of requirements
for the degree of Doctor of Education
in the Department of Higher Education
The University of Mississippi

by
April D. Thompson
May 2020
ABSTRACT

Low-socioeconomic students often persist and graduate from institutions of higher education at lower rates than middle and upper-socioeconomic students. Learning communities are one proactive program established in higher education to support first-year students in their academic and social acclimation into college. However, learning community literature tends to focus on the success of the participant population as a whole. This study sought to contribute to existing learning community literature and low-socioeconomic student literature by measuring learning community impact on low-socioeconomic student academic success in terms of GPA, same-institution retention, and same-institution degree completion within six years.

This quantitative study measured GPA, retention and degree completion data of low-socioeconomic students participating in the FASTrack first-year learning community program at the University of Mississippi for fall cohorts 2010, 2011, 2012, and 2013. The FASTrack learning community seeks to help first-year students by providing cohort linked-courses, academic advising, mentoring, and a residential option. First-year, low-socioeconomic FASTrack participant outcomes were compared to first-year, low-socioeconomic students of the same cohort years who did not participate in FASTrack.

Key findings of this study include: (a) learning community participation did not significantly impact GPA for first semester or first year outcomes of low-socioeconomic students, (b) low-socioeconomic students not participating in FASTrack had significantly higher second, third and fourth year GPA outcomes, suggesting learning community participation may
have had a slight impact in the first year, (c) learning community participation had an impact in retention with low-socioeconomic participants having higher retention rates for second, third, and fourth year compared to low-income students not participating in a learning community, (d) learning community participation had an impact on low-socioeconomic student second year retention compared to middle and upper-socioeconomic first-year students and (e) learning community participation had no impact on degree completion within six years for low-socioeconomic students.
DEDICATION

This dissertation is dedicated to my dad, David C. Murphy, and my sons, Michael J. Thompson and Liam D. Thompson.

Dear Dad: You have been my main supporter, fan, teacher, motivator and source of influence my entire life. You taught me to be strong, to keep my eyes open, to work hard, to push beyond perceived limits, and the importance, beauty, and power of words. I needed your voice many times in this dissertation journey and channeled your messages and strength more than one can imagine. I miss you and I hope I have made you proud. MYLY Always!

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CHAPTER I

Introduction

Statement of the Problem

Over the past few decades, jobs requiring higher levels of education have increased 68%, including middle-range jobs, which once required only a high school degree (Khine, 2019). According to Jury et al., (2017) it is predicted that by “2020 postsecondary education will be required for 65% of jobs” (p. 17). Additionally, according to the latest U.S. Bureau of Labor Statistics data, jobs requiring an associate’s degree will increase 7.9%, jobs requiring a bachelor’s degree will increase 7.7% and jobs requiring a master’s degree will increase 13.7% between 2018 and 2028; while positions requiring a high school diploma will only increase by 2.9% (U.S. Bureau of Labor Statistics, 2019). With more positions requiring qualified applicants to hold a bachelor’s degree or higher, employment growth has been highest for citizens with college degrees.

Education requirement escalation in the workforce has led to the increase of students enrolling in higher education as a necessity to be competitive in the job market. In the fall of 2019, nearly 19.9 million students attended institutions of higher education, this number is projected to increase to 20.5 million students by fall 2027 (Hussar & Bailey, 2019; National Center for Educational Statistics, 2018). Hussar and Bailey (2019) predict by 2027 nearly 3 million students will be enrolling as first-time freshmen in the fall semester. Access to higher education is imperative for future employment opportunities and societal growth, especially for low-socioeconomic students who often face financial barriers to higher education opportunities.
Need-based aid, such as the Federal Pell Grant, has increased access opportunities for low-socioeconomic students.

The Federal Pell Grant is awarded to undergraduate applicants “who display exceptional financial need” (Federal Student Aid, n.d., para. 1). According to The College Board (2016), Pell Grant recipients increased 55% from the 2003-2004 academic year to the 2013-2014 academic year; while student enrollment declined nationally, Pell Grant awards have steadied. According to The College Board (2018a) “the share of undergraduate students receiving Pell Grants rose from 25% in 2007-08 to peak at 38% in 2011-12. It then declined steadily to 32% in 2017-18” (para. 1). Indeed, for the 2015-2016 academic year, 28 billion dollars in Pell Grant disbursements were given to 7.6 million students, representing “almost 40 percent of undergraduates in the United States” (Rossman, 2017). Though Pell Grant recipient enrollment has held steady, retention and degree completion continue to be a greater challenge for low-socioeconomic students than for those stemming from higher socioeconomic households (Estep, 2016; Rossman, 2017).

Strange and Banning (2015) described student retention as a longstanding topic of concern for higher education, because scholars show “anywhere from 30 to 60 percent of students who enter college…decide to leave prior to completing a degree or program certificate” (p. x). As access to higher education has led to increased overall enrollment, the population of low-income and underprepared students in higher education has also increased (Engstrom & Tinto, 2008; Estep, 2016; Institute for Education Sciences, 2013). While greater access to higher education for low-income students is a positive trend in education, it also carries concerns regarding low-income, at-risk student academic success.
Low-socioeconomic students often embody characteristics of students many studies have deemed high-risk of leaving higher education prior to completing a degree. Wei, et al. (2002) discussed seven persistence risk factors associated with student attrition: completing high school through a completion certificate, delaying enrollment in postsecondary institutions, being financially independent, having dependents, being a single parent, and attending part-time and working full-time (p. v). Wei, et al. (2002) found that with exception to part-time enrollment and full-time work schedules, Pell Grant recipients were more likely to receive a high school completion certificate than a diploma, have delayed postsecondary enrollment, be financially independent, have children, and be single parents compared to non-Pell Grant recipients (p. 26).

Compared to non-Pell Grant recipients, a larger percentage of Pell Grant recipients represent additional at-risk student demographics, such as coming from a low-socioeconomic background, coming from underperforming academic school districts, being first-generation students, being members of a minority group, and being female (Engle & Tinto, 2008; Stewart, et al., 2015; Wei, et al., 2002, 2009).

Nichols (2015) found that only 51% of Pell Grant recipients obtain a degree in six years, compared to 65% of non-Pell Grant students. Pell Grant eligible students entering 4-year public institutions in the 2010 cohort had a six-year graduation rate of 48.5%, compared to the non-Pell Grant eligible graduation rate of 58.8% (Rossman, 2017). Additionally, low-socioeconomic students are 26% more likely to leave college after their first year and 60% of low-income, first-generation students leave college after the first year and fail to earn a degree (Chen & DesJardins, 2008; Engle & Tinto, 2008). High-socioeconomic students are 55% more likely to persist than low-socioeconomic students (Chen & DesJardins, 2008; Chen & St. John, 2011), and 45% of Pell Grant recipients do not enroll for their second year of college (Schudde & Scott-
Clayton, 2016). Additionally, due to higher transfer rates and stop-out rates, Pell Grant recipients take longer to graduate than their non-Pell Grant counterparts (Wei, et al., 2009).

As higher education has developed overtime and the needs of society have grown, the philosophy of student success responsibility has changed. Once thought to be the sole responsibility of the student, retention is now widely considered an accountability mix between both student and institution (Fink & Inkelas, 2015). Many states have implemented performance-based allocation models for institutions of higher education. In April 2013, the Board of Trustees of State Institutions of Higher Learning for the state of Mississippi announced the implementation of a new performance-based allocation model. This new formula takes into consideration the number of credit hours successfully completed, the number of degrees awarded, and how many at-risk students, “such as Pell Grant recipients,” are served (IHL News, 2013). One proactive approach for institutional accountability in student retention that may also help close the degree completion gap between socioeconomic groups, is the implementation of strategic institutional support programs. Engaging students in academic and social campus integration through learning community program participation is one method in which colleges can be proactive in supporting the persistence of low-socioeconomic students.

Tinto’s Longitudinal Model of Institutional Departure is a theoretical framework often used to develop programs, such as learning communities, with the mission of developing the interrelationship between both academic and social integration and their connection to student retention. Tinto’s theory posits that both a student’s social and academic integration into the institution’s community and culture are imperative in effecting a student’s decision to stay, leave, or eventually earn a degree (Tinto, 1987). Learning community programs are designed to facilitate academic integration by teaching collegiate level study skills and learning techniques,
and facilitating social integration by introducing students to faculty, administrators, peer cohorts, and student resources. Smith, et al., (2004) provided a detailed definition:

Learning communities are a variety of curricular approaches that intentionally link or cluster two or more courses, often around an interdisciplinary theme or problem, and enroll a common cohort of students. This represents an intentional restructuring of students’ time, credit, and learning experience to build community, enhance learning, and foster connections among students, faculty, and disciplines. At their best, learning communities practice pedagogies of active engagement and reflection. (p. 67)

Due to differing student population needs, financial constraints and obligations, staffing and logistical issues of individual institutions, learning community formats can differ between schools and programs. Learning community programs all involve a cohort of students; however, some learning communities only structure the students in a few like-courses, while other cohorts may take all freshmen-year courses together. Some learning communities have an academic focus and structure curriculum around study techniques, structured tutoring, and study hall services, while other learning communities focus on social integration and create a curriculum around campus history, resources, and student community. Additionally, some learning communities focus on specific interests, subjects or topics such as STEM, environmental protection, or music; still, other learning communities are dedicated to specific student populations such as Honors students, student-athletes, or first-generation students.

Regardless of the particular focus, “most learning communities incorporate active and collaborative learning activities and promote involvement in complementary academic and social activities” (Zhao & Kuh, 2004, p.116). Lenning and Ebbers (1999) noted that while specific
internal curriculum and programming may differ, the learning community framework falls into one of the following categories:

- **Curriculum Learning Communities** – curriculum structure is the connecting link.
- **Classroom Learning Communities** – individual courses may be linked to the learning community, but does not create a complete curriculum.
- **Residential or Living Learning Communities** – student participants live in the same dormitory as well as take linked coursework.
- **Student-Type Learning Community** – students are linked by a common characteristic (ex: STEM majors, honors students, student-athletes, etc.).

Due to the variety of learning community formats, previous research regarding learning community success varies in impact significance findings. Some studies found students who participated in a learning community experienced easier social and academic transition into college (Inkelas, et al., 2007), were more likely to persist and become more engaged, committing more time and energy to coursework, faculty interaction, and peer interaction than students not participating in a learning community (Engstrom & Tinto, 2008; Rocconi, 2011; Tinto & Reimer, 1998). Some studies have examined first-to-second semester retention and first-to-second year retention, and grade point average comparisons and found learning community students to have higher rates of persistence and higher grade point averages (Hegler, 2004). However, other studies found little to no statistically significant effect of learning community participation on student success (Johnson & Romanoff, 1999). These studies focus on the learning community student population as a whole; however, this study focuses on a select population of low-socioeconomic students within the learning community population. By evaluating the impact of learning community participation on low-socioeconomic student
academic success, as defined by GPA, same-institution retention, and same-institution degree completion, this study contributes to the body of existing literature of learning community studies in four-year institutions.

This study focuses on full-time freshmen fall cohorts for years 2010 through 2013; during this timeframe the University of Mississippi continued to see an increase in students receiving need-based aid. In 2007, 35% of the university’s undergraduate, full-time students received some form of need-based aid (Common Data Set 2008-2009, 2009). In 2013, 68% of full-time undergraduate UM students received a form of need-based aid (Common Data Set 2013-2014, 2014) and by 2015, 73% of full-time undergraduate UM students received a form of need-based aid (Common Data Set H: Financial Aid 2016-2017, 2017). Universities have a responsibility to support all students admitted; with need-based aid increasing access for low-socioeconomic students who often come from underperforming high schools, it is important to create programming that will positively impact both academic and social integration to campus life.

In a proactive stance to improve retention and degree completion rates, The University of Mississippi has invested in multiple learning community opportunities for students, including a summer bridge program, multiple first-year learning communities, and a sophomore year experience learning community. This study will focus on the Foundation for Academic Success Track (FASTrack) learning community program because it is open to all first-year students, does not require a specific incoming GPA, which aids in access for students from low-socioeconomic backgrounds, allowing for an adequate study population. Figure 1.1 outlines the design features of University of Mississippi learning community programs.
FASTrack’s mission is “to help first year students transition from high school to college in a supportive environment” (FASTrack, 2019). This learning community is a freshmen year program and is available to all incoming university students; however, due to budget and resources, selection is limited. The director of FASTrack and committee members select the cohorts for each academic year. The cohort groups of twenty students are created with an effort to ensure diversity among each group. FASTrack students begin participating in their structured learning community the summer prior to their freshmen year by attending orientation as a cohort. In addition to the traditional University of Mississippi orientation agenda, FASTrack students attend a specific information setting and meet individually with FASTrack academic advisors.
Finally, FASTrack students have the opportunity to participate in the FASTrack Living Learning Community (LLC) by living in a selected dormitory with other FASTrack participants.

As college access increases, so too does the number of high-risk students. Low-socioeconomic students embody risk factors identified with stop-out, drop-out, and failure to complete degrees. Pell Grant recipients are low-income, often minority, first-generation students who are more likely to enter college with substandard academic background or skillset. Retention of students and degree completion are priorities for institutions of higher education. While learning community program research has shown varying levels of positive impact, the research varies across student and institutional type.

Learning community programs are designed around specific needs of the institution; therefore, generalizability is difficult. Thus, continued research of program impact is necessary for design and funding decisions. This study contributes to existing learning community literature by analyzing the impact learning community participation in a 4-year institution may have on the academic success of low-socioeconomic students. Unique to FASTrack, is that it is a broad-based learning community open for application from any entering freshmen, regardless of background, high school grade point average (GPA), standardized test score, or degree interest. This study is important for university student support administrators; understanding the needs of the growing low-income, high-risk student population is imperative for developing support programs for academic success.

**Purpose of the Study**

The purpose of this quantitative study is to determine if learning community participation has an impact on the academic success, in terms of GPA, retention, and degree completion, of low-socioeconomic students. This was examined by analyzing learning community impact on
low-socioeconomic student academic success for freshmen cohorts starting in fall 2010 - 2013, at a public, 4-year, Carnegie Classified R1 university located in the Southern region of the United States. Pell Grant eligibility was used to determine low-socioeconomic status.

Significance of the Study

Student retention to degree completion is an important mission for any institution. When students enter a university with backgrounds placing them at a higher risk of attrition, the university attempts to solve these issues with support staff and programs. Learning communities are one program often implemented with the mission to increase opportunities for student success. The creation and implementation of these programs take many resources including time, faculty, and financial resources. Understanding the impact learning communities may or may not have on low-socioeconomic student success is significant for higher education administrators and faculty when justifying new program proposals, revamping current programs, discussing new policy implementation, considering resource use, and financial commitment to the development of student support programs.

Overview of Theoretical Perspectives

One of the most cited theories in persistence and student success literature is Tinto’s Longitudinal Model of Institutional Departure. Aligned with Tinto’s theory, Bean’s Model of Student Attrition and Strange and Banning’s Campus Ecology Theory emphasize the influence campus programs and communities have in creating campus culture and student retention decisions. These theories are described below in greater depth to illustrate the interconnection between the theoretical frameworks.
Tinto’s Longitudinal Model of Institutional Departure (1993)

Tinto’s Longitudinal Model of Institutional Departure emphasized the institution’s role in a student’s decision to persist. Tinto (2012a) explained, “by adapting a largely sociological model to help explain student attrition in higher education, I sought to shed light on the role played by the academic and social environment of an institution in the success of its students” (p. vii). Tinto’s theory of student integration stresses the institution’s role in a student’s decision to persist, theorizing the more positive interactions in both institutional academic and social settings, the more likely a student is to successfully integrate into the college community, and more likely to persist. Conversely, the more negative interactions in institutional academic and social settings, the less likely a student is to integrate and persist (Burrus, et al., 2013).

Strange and Banning’s Campus Ecology Theory (2001)

Based on organizational turnover theory, Strange and Banning’s Campus Ecology Theory speculated that satisfied students will remain at a university and unsatisfied students will not. Like Tinto, Strange and Banning note the role universities play in strategically developing a campus environment, which positively influences students’ academic and social integration into the university setting.

Bean’s Model of Student Attrition (1983)

Based on models of organizational turnover, Bean’s Model of Student Attrition (1983) “was generated to account for external factors that affect the persistence of nontraditional students.” Bean’s model agrees with Tinto’s and Strange and Banning’s in that student interaction, positive or negative, “influence satisfaction, commitment to degree completion, and persistence” (Burrus, et al., 2013). However, the model of student attrition attests that in addition to institutional and environmental factors influence on persistence and degree completion,
personal variables, such as family approval and obligations, directly affect persistence (Cabrera, et al., 1992). Clearly, variables influencing student persistence and degree completion vary greatly and can be intricately woven.

While Tinto, Bean, and Strange and Banning recognized the complex variables in a student’s retention decisions and academic success, this study is designed to measure the impact a university sub-organization (learning community) may have on low-socioeconomic student academic success. Further research using qualitative measures, such as surveys and student interviews of learning community participants, would be beneficial in developing a deeper understanding of the institution and individual combination of retention decisions and academic success.

**Research Questions**

This study aims to determine if learning community participation impacts academic success for low-socioeconomic (SES) students attending a 4-year, public institution. For the purposes of this study, academic success is measured by grade point average (GPA), same-institution retention, and same-institution degree completion. This study seeks to answer the following research questions:

1. Is there a significant difference in the average GPA of low-socioeconomic student learning community participants (LCP) compared to low-socioeconomic non-participants (NLCP) during the following time periods: (a) first semester, (b) first year, (c) second year, (d) third year, and (e) fourth year?

2. Do low-socioeconomic students participating in a learning community have higher same-institution retention rates compared to low socioeconomic non-participants
during the following time periods: (a) returned second year, (b) returned third year, and (c) returned fourth year?

3. Do low-socioeconomic students participating in a learning community have higher same-institution degree completion rates compared to low socioeconomic non-participants during the following time periods: (a) graduated by year four, (b) graduated by year five, and (c) graduated by year six?

Definition of Terms

Degree Completion: For this study, degree completion is defined as an undergraduate student completing all degree requirements within the same institution in which the student began post-secondary education.

Expected Family Contribution (EFC): EFC is the “number that determines students’ eligibility for certain types of federal aid” (The EFC Formula, 2019). EFC is used by financial aid staff to determine how much financial aid a student would receive if attending that specific university and is calculated using information students provide on the Free Application for Federal Student Aid, which includes family income, assets, benefits, family size, and number of current college students. (How is Aid Calculated, 2018; The EFC Formula, 2019).

Financial Need: The difference between the Cost of Attendance at the school and the student’s Estimated Family Contribution (Basic Eligibility, n.d.).

First-Generation Student: A student whose parents or guardians have never attended post-secondary education or whose parents or guardians have received some post-secondary credits, but did not earn a degree (Inkelas, et al., 2007).

Free Application for Federal Student Aid (FAFSA): FAFSA is the free application students must complete in order to apply for federal financial aid such as Federal Pell Grant, loans, and work-study (Glossary, n.d.).
Learning Community: A student cohort participating in strategically linked academic courses, university resources, and planned campus social events (Lenning & Ebbers, 1999; Tinto, 2012a, 2012b).

Low-Socioeconomic Student: An individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount (U.S. Department of Education, 2019).

Pell Grant Eligible: An undergraduate student who has met the federal government’s Basic Eligibility Criteria, which includes demonstrating a financial need. Financial Need is “the difference between the Cost of Attendance (COA) at the school and the student’s Estimated Family Contribution (EFC)” (Basic Eligibility, n.d.).

Stop-Out: A temporary departure from secondary education then returning to the same or different institution to complete degree requirements (Burros, et al., 2013; Wei, et al., 2009).

Student Retention: Continued enrollment or degree completion within the same institution (Persistence and Retention, 2019).

Student Persistence: Continued enrollment or degree completion at any institution (Persistence and Retention, 2019).

Overview of Methodology

This quantitative study measures first-year learning community participation impact on low-socioeconomic student academic success: GPA, same institution retention, and same-institution degree completion within six years. Existing data such as Pell Grant eligibility status, grade point average, attrition and retention, and degree completion were de-identified through the institution’s office of Institutional Research, Effectiveness and Planning (IREP). As the data currently exists, a correlational design was used.
Learning community participation was used as a binary, independent variable. Low-socioeconomic (SES) students, identified through FAFSA applications and verified Pell Grant eligibility, were classified as either learning community participant (LCP) or non-participant (NLCP). Academic success is the dependent variable. Incoming high school GPA and incoming standardized ACT composite test scores (ACTC) were compared to determine differences in pre-college academic performance between the LCP and NLCP groups.

**Scope of the Study**

The scope of this study focused on low-socioeconomic students participating in one specific learning community at a four-year institution in the Southern region of the United States. While this university hosts multiple learning communities, the learning community chosen for study does not require a specific high school grade point average for participation, and is therefore open to a more diverse student population in terms of academic background and interest of study. This learning community’s model is designed to include higher level program elements such as participation for the student’s first full academic year, linked courses, advising services, mentoring services, and a residential option. Selecting this particular learning community allowed the broadest structure of support and an adequate low-socioeconomic student population sample.

The University’s Office of Institutional Research, Effectiveness, and Planning (IREP) used student FAFSA applications and verified Pell Grant eligibility status to identify low-socioeconomic students in the studied cohorts. This study focused on low-socioeconomic, first-year students in fall cohorts 2010, 2011, 2012, and 2013. This cohort range allowed for a larger low-socioeconomic learning community participant population and access to six-year degree completion data. Low-socioeconomic students are more likely than middle and upper
socioeconomic students to struggle academically in post-secondary education and typically have one or a combination of high risk factors. In addition to having a low-socioeconomic background, these risk factors include coming from underperforming academic school districts, being a first-generation student, being a minority, having delayed post-secondary enrollment, being financially independent, having dependents, or being a single parent.

**Limitations of the Study**

Definitions, structures, student population, and missions of learning communities vary greatly within institutions. Therefore, generalizability of the study may be limited. Replicating this study with other learning community structures and universities would be beneficial to learning community research. Understanding the effectiveness of different learning community structures on low-socioeconomic students would benefit institutions interested in creating a new learning community or restructuring an existing learning community for this particular student population. Additionally, this study focuses on measurable, quantitative academic success: GPA, retention, and degree completion. Tinto, Strange and Banning, and Bean’s theories and models emphasize the importance of both academic and social integration. Future research would benefit from a mixed-method approach to better understand both the quantitative and qualitative impact learning community participation may have on student success.

Low-socioeconomic students were identified through submitted Free Application for Federal Student Financial Aid (FAFSA). However, FAFSA submission is not mandatory; therefore, students who may meet all Pell Grant eligibility requirements, but did not complete a FAFSA application, will not be known by the institution and consequently, not included in the study. Additionally, participation in the selected learning community is not mandatory. Students complete applications and are selected by a selection committee. Self-selecting into a community
focused on academic success may indicate other variables influencing persistence compared to low-income students who did not self-select into a learning community. On the other hand, some low SES students not participating in the selected learning community may be grouped into the non-participant population, yet actually be participating in another learning community within the institution; this participation could influence their retention and degree completion.

**Organization of the Study**

Chapter one provides an introduction to low SES student academic success and the purpose of learning communities in higher education. Chapter one also provides discussion of the purpose and significance of the study, an overview of the theoretical perspectives, research questions, definition of terms, and scope and limitations of the study.

Chapter two provides a more in depth review of relevant literature of high risk student characteristics, retention and degree completion, Pell Grant eligible students, learning communities in higher education, and the theoretical perspectives of Tinto’s Longitudinal Model of Institutional Departure, Strange and Banning’s Campus Ecology Theory, and Bean’s Model of Student Attrition.

Chapter three provides detail regarding the quantitative research design used in the study. This chapter describes the site and sample population, provides the data collection plan, and analysis of the data using independent sample t-tests.

Chapter four reports the findings of the study organized around the research questions. Finally, chapter five provides a discussion of the findings as they relate to the impact learning communities may or may not have on the academic success of low-socioeconomic students, the implications for practice, limitations of the study, and future research.
CHAPTER II

Literature Review

Need-based aid, such as the Federal Pell Grant, have had a profound effect on access to higher education for low-socioeconomic students. However, access is only one step towards creating a pathway of academic success for low-socioeconomic students. Frequently, low-socioeconomic students are underprepared for the academic rigors of higher education, often having a background of high-risk factors: graduating from low performing and under resourced high schools, being a first-generation college student, or being a minority student. These high-risk factors often stand as barriers between access and degree completion.

The benefit of completing higher levels of education is imperative for both the individual and society. Although access to higher education has increased for low-socioeconomic students, government funding continues to decrease while institutional tuition and fees continue to increase. This continuous trend of increased tuition costs places further burden on low-socioeconomic students; while Pell Grant awards once covered a majority of the tuition cost, the level of coverage continues to decrease as tuition continues to increase. For the 2018-2019 academic year, the maximum Pell Grant “covered 60% of average public four-year tuition and fees” (The College Board, 2018b). Performance-based allocation models and societal scrutiny have placed academic success accountability standards on universities, typically through student retention, graduation rates, and job placement data. Universities must create supportive and positive learning environments that provide an opportunity for individual growth and academic
success for students. Understanding the risk factors of low-socioeconomic students and strategically designing programs to support their path to degree completion is imperative.

Theoretical Foundation

In previous decades of American higher education history, the responsibility of retention was mainly placed upon the student. When a student was not successful in retaining college enrollment, it was thought to be due to student academic inability or negligence. However, as tuition increases, access to higher education increases, and the student body has grown in both numbers and diversity, a shift in institutional thinking has emerged. Learning is no longer thought as a “one-dimensional activity,” instead, educators and administrators now understand learning “as a multidimensional experience involving multiple intelligences and a wide range of styles and preferences” (Strange & Banning, 2015, p. 136). Institutions have a more thorough understanding of their role in creating a purposeful academic and social institutional culture, which can influence student decision to remain at the institution.

Tinto’s Longitudinal Model of Institutional Departure also emphasized the importance of student integration into campus culture and institutional commitment in regards to a student’s decision to remain or dropout. Tinto’s theory is further supported by Bean’s Model of Student Attrition and Strange and Banning’s Campus Ecology Theory.

Tinto’s Longitudinal Model of Institutional Departure (1993)

In 1975 Vincent Tinto introduced the theory of student departure, producing a theoretical model of attrition and persistence. Critics of Tinto’s theory of student departure argued that the theory did not take into consideration external factors influencing departure, such as financial and family factors, which are not primarily influenced by institutional control (Burros, et al., 2013; Cabrera, et al., 1992). Additional critique took issue with the term “integration,” believing
the word marginalizes minority students by suggesting the need to “relinquish previously held values and adopt the dominant values of an institution” (Burrus, et al., 2013). After further research, analysis and critique by other researchers, Tinto expanded his original theory to include consideration of student background and institutional fit, and by 1993 had modified his student departure theory into a model of student integration.

Tinto’s Longitudinal Model of Institutional Departure emphasized the institution’s role in a student’s decision to persist and theorized that the more positive interaction with both institutional academic and social settings, the more likely a student is to successfully integrate into the college community and persist. Conversely, the more negative interactions in institutional academic and social settings, the less likely a student is to integrate and persist (Burrus, et al., 2013; Reason, 2003).

Tinto (2012b) found that a student’s first year experience is vital to outcomes of persistence, stating “the largest portion of institutional leaving occurs in that [first year] and prior to the beginning of the second year (p. 14). According to Tinto (1987, 2012a), prior to his model, theories of student attrition focused on the shortcomings of the student; however, Tinto’s theory, as seen in Figure 2, investigates the role the institution plays in students’ persistence. Tinto’s theory suggests a students’ level of both academic and social integration into the collegiate environment significantly impacts student retention or attrition outcome (Stater, 2009; Stewart, et al., 2015; Tinto, 2012a). As noted in Inkelas, et al. (2007), Tinto argues “students are more likely to persist in college when they successfully separate from their home context and become academically and socially integrated into the college setting” (p. 406). In order to truly integrate into the collegiate environment, Tinto hypothesized students would need to progress through
three stages of integration: separation from past communities, transition between communities, and incorporation into the new community (Morrison & Silverman, 2012).

According to Morrison and Silverman (2012), in the first stage, separation of past communities, students need to begin disengaging from the community in which they belonged prior to entering college. For many four-year college students, this begins with the physical separation of moving onto campus and out of the familial home. However, separation from past communities also involves a mental separation, opening oneself to new social circles and diverse cultures, as well as new academic and philosophical thoughts. The second phase, transition between communities, is the key component in which institutions are the most involved and most effective in creating a successful transition into the college community. All students experience some difficulty completing the transition from secondary education to higher education; however, Tinto, as discussed in Morrison and Silverman (2012), and supported by Bean and Strange and Banning, suggested that institutions, which actively participated in their students transitioning process, were more effective in retaining students than institutions not involved in the transition process. Finally, students who were able to integrate in both the social and academic college communities completed the final stage and were more likely to persist to graduation. Figure 2.1 illustrates Tinto’s Longitudinal Model of Institutional Departure.
Tinto’s Longitudinal Model of Institutional Departure

Note. From Tinto, V. (2012b). Leaving College: Rethinking the Causes and Cures of Student Attrition, University of Chicago Press, Chicago, IL.

Strange and Banning’s Campus Ecology Theory (2001)

Strange and Banning (2001) developed the Campus Ecology Theory based on organization turnover theory and the idea that “satisfied members tend to remain productive in the organization longer; dissatisfied members are at risk for becoming unproductive or just dropping out” (p. 77). Unlike social groups, according to organizational theory, organizations are “deliberately constructed and reconstructed to seek specific goals” (Strange & Banning, 2001, p. 59). Institutions of higher education are constructed with the specific goal of educating
and preparing students for higher levels of thinking, to be productive citizens and to contribute to the workforce. Within institutions of higher education exist many sub-organizations such as residence halls, supplemental instruction groups, student organizations, and learning communities. These sub-organizations are constructed through the reflection of the institution’s culture. Strange and Banning (2001) note that campus organizations are “cultures that assist participants, staff as well as students, in making meaning of the college experience…they are powerful tools in socializing students to the goals and purposes of higher education, what it means to be a member of a community, and how to go about the business of being a college student” (p. 104).

Organizations are categorized by three components: deliberately planned division of labor and communication, one or more power centers responsible for reviewing the organization’s performance, the ability to remove unsatisfactory personnel from the organization and the ability to transfer or promote members (Strange & Banning, 2015, p. 82). University systems demonstrate all three organizational characteristics:

- Division of Labor: departments, deans, chairs, faculty, administrators
- Distribution of Power: administrators, faculty and staff are responsible for designing and implementing policies, programs, and procedures to meet institutional goals.
- Personnel and programs are routinely reviewed, promoted or dismissed based on their effectiveness (p. 82).

The ecological perspective views the environments’ influence on the people within the environment, noting the institution’s responsibility to design a campus environment that meets their mission to, at a minimum, attract, satisfy, and retain students. From a more in-depth educational mission, institutions also bear the responsibility of creating learning environments,
which influence “complex critical reasoning, communication, and leadership; a sense of identity and purpose; an appreciation for differences; and a commitment to lifelong learning” (Strange & Banning, 2015, p. 2). Whether in a classroom, residence hall, learning community, athletic venue, or administrative office, students interact with purposeful campus environments designed to influence behavior, support student needs, and meet specific goals.

Strange and Banning’s Ecology of Learning model “begins with an assumption that student and campus are mutually shaping forces” in the environment, culture, and student acclimation to the institution. Eight themes comprise the conceptual core of the Ecology of Learning Model:

- A campus environment consists of all the stimuli that impinge upon the students’ sensory modalities, including physical, chemical, biological, and social stimulation.
- A transactional relationship exists between college students and their campus environment, i.e., the students shape the environment and are shaped by it.
- For purposes of environmental design, the shaping properties of the campus environment are focused on; however, the students are still viewed as active, choice-making agents who may resist, transform, or nullify environmental influences.
- Every student possesses the capacity for a wide spectrum of possible behaviors. A campus environment may facilitate or inhibit any one or more of those behaviors. The campus should be intentionally designed to offer opportunities, incentives, and reinforcements for growth and development.
- Students will attempt to cope with any educational environment in which they are placed. If the environment is not compatible with the students, the students may react negatively or fail to develop desirable qualities.
• Because of the wide range of individual differences among students, fitting the campus environment to the student requires the creation of a wide variety of campus sub-environments. There must be an attempt to design for the wide range of individual characteristics found among students.

• Every campus has a design, even if the administration, faculty, and students have not planned it or are not consciously aware of it. A design technology for campus environments, therefore, is useful for both the analysis of existing campus environments and the design of new ones (p. 200).

Furthermore, Strange and Banning (2015), referencing Hage (1980), explain there are essentially “four performances of organizational functioning: innovation, efficiency, quantity of production, and morale” (p. 105). Innovation is a necessity in higher education. An institution’s ability to analyze and recognize societal changes and the needs of its students to create programs, events and curriculum, is key to both attracting and retaining students, faculty, and staff. Production tends to be used more in the realm of business organizations; however, universities are highly productive entities. Higher education is charged with producing new research, inventions, and educated, degree holding students. As government funding decreases and the demand for accountability data increases, universities must efficiently produce the programming and support which keep faculty, staff, and student morale high. If faculty, staff, and students are unsatisfied within the organization of higher education, turnover and attrition rates will disrupt the institution, production will decrease, funding will decrease more rapidly, and innovation will cease.

Learning communities are designed to integrate students into the culture of the institution. Often learning communities are created for specific student populations, such as first-generation,
student-athletes, or honors college students. Special topics such as STEM, Law, or Pharmacy can also be the central theme of a learning community. Regardless of its specific makeup, learning communities are innovative organizations designed with the specific purpose of influencing student retention, academic success, and social integration into the campus environment and culture. Strange and Banning (2015) explained that the hierarchy of environmental design, is complementary to Maslow’s model of human needs, as depicted in Figure 2.2. Strange and Banning state that the beginning of organizational and environment effect begins with inclusion and safety, which are also the beginning components of developing student support programs such as learning communities. When a student feels safe and accepted within their environment, they will become more engaged with the academic and social environment around them. Students begin to experience place-identity “through the conditions of community-whether in the form of a class, a student organization, a peer training program, or a residence hall floor-that participants experience a complete sense of membership in a setting” increasing the likelihood of student success (Strange & Banning, 2015, p. 141).

**Figure 2.2**

Strange and Banning’s Hierarchy of Environmental Design
Bean’s Model of Student Attrition (1983)

Bean’s Model of Student Attrition is a “causal model adapted from employee turnover in work organizations to student attrition in IHE’s (Institutes of Higher Education)” (Bean, 1979, p. 2). Bean developed the model of student attrition based on Price’s (1977) model of employee turnover, which theorized that organizational determinants are expected to affect satisfaction, which in turn is expected to influence employee turnover. In higher education, Bean theorized, as depicted in Figure 2.3, similar to organizational turnover theory, that determinants within an institution effecting student satisfaction, influence dropout decisions.

In Price’s model, pay is considered a determinant of turnover, to correlate the model to higher education, Bean replaced pay with grade point average (GPA), considered a similar extrinsic resource of motivation (Bean, 1979). Additional measures used as organizational substitutes for higher education are “development and institutional quality are expected to influence the potential earning power of a student [and] practical value indicates the student’s assessment of the usefulness of his or her education for getting a job” (Bean, 1979, p. 4). In addition to the extrinsic reward of GPA and student satisfaction in the value of education, Bean’s Model of Student Attrition suggested, “courses and memberships in campus organizations are expected to influence satisfaction and thus dropout” (Bean, 1979, p. 5). Bean (1979) noted that membership to a campus organization, which is internal to the campus and thus creates a connection between student and institution, would increase “what Tinto called social integration” and have a “negative influence on intent to leave” (p. 6). Bean, Strange and Banning, and Tinto agree that the more positive a student experiences their institution, the more likely they are to
persist within the same institution. Thusly, if students perceive a more negative experience with their institution, the less likely the student will persist within the same institution. Burrus, et al. (2013) explained that Bean’s model agreed with Tinto’s in that student interaction, positive or negative, “influence satisfaction, commitment to degree completion, and persistence” (p. 8).

Unlike Tinto’s Theory of Student Departure and Strange and Banning’s Campus Ecology Theory, Bean’s Model of Student Attrition “emphasizes the role of factors external to the institution in affecting both attitudes and decisions” (Cabrera, et al., 1993, p. 126). The model of student attrition attested that in addition to institutional and environmental factors influence on persistence and degree completion, personal variables, such as family approval and obligations, directly affect persistence (Cabrera, et al., 1992). Bean (1979) explained, “the model indicates that the background characteristics of students must be taken into account in order to understand their interaction within the environment of the IHE” (p. 7). Though Tinto’s model and Strange and Banning’s theory did not focus on student background determinants in retention decisions, Bean (institutional commitment), Tinto (student integration), and Strange and Banning (satisfied members) agreed a student’s positive connection to the institution decreases the likelihood a student will drop out.
Figure 2.3

Bean’s Model of Student Attrition

![Bean's Model of Student Attrition](image)


Theoretical Framework Analysis

Cabrera, et al., (1993) examined Tinto and Bean’s theories, finding that both theories overlap “in terms of organizational factors (courses and academic integration) and commitments to the institutions (institutional commitment, institutional fit and quality).” Additionally, both theories “argue that persistence is affected by the successful match between the student and the institutions” (p. 125). Cabrera, et al. (1992) also found that while Tinto’s model focused on the institution’s role in student persistence and Bean’s model focused on external factors of the individual study, the two models are complementary of each other and not mutually exclusive. Bean’s theory diverged from Tinto’s in its concentration of external variables, such as family obligations and health, which influence a student’s decision to remain at a university. The focus of this study is on institutional influence (learning community impact) on GPA, student retention, and degree completion. With this concentration in mind, and because individual and
external factors will not be investigated, Banning and Strange’s Campus Ecology Theory and Tinto’s Student Integration Model are more applicable to this particular study. However, further study of learning community impact on low-socioeconomic student success would benefit from the inclusion of Bean’s qualitative measures of student background and external factors pertaining to same institution retention decisions.

Chambliss & Takacs (2014), as noted in Strange & Banning (2015) found that when a college fosters relationships, which motivates a positive academic and social sense of belonging, students had a more successful college experience. Additionally, university subcultures, such as learning communities, “play an important role…in introducing students to and maintaining their engagement in the learning process” (Strange & Banning, 2015, p. 53). Just as Tinto discussed the role positive interaction plays in a student’s decision to remain at a university, Strange & Banning (2015) also explained the importance of morale in an organization, noting higher morale is associated with lower turn-over, and within the institutional level, the lower the morale of students the higher the rate of attrition (p. 99). Proshansky, Fabian, and Kaminoff’s (1983) study of place-identity noted that while influenced by a wide range of experiences and relationships, place-identity, “a personal attachment to geographically locatable places…provides a sense of belonging and purpose which give meaning to [one’s] life” (p. 60). Successful academic and social integration to university culture creates a place-identity bond between student and university, increasing the likelihood of retention and degree completion.

Universities are filled with organizational subcultures within the campus environment. These subcultures range from informal student study groups, to semi-formal classroom settings and student clubs, to highly structured programs such as learning communities. Tinto’s theory argued the importance of student integration in terms of positive effects of retention and degree
completion. Under organizational culture and Campus Ecology Theory, organized subcultures within a university are tasked with creating internal integration and external adaptation by “making meaning of the college experience…socializing students to the goals and purposes of higher education, what it means to be a member of a community, and how to go about the business of being a college student” (Strange & Banning, 2015, p. 131).

**Learning Communities in Higher Education**

Early American Higher Education began as large-scale learning communities. In an effort to integrate knowledge and culture into students’ lives, colleges such as Harvard, Yale, Princeton, and William and Mary implemented the Oxbridge Residential College Model. In this model the colleges housed student sleeping quarters, lecture halls, dining halls, and tutored residents in one area as an effort to integrate students into the academic and social culture of the college. Due to rapidly increasing student populations from the passing of the Morrill Land Grant Act of 1862 and a movement towards a more subject-area focused education, the Oxbridge Residential College Model faded into the separate academic buildings, dormitories, and unions more common on today’s campuses (Fink & Inkelas, 2015).

In the late 20th Century, government and society began questioning the quality of the higher education system. According to Fink and Inkelas (2015), many reports, including studies from the National Institute of Education and the Kellogg Commission, outlined the shortcomings of the American Higher Education institutions; mainly the disconnect between classroom education and workforce placement, a lack of a globally competitive workforce, and higher tuition rates compared to potential earning returns (p. 10). The creation of learning communities was consistently recommended as one solution for improving learning, retention, and persistence.
Learning Community Models

Learning Communities vary in format, instruction and student target population; however, most learning communities are designed to integrate academic and social activities, as well as using active and collaborative learning techniques within the classroom structure. The mission in using a combination of academic and social strategies, techniques, and events is to increase student persistence and retention outcomes, develop college level study and critical thinking skills, positively introduce students to diversity, social tolerance and responsibility, and acclimate new students into the campus culture (Zhao & Kuh, 2004). Community participants, through sharing of experiences, develop a sense of belonging and therefore become more engaged academically and socially, assimilation into the institutions’ culture, belief of having influence in the community and commitment to the institution (Strange & Banning, 2001). In general, learning communities are small, or segmented into smaller groups within a community, to promote student engagement through “collaborative partnerships between faculty, students, and [sometimes] residence hall staff” (Schroeder, 1994, p. 183).

Though learning communities can vary, the main component in creating a learning community is creating a linked course system, enabling the learning community cohorts to attend some or all their courses together. Additionally, these courses are linked together by a chosen theme to create a more in-depth and active learning environment for the learning community cohort (Engstrom & Tinto, 2008; Tinto, 2003). Tinto (2003) explained learning communities in that while they can vary in a multitude of ways, learning communities have three commonalities: shared knowledge, shared knowing, and shared responsibility. Students in learning community cohorts experience shared knowledge through participation in a theme-based curriculum in which instructors consciously create overlapping course curriculum to “promote higher levels of
cognitive complexity” (p. 2). Shared knowing is created by integrating students academically and socially through the coursework and shared activities outside the classroom. Lastly, learning communities involve student participation in collaborative coursework and social environments, creating a cooperative team environment for a shared responsibility experience. In creating active learning environments of shared knowledge and shared learning responsibility, learning communities “seek to involve students both socially and intellectually in ways that promote cognitive development” (Tinto, 1999, p.7).

Learning communities provide a structured environment in which university faculty and administration can guide new students through Tinto’s Student Integration Model phases of community integration. Engstrom and Tinto (2008) found students benefited from the “safe and supportive place to learn” created by the learning community faculty. Learning community faculty strategically created these environments by using active and collaborative pedagogies, collaborating with other faculty to create an integrated curriculum, integrating campus support services into the learning community curriculum, and demanding high academic and social expectations from students while providing high levels of support and encouragement (p. 12). According to Wells (1996), as cited in Strange and Banning (2001), “successful communities can be assessed using three criteria: commitment to the community, a sense of empowerment, and a sense that one matters to others within the community” (p. 18). Regardless of format, theme, or timeframe, a learning community’s goal is to embrace and support the student during their transition into the academic and social environment of higher education. During this process the student will learn the successful traits of a college student, develop place-identity with the university, and become a productive and meaningful member of the campus community.
Inkelas and Soldner, as stated in Fink and Inkelas (2015), created an integrated model of learning community type (p. 12): (a) paired or clustered courses, (b) smaller cohorts among large enrollments, including freshmen interest groups and federated learning communities, (c) coordinated or team-taught series of courses, (d) learning communities for special populations, and (e) residentially based learning communities.

Tinto (2004) explained that in the simplest form, learning communities consist of a minimum of two linked courses taken as a cohort. In larger institutions, the learning community structure involves a separation from the linked courses into a freshmen interest group. In this instance, the learning community cohort takes the same courses, often large lecture courses with non-learning community students, and then attend break-out sessions, known as freshmen interest groups, with only the learning community cohort. The cluster course structure combines the features of linked classes and freshmen interest group sessions. Coordinated studies organizes the linked courses with a meaningful theme, this structure takes cross-department coordinated effort in curriculum development. Student cohorts participating in a curriculum-centered learning community are enrolled in two or more courses, from different disciplines, linked by a common theme. (Lenning & Ebbers, 1999). Tinto (2004) explained when institutions create learning communities with curriculum and structures that link courses, they create opportunities for social involvement and shared active learning, students spend more time studying together and are more academically and socially engaged with peers, faculty, and campus, enhancing “student learning and persistence” (p. 8). To illustrate the different learning community models, Tinto (1999) provided a figure (2.4) detailing the most common learning community models:
Common Learning Community Models

**Figure 2.4**

In addition to the formats previously discussed, living learning communities (LLC) also organize student cohorts into a linked curriculum to facilitate academic and social support, and integration into campus culture. However, LLC’s provide an additional program component by creating a residential environment that incorporates out-of-class academic support such as tutorial hours, as well as arranged social functions such as residential based gatherings. Inkelas and Weisman (2003) found students participating in a living learning community in public institutions reported a “smoother academic transition” than students not participating in a LLC.

In a study of first-generation students participating in living learning communities in four-year institutions, Inkelas, et al. (2007) found that those participating in a LLC perceived an easier academic and social transition into college than first-generation students living in a traditional residence hall (p. 416). Inkelas, et al. (2007) also found first-generation students in a LLC perceived an easier acclimation into the college environment when they also perceived a strong social and academic supportive environment from their residential hall.

**Learning Community Literature**

Tinto, Bean, and Strange and Banning theorized the more connected a student feels to the campus, the faculty, the programs, and their peers, the more likely it is for students to remain at the university and complete their degree. Tinto and Goodsell (1993) found that first-year students in large, public research institutions who participated in Freshmen Interest Group programs characterized by linked courses were more likely to persist than freshmen who did not participate. Shapiro and Levine (1999) found in comparison to non-learning community students, learning community participants had higher persistence rates and were more engaged academically and socially. Additionally, Engstrom and Tinto (2008) found after controlling for student demographics and engagement, participation in a learning community is independently connected to positive student persistence outcomes, indicating that a component, or components of a learning community, separate from the increased engagement, positively affect student persistence (p. 11).

In a study conducted with learning communities from 13 two-year community colleges, Engstrom and Tinto (2008) found students participating in some form of learning community reported higher and more positive levels of academic and social engagement and campus faculty and administrative encouragement. In addition to being more engaged with the college
environment, those participating in learning communities were more likely to persist (62%) from first to second year, compared to non-learning community participants (57%) (p. 11).

Zhao and Kuh (2004) found that seniors who had participated in a learning community at some point during their college career, had higher grades than those who did not participate in a learning community (p.124). Grade point averages (GPA) are common measurements of academic success and predictors of persistence towards retention and degree completion (Reason, 2003). Since academic culture integration, including classroom behavior, active learning and study techniques, and student-faculty relationship development is a key mission for learning communities, student GPA is also a measurement for the success of a learning community program. As discussed in Stater (2009), studies have found that institutional interventions and programs such as “academic instruction programs, advising and support services, and structured residence hall arrangements have positive effects on college grades and persistence” (p. 784).

As noted in Zhao and Kuh (2004) (p.118), research pertaining to residential learning communities (Blimling, 1993; Pascarella, et al.,1994) are particularly influential in regards to academic and social integration and involvement. Zhao and Kuh (2004) found that due to learning community structure and faculty involvement, learning community students interacted more with faculty and advisors, and generally had a more positive view regarding campus support of student needs and were more satisfied with their college experience (p.124, 127). Tinto (2003) found students involved in a learning community “formed their own self-supporting groups” and spent more time with their peers outside of the classroom than students not participating in a learning community (p. 5). In addition to more social participation, learning community students were more active in classroom participation, and persisted at higher rates
than non-participants (Tinto, 2003). Students, as reported in Inkelas and Weisman (2003), reported a smoother transition into the academic culture due to participation in the academic and social opportunities provided as a participant of a living learning community.

The majority of learning community studies focus on the learning community participant population as a whole. However, student populations and their needs are very diverse, thus studying specific populations within the learning community population is important to fully understand the scope of impact a learning community program has on student success. Low-socioeconomic students often have characteristics which place them as high-risk students in terms of retention and degree completion. Universities often use programs such as learning communities to assist underprepared students in academic and social acclimation. Understanding the specific needs of low-socioeconomic students and program impact, is necessary for developing quality programming that can have a positive impact on low-socioeconomic student success.

**Federal Pell Grant Program**

Need-based aid is funding granted to low-income students, unlike merit-based aid, it does not take into consideration factors such as GPA or test scores, the only variable considered is family income level. According to Ma, et al., (2016) “In 2015, 82% of high school graduates from the highest family income quintile (above $100,010) enrolled immediately in college, compared with 62% of those from middle income quintile ($37,000-$60,300) and 58% of those from the lowest quintile (below $20,582). The mission of Federal need-based aid is to open accessibility to higher education to students who do not have the means to afford the continuously increasing tuition costs.
Originally called the Basic Educational Opportunity Grant (BEOG), the Pell Grant program has been providing need-based aid to qualifying undergraduate students for over thirty years (The Pell Institute, 2017, para. 1). Unlike a loan, students do not need to pay back rewarded grant funds. The maximum Pell Grant reward a student can receive for the 2019-2020 school year is $6,195 (Federal Student Aid, n.d., para. 2). Student awards are based on the individual’s financial need, university cost of attendance, full-time or part-time status, and academic year attendance plans. Additionally, qualifying students are only eligible to receive funds for twelve semesters, the equivalent of six years (Federal Student Aid, n.d., para. 3).

Students must remain eligible throughout their college career, this includes meeting their specific school GPA and progress toward degree requirements. (Federal Student Aid, n.d., para. 2). The purpose of the Pell Grant is to reduce the cost of attendance for low-socioeconomic students, providing access and theoretically diminishing attrition caused by economic needs (Goldrick-Rab, et al., 2016). In the 1970s, Pell Grant aid covered roughly 75% of the cost of attending a four-year public university, today it covers less than 33% (Goldrick-Rab, et al., 2016). The Pell Grant Program is the largest need-based aid program, providing financial support and educational opportunities to millions of students, opening the door to higher education for many who would otherwise not have the opportunity.

In addition to providing access to higher education, receipt of aid has been linked to lower levels of dropout. Chen and DesJardins (2008) found low-socioeconomic students who receive Pell Grants have lower predictability (20.8%) of dropping out compared to middle-income Pell Grant recipients (25%). Tinto (2004) noted from NCES 2002 data, students receiving Pell Grant aid were more likely to persist than non-recipients in four-year institutions (p. 13). However, Godrick-Rab, et al., (2016) declared, “Nationally, 11% of Pell Grant recipients...
entering public universities do not enroll for a second year of college, and about 80% do not receive a bachelor’s degree within four years (p. 1764).

In the first year of the Pell Grant program, 1973-1974, sixty-two percent of recipients attended four-year institutions. Over the years, Pell Grant recipient enrollment has shifted, since 2002 only about 45% of Pell Grant recipients attend four-year institutions (Engstrom & Tinto, 2008). As discussed in Engstrom & Tinto (2008), a study conducted by the National Center for Education Statistics in 2003 found that students entering four-year institutions were more likely to earn a degree (6 in 10 students) than students who began in two-year institutions (1 in 10 students) (p. 6). The purpose of Pell Grant is to decrease the cost of attendance; however, with tuition costs continuing to increase and Pell Grant coverage decreasing, Pell Grant recipients may begin college at a two-year institution, take on more loan debt, and take longer to graduate, increasing the risk of attrition in a population already at risk of high attrition rates. Retention and degree completion of Pell Grant recipients within the shortest possible timeframe is beneficial to the students and the institution. This study measures the impact structured learning communities may have on the academic success of low-socioeconomic students in a four-year, public institution.

Stater (2009) found that merit-based aid had larger positive effects than need-based aid. Unlike merit-based aid, which is often tied to the student’s current university, need-based government funded aid is often transferrable between institutions. Due to the ability to transfer need-based aid, the receiving of the aid does not foster a “student-institution” bond, or place-identity, as does a merit-based award (p. 808). Therefore, institutions must take a more active role in fostering need-based aid recipient institutional integration.
Pell Grant Recipient Characteristics

Pell Grant recipients embody characteristics described as at-risk or high-risk. These low-socioeconomic students are often first-generation students, minority students, and graduates from underperforming high schools. Pell Grant recipients are more likely to attend a for-profit, less than four-year institution in comparison to non-Pell Grant recipients (Engstrom & Tinto, 2008; Wei, et al., 2002). Pell Grant recipients are also less likely to be academically prepared for college in comparison to non-Pell Grant recipients, this includes SAT and ACT scores falling in the lowest range, attending high schools with deficient curriculum, and having a higher rate of GED completions in comparison to non-Pell Grant recipients (Wei, et al., 2002).

Low-Socioeconomic Students

Socioeconomic status is important in relation to persistence and degree completion. Burros, et al. (2013) have shown that those in the higher socioeconomic quartile are more likely to persist to degree completion than those in the lower quartile. Students in the higher quartile are more likely to come from more affluent schools with available resources, fostering a stronger academic foundation than students who do not have the same resources. According to Burros, et al., (2013), “moving upward from one SES (socioeconomic status) quintile to another produced, on average, over a 6% increase in the likelihood of receiving a college degree” (p. 17). In a study using the National Center for Educational Statistics’ (NCES) Beginning Postsecondary Students survey (BPS:96/01), Chen and DesJardins (2008) found 38% of low-socioeconomic students dropped out within a six-year observation period and did not return to institutes of higher education. In comparison, 31% of middle-income students and 22% of high-income students dropped out (p. 10). Alon (2011) explained that low-income students are not only less likely to attend college than higher socioeconomic peers, but also less likely to earn a bachelor’s degree.
Bailey and Dynarski (2011) discussed the completion gap, noting students from high-income families are more likely to persist and are twice as likely to complete their degree than students from low-socioeconomic backgrounds.

Tinto’s Student Integration Model focuses on the institution’s role; however, Tinto does acknowledge the unique set of circumstances presented by each student in regards to academic foundation, secondary school experience, parental involvement, self-perception and motivation, and the role these play in student persistence (Tinto, 2007, 2012a). Tinto (2004) notes a 2001 study by Cabrera, LaNasa, and Burkum of high school sophomores followed for 13 years; this study found that only 13% of low-income students entered a four-year institution post high school, compared to 45% of high income students (p. 6). Cabrera et al. (2001) also found 42% of academically prepared low-income students failed to earn a bachelor’s degree in six years, compared to 19% of high-income students. Tinto concluded low-income students often have family financial responsibilities and are first generation students, which could lead to less time spent involved in campus activities and the feeling of not belonging, leading to high attrition risk.

Jury et al. (2017) reviewed research pertaining to the psychological barriers faced by low-socioeconomic students in regards to persistence and degree completion. Psychological barriers were defined as a student’s “emotional experience (e.g. emotional distress, well-being), identity management (e.g. sense of belonging), self-perception (e.g. self-efficacy, perceived threat), and motivation (e.g. achievement goals, fear of failure)” (p. 18). Understanding the psychological barriers faced by low-socioeconomic students will aid institutes of higher education in the development of programs and campus culture that support academic and social integration into the campus environment, leading to higher persistence and degree completion rates.
Studies discussed in Jury, et al. (2017) found that low-socioeconomic students are more likely to feel emotional distress and reported higher levels of depression. Additionally, low-socioeconomic students reported lower perceptions of competency, more doubts of belonging, and fear of proving they do not belong (p. 19-20). Low-socioeconomic students may struggle to feel connected to the academic and social environments of higher education, because they are more likely to complete secondary education in school systems not equipped with the resources or funding that can provide the academic rigor and support needed for students to develop the habits, mentality, and skills required to succeed in the college environment (Goldrick-Rab, et al., 2016).

As discussed in Stater (2009), “student choice theory” assumes that persistence is based on a series of decisions a student makes. These decisions are based on the individual’s background, education, environment and policy. In regards to student choice, if the cost of attending college is lowered through aid, this “policy instrument” would, based on student choice theory, have a positive impact on the student’s choice to persist. Thus, low tuition and/or adequate aid, would positively affect persistence rates of students receiving aid (Stater, 2009). Though Pell Grant recipients are less likely to be academically prepared for post-secondary education, Wei, et al., (2002) found “no overall differences between low and middle-income Pell recipients and non-recipients” in persistence rates for those attending public 4-year institutions (p. 29). However, Stewart, et al., (2015), found a statistically significant relationship between financial aid status and persistence. Students receiving financial aid requiring specific GPA qualifications and sanctions or limitations on work hours, such as Pell Grants, may be more likely to persist in higher education. Interestingly, Wei, et al., (2002) found Pell Grant recipients who scored in the lowest ACT/SAT quartile were “less likely than non-recipients to leave
without a degree” (p. 29). Additionally, “Among those [students] scoring in the lowest quartile [on standardized tests] Pell Grant recipients were less likely to leave without a degree (15 versus 28 percent,) while among those scoring in the middle quartiles, Pell Grant recipients were more likely to leave without a degree (17 versus 12 percent)” (Wei, et al., 2002, p.vi).

**Minority Students**

Studies have shown race as a significant predictor of undergraduate retention, noting African American, Hispanic, and American Indian were more likely than Caucasian students to withdraw from university (Reason, 2003). As stated in Burros, et al., (2013) while more minorities are enrolling in higher education due to increases in accessibility, minorities, other than Asian/Pacific Islanders, are more likely to leave college without a degree than Caucasian students. Strayhorn (2008) found “all else being equal, low-income Black males who are more socially integrated into campus life also are more likely to be retained than those (Black males) with little to no social integration” (p. 15). Latin American students, due to family culture, obligations, and environmental factors external to the college context, displayed the lowest degree completion rate of all minority groups (Burros, et al., 2013). Allen (1999) found that a 68% variance for minority students’ retention from first to second year was accounted for by high school rank, first-year college GPA, and the students’ self-reported desire to earn a college degree.

**First-Generation Students**

Studies typically use one of two definitions for first generation students:

- A student whose parents or guardians have never attended post-secondary education.
• A student whose parents or guardians have earned a few post-secondary credits, but did not earn a degree (Inkelas, et al., 2007).

First-generation students “tend to be less academically prepared, have lower reading, math and critical thinking skills, and be more likely to attend high schools with less rigorous curricula” than students with secondary education degree holding parents (Inkelas, et al., 2007, p. 405). Additionally, as discussed in Jury, et al. (2017) and noted in Inkelas, et al. (2007), Choy found “that first-generation college students were more than twice as likely (23% vs. 10%) to leave a 4-year institution before their second year than students whose parents had a bachelor’s degree (p. 406).

While Jury, et al., (2017) found that first-generation students were more likely to fear failure and had lower persistence rates than non-first generation students, studies discussed in Inkelas et al., (2007) found that first-generation students are more likely to persist in smaller classrooms, where instructor attention and class participation is more likely to occur than in larger lecture halls. Furthermore, first-generation students are also more likely to persist when engaged in extracurricular student activities and when participating in campus activities. However, first-generation students are also less likely to participate in classroom discussions, less likely to join student activities, and more likely to have friends and activities off campus and not part of the college environment. Studies such as Terenzini (1994), as cited in Inkelas, et al., (2007), state first-generation students must adjust to a new academic and social culture, indeed, disengage from previous academic and social cultural knowledge in order to acclimate and persist in the collegiate environment. Learning communities offer a designed structure of smaller enrollment courses, highly engaged instructors, and campus social events, which place first-
generation students in an environment designed to create academic and social transitioning and college persistence.

**Benefits of Higher Education**

The benefits of higher education, for both the individual and society as a whole, have been well documented. Obtaining a college degree is beneficial to the student in that “college attendance improves verbal, quantitative, communication, critical thinking, and moral reasoning skills” (Burrus, et al., 2013, p. 1). Additionally, those who complete a bachelor’s degree “earn over one million dollars more during their lifetime than do those who do not go to college” (Tinto, 2012a, p. 1) and for first-generation students, often a primary characteristic of low-socioeconomic students, the impact of income earned with a college degree is “at least doubling of family earnings” (Tinto, 2004, p. 7). For all races and ethnicities, unemployment rates decreased as the level of education increased (Ma, et al., 2016). Baum and Payea (2004) found that regardless of income bracket, the percentage of those reporting the best individual health increased as education level increased. In addition to individual benefits, the more educated a population, the more society benefits.

Higher education “has been linked to lower unemployment rates, greater job satisfaction, decreased reliance on social support and public assistance programs, lower rates of obesity, and higher reported levels of voting and volunteerism” (Burrus, et al., 2013, p. 1). The largest population of State, Local, and Federal prison inmates are those with a high school degree or less, the smallest population in all three security levels (minimum, medium, and maximum) of prison are those with postsecondary schooling (Harlow, 2003). Children of educated parents tend to earn higher levels of education and the more educated a population, the higher percentage of citizens volunteer in the community and on average, volunteer more hours than those with less
education (U.S. Department of Labor, 2015). Tinto (2004) agrees, noting that those with degrees tend to participate more in their communities, consume fewer public services, commit fewer crimes and are less likely to be unemployed than those with only a high school degree. Low-socioeconomic students stand to greatly benefit from earning a college education, yet often they are underprepared and never complete the degree for which they seek. Understanding how a formal university program designed to positively impact student academic success impacts low-socioeconomic students is important for the future support planning for low-socioeconomic college students.

**Persistence and Retention**

The term persistence does not have one clear definition. In some studies, persistence can refer to a student who continues in higher education at any level of institution through consistent transfer, including stop-outs. In other studies, persistence refers to students who continue within the same institution. Stop-out is defined as a “temporary withdrawal from an institution or system” (Burrus, et al., 2013, p. 5). For this study, persistence pertains to a student who continues enrollment, without stop-outs, at a single institution.

For institutions to answer the student’s desire to complete a degree, Tinto (2016) explains the importance for institutions to understand how a student’s experiences, especially during the first year, influence their motivation to persist. Tinto notes three keys to student persistence-motivation that institutions can influence: self-efficacy, sense of belonging, and perceived value of curriculum. Self-efficacy is a person’s belief in their ability to succeed. Students with low self-efficacy tend to become discouraged and withdrawn when encountering difficulties. It is important for institutions to have programs in place that not only are able to identify students in need of intervention, but also provide a structured and quick response of intervention. Students
who feel like contributing and valued members of the college community are more likely to persist and be retained than those who feel as if they do not belong. Institutions can create opportunities for students to develop a bond with the college by creating cohort programs, such as learning communities, that require and promote shared academic and social experiences in a supportive environment. Tinto (2016) explained that students expect value in their education and courses, if students do not see a valuable use of the subject or assignments, they are less likely to persist. Institutions can proactively develop value in their curriculum by creating linked curriculum learning communities which “promote a form of interdisciplinary learning that is not easily achieved in stand-alone courses” (p. 4).

Student engagement is an important factor in student persistence. The more a student is engaged, both academically and socially, the more the student learns and the more likely they are to persist. Student engagement, according to Astin (1985), as noted in Strange and Banning (2015) “refers to the amount of physical and psychological energy that the student devotes to academic experience” (p. 188). Students who actively engage in classroom and campus activities, and who positively interact with peers and faculty are more likely to retain enrollment at the same institution and persist to degree completion.

As tuition continues to increase and state funding continues to decrease, parents, students, and administrators have an invested interest in positive persistence rates. One common measurement of persistence in higher education is that of student retention from first semester freshmen year to first semester sophomore year. Studies consistently show the importance of freshmen year in regards to social and academic success, noting that students retained to their sophomore year are more likely to persist to degree completion (Engle & Tinto, 2008; Mortenson, 2012; Tinto, 1987). With grant and loan programs, access to higher education has
increased enrollment numbers. High school students entering college immediately following high school graduation increased from 49% in the 1980s to 67% in 2014 (Engstrom & Tinto, 2008). Providing access to education is an important step; however, it is only the first step. With increased access, universities are also experiencing a growing student population underprepared for the expectations of the collegiate academic and social community. It is essential for universities to provide support for students entering their college careers in order to increase student retention and degree completion rates.

**Need for Present Study**

The use of learning communities in institutions of higher education is not a new concept; creating learning communities continues to be an evolving strategy for increasing retention and graduation rates. Studies of learning communities in four-year institutions tend to focus on the overall community population while few studies focus on a specific sub-population within the learning community. Low-socioeconomic students often enter college underprepared for the academic rigors of university work and while access to higher education has improved for low-income students, succeeding to degree completion is necessary for access to be beneficial for the students, the institution, and to society. Institutions of higher education have a responsibility to support and provide opportunity for student success; learning communities can provide an opportunity to guide students through both the academic and social transitions of college, providing structured opportunities for development and success. This study contributes to the learning community research field by focusing on low-socioeconomic students participating in a first-year learning community at a four-year research institution.
CHAPTER III

Methods

With the introduction of the Pell Grant, access to higher education opportunities for low-socioeconomic students increased, helping close the accessibility gap with middle and high-socioeconomic students (Estep, 2016; Tinto 2012a). However, degree attainment rates between high-socioeconomic students and low-socioeconomic students continues to be of concern (Estep, 2016). Pell Grant eligible students often encompass a number of characteristics associated with attrition risk. Institutes of higher education often develop programming, such as learning communities, aimed to support students in their successful transition into higher education. This quantitative study analyzes the impact learning community participation has on the academic success of the low-socioeconomic student population at an R1 institution in the Southern region of the United States. The following questions were explored:

1. Is there a significant difference in the average GPA of low-socioeconomic student learning community participants (LCP) compared to low-socioeconomic non-participants (NLCP) during the following time periods: (a) first semester, (b) first year, (c) second year, (d) third year, and (e) fourth year?

2. Do low-socioeconomic students participating in a learning community have higher same-institution retention rates compared to low socioeconomic non-participants during the following time periods: (a) returned second year, (b) returned third year, and (c) returned fourth year?
3. Do low-socioeconomic students participating in a learning community have higher same-institution degree completion rates compared to low socioeconomic non-participants during the following time periods: (a) graduated by year four, (b) graduated by year five, and (c) graduated by year six?

Site

The University of Mississippi

The University of Mississippi (UM) is the flagship university for the state of Mississippi with its main campus located in Oxford, regional campuses located in Desoto, Tupelo, Boonville and Grenada, and a University Medical Center located in Jackson, MS. (About UM, 2019). UM is classified as a Carnegie, RI doctoral university. The 2019-2020 undergraduate student population of 16,545 for the Oxford and regional sites consists of 55% female and 45% male, of whom 22.9% are minority (About UM, 2019; Mini Fact Book 2019-2020, 2019). This study was conducted on the main campus in Oxford, Mississippi. In Fall 2019, 3,249 students were first-time freshmen. Of the incoming 2018 freshmen cohort, the average incoming high school GPA was 3.57 on a 4.0 scale and the average incoming ACT score was 24.8 out of a possible 36 (Mini Fact Book 2019-2020, 2019).

University of Mississippi retention for first to second year full-time freshmen has exceeded national averages, averaging 85% since 2012, compared to the national 4-year institution average of 82% (Persistence & Retention, 2019; Retention Trends, 2019). Furthermore, the 6-year graduation rate for the 2011 cohort of 60.1% matched the national 4-year institution average (60%) for the equivalent cohort (Graduation Trends, 2019; National Center for Education Statistics, 2019). The most recent available data notes for fall 2017, the first to second year national retention rate for full-time freshmen enrolled in a 4-year public
institutions was 79.1%, compared to UM’s equivalent cohort retention rate of 84.9% (Mini Fact Book 2019-2020, 2019; Persistence & Retention, 2019).

**FASTrack Learning Community**

FASTrack is a first-year learning community, whose mission is to help “students transition from high school to college” (FASTrack FAQ, 2019). This learning community program offers smaller classes, individualized advising and mentoring, and a community of supportive peers. FASTrack FAQ (2019) states that “the early connections students make in FASTrack facilitate academic success, encourage campus involvement, and provide opportunities for leadership development.” All first-year freshmen at the University of Mississippi, regardless of high school GPA, standardized test scores, or major, are eligible to apply to the learning community. However, first-year students who are participating in the “Honors College, the Croft Institute, Luckyday, or students taking two Developmental Studies courses” are not eligible for FASTrack “because these programs offer similar systems of support.” If selected, the student will incur a one-time fee of $440; however, Pell Grant eligible students will not be charged the fee (FASTrack FAQ, 2019).

Cohorts of 20 are created with an effort to ensure diversity among each group. FASTrack students begin participating in their structured learning community the summer prior to their freshmen year by attending orientation together. In addition to the traditional University of Mississippi orientation agenda, cohorts attend a FASTrack specific information setting and meet individually with academic advisors. Finally, FASTrack students have the opportunity to participate in the FASTrack Living Learning Community (LLC) by residing in a selected dormitory with other learning community participants. Though participation in the FASTrack LLC is not required, it is recommended.
FASTrack cohorts take three courses together in the fall semester and up to two courses together in the spring semester. The three cohort courses for the fall semester are First-Year Writing (WRIT 101), First Year Experience (EDHE 105), and either General Psychology (PSY 201) or Introductory Sociology (SOC 101). During the second semester, only First-Year Writing II (WRIT 102) is required as a cohort course; however, students have the option of taking Advancing the First Year Experience (EDHE 106) and Inquiry to Life Human Biology (BISC 102) as FASTrack cohort courses. In Spring 2020, FASTrack offered a new second semester course option, Fundamentals of Public Speaking (SPCH 102). In addition to FASTrack specific sections, students enroll in non-cohort courses to maintain a schedule of 15 credit hours.

In addition to linking student cohorts to courses, FASTrack establishes a support system to help students’ academic and social transition to the college environment. Instructors are selected by the learning community director and use the classroom setting to establish the tone for college classroom behavior, study habits, and academic interaction expected of successful college students. Full-time staff members serve as academic mentors, tracking student progress such as attendance and grades, so if needed, intervention for struggling students can take place early in their first semester. In addition to academic mentors, FASTrack has a peer leader program comprised of successful, former FASTrack students. Peer Leaders guide their assigned cohorts through their first year by introducing them to campus resources, student services, and campus life in general. Peer Leaders are assigned cohorts through the EDHE 105 courses and attend the course at least once per week, helping the instructor and interacting with their cohort. The Peer Leader Program also requires interaction with mentees on a social level outside of the classroom, organizing social events as a FASTrack group and intermingling with other university sponsored events (FASTrack, 2019).
FASTrack and the Counselor Education Clinic for Outreach and Personal Enrichment (COPE), “as an additional platform of support as [FASTrack] students develop into healthy, successful young adults during their first year on campus,” have teamed together to create a support program, which began in the 2016-2017 school year called FRESH MINDS. Though not mandatory, this program provides individual and group counseling sessions, free of charge for FASTrack students. Sessions discuss topics such as transition and adjustment to college life, stress and anxiety management, grief and depression, alcohol and drug use, eating disorders, time management, test anxiety, etc. (FASTrack FRESH MINDS, 2016).

Sample

The sample for this study are low-socioeconomic (SES), full-time freshmen entering the university in the fall 2010, 2011, 2012, and 2013 cohorts. These cohort years were chosen to ensure an adequate low-SES FASTrack participant pool and accessible 6-year degree completion data. In order to identify low-SES students, the University of Mississippi’s Office of Institutional Research, Effectiveness and Planning (IREP) provided a master student list to the Office of Financial Aid. Financial Aid identified (yes/no) students who were verified Pell Grant eligible upon entering the university as first-time freshmen. Once low-SES students were identified, IREP removed all non-Pell Grant eligible students, removed all identifying labels and demographics, noted (yes/no) for FASTrack participation, provided incoming high school GPA (HS GPA), incoming ACT composite scores (ACTC), college GPA (first semester, first year, second year, third year, and fourth year), retention status (returned second year, returned third year, and returned fourth year), and degree completion status (by year four, by year five, and by year six). This study analyzed learning community impact on low-socioeconomic student

**Permissions and Procedures of Data Collection**

This study is a collaboration with the University of Mississippi’s Office of Financial Aid, Office of the Registrar, and Office of Institutional Research, Effectiveness and Planning (IREP). Permission was received from the University of Mississippi’s Institutional Review Board to conduct the proposed research. Data for low-socioeconomic FASTrack participants and the comparison low-socioeconomic non-learning community students was collected through IREP regarding incoming academic data (high school core GPA and standardized test scores), college GPA, year-to-year retention, and degree completion data. The Office of Financial Aid approved the internal use of FAFSA information to identify low-socioeconomic students, as long as student identifiers were removed prior to granting the dataset to the researcher. The Office of the Registrar permitted access to grade point average data.

After approval from the Institutional Review Board was received, the researcher submitted a data request through an internal UM ticket system for the Office of Institutional Research, Effectiveness and Planning. IREP supplied a student list of fall freshmen cohort years 2010-2013 to the Office of Financial Aid. Financial Aid, using FAFSA applications and verified Pell Grant eligibility status, identified (yes/no) low-socioeconomic students. Following Financial Aid, IREP removed students labeled “no” for low SES standing, removed any demographic identifiers, marked students (yes/no) for FASTrack participation status, provided incoming HS GPA and ACTC scores, provided college GPA through fourth year, retention status (yes/no) through fourth year, and graduation status (yes/no) through sixth year.
Hypotheses

Tinto’s Longitudinal Model of Student Departure, as supported by Bean’s Model of Student Attrition and Strange and Banning’s Campus Ecology Theory, theorized the importance the role institution impact has in regards to student departure decision. The foundational theory in this framework explains that the earlier a student acclimates both academically and socially into the culture of the institution, the greater likelihood the student will be retained to degree completion. Learning community participation is one proactive intervention commonly created to encourage active academic and social participation within a student’s first year on campus. The hypotheses for this study are based on the institution specific focus of these models. These models suggest that participation in a learning community would positively impact student success such as GPA, retention, and degree completion.

1. Null Hypothesis 1: There is no significant difference in average first semester GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.

   Alternative Hypothesis 1: There is a significant difference in average first semester GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.

2. Null Hypothesis 2: There is no significant difference in the average first year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.

   Alternative Hypothesis 2: There is a significant difference in the average first year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.
3. Null Hypothesis 3: There is no significant difference in the average second year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.
   Alternative Hypothesis 3: There is a significant difference in the average second year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.

4. Null Hypothesis 4: There is no significant difference in the average third year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.
   Alternative Hypothesis 4: There is a significant difference in the average third year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.

5. Null Hypothesis 5: There is no significant difference in the average fourth year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.
   Alternative Hypothesis 5: There is a significant difference in the average fourth year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students.

6. Null Hypothesis 6: Low-socioeconomic learning community participants are not more likely to be retained to year two than low-socioeconomic non-learning community students.
Alternative Hypothesis 6: Low-socioeconomic learning community participants are more likely to be retained to year two than low-socioeconomic non-learning community students.

7. Null Hypothesis 7: Low-socioeconomic learning community participants are not more likely to be retained to year three than low-socioeconomic non-learning community students.

    Alternative Hypothesis 7: Low-socioeconomic learning community participants are more likely to be retained to year three than non-learning community low-socioeconomic students.

8. Null Hypothesis 8: Low-socioeconomic learning community participants are not more likely to be retained to year four than low-socioeconomic non-learning community students.

    Alternative Hypothesis 8: Low-socioeconomic learning community participants are more likely to be retained to year four than non-learning community low-socioeconomic students.

9. Null Hypothesis 9: Low-socioeconomic learning community participants are not more likely to graduate within 6–years than low-socioeconomic non-learning community students.

    Alternative Hypothesis 9: Low-socioeconomic learning community participants are more likely to graduate within 6–years than low-socioeconomic non-learning community students.

**Research Design**

This quantitative study examined the relationship between learning community participation and measurable student success for low-socioeconomic students: GPA, same-
institution retention, and same-institution degree completion. Using a correlational design, research designed to describe the relationship between two variables, this study seeks to analyze the impact learning community participation has on the academic success of low-socioeconomic students. Correlational designs use existing data such as incoming high school grade point average (HS GPA), standardized test scores, retention data, and degree completion data (Creswell, 2015). This data was collected through the University of Mississippi’s office of Institutional Research, Effectiveness and Planning.

Measurements

**Independent Variable: Learning Community Participation**

This study will use the binary variable learning community participation as the independent variable. Low-socioeconomic students will either be FASTrack participants = 1, or non-participants = 0. Low-socioeconomic FASTrack learning community participants are noted as LCP. Low SES students not participating in FASTrack are noted as NLCP. Students were identified as FASTrack students by IREP databases using university software.

**Dependent Variable: Academic Success**

Academic success, is the dependent variable. Academic success will be measured by GPA and binary outcomes: same-institution retention and same-institution degree completion.

**Grade Point Average**

Grade point average will be measured on a 4.0 scale from grades earned in credit bearing courses leading to the completion of first semester, first year, second year, third year, and fourth year at the same institution.
**Same-Institution Retention**

Low SES LCP and low SES NLCP retention data will be determined as a short-term binary outcome of student success. For this study, retention will refer to same-institution retention (retained = 1, not retained = 0), and will be measured as second year, third year, and fourth year retention.

**Same-Institution Degree Completion**

Low SES LCP and low SES NLCP degree completion data (graduated = 1, did not graduate = 0) will be measured as graduated within 4 years, graduated within 5 years, and graduated within 6 years. Retention and degree completion data will be provided as a descriptive chart.

**Additional Variables**

Incoming high school grade point average (HS GPA) and standardized college admissions tests such as the American College Test (ACT) and the Scholastic Aptitude Test (SAT) scores are the standard data used to predict college success (Ransdell, 2001). In a study comparing ACT composite (ACTC) score and incoming high school GPA effectiveness for predicting first-year college GPA, Noble and Sawyer (2002) found that “ACT Composite scores provided greater differentiation across levels of achievement than do high school GPAs in terms of students’ probable success during their first year in college” (p. 19). Additionally, Noble and Stewart (2002) found that high school GPA predictions of first-year college GPA of 2.5 or higher was more accurate than those based on ACT score. However, taking both high school GPA and ACTC score together was more accurate than individually (Noble & Steward, 2002).

Additional variables of interest in this study include high school grade point average (HS GPA) and ACT composite scores (ACTC). Research indicates that incoming high school GPA and standardized test scores are commonly used as predictors of college academic success. Low
SES LCP and low SES NLCP high school GPA and ACTC scores are analyzed through independent t-tests to determine difference in pre-college academic performance between the LCP an NLCP groups.

Analysis of the Data

Independent sample t-tests are used to compare two groups “in terms of 1 dependent variable” (Creswell, 2012, p. 613). Research question one aims to compare two groups, low-socioeconomic learning community participants (LCP) and low-socioeconomic non-learning community participants (NLCP), with one dependent variable, GPA. Independent sample t-tests are used to evaluate research question one. Additionally, independent sample t-tests are used to analyze HS GPA and ACTC for comparison of college success predictor variables for both low-SES LCP and NLCP groups. The comparison of HS GPA and ACTC scores of LCP and NLCP students was calculated to determine if there were any differences in academic performance between the two populations prior to college. Finally, comparison tables of the low SES LCP and low SES NLCP groups are analyzed for comparison and discussion of same-institution retention and degree completion. Chapter 4 reports the findings of academic success analysis between low-socioeconomic learning community participants and low-socioeconomic non-learning community participants.
CHAPTER IV

Results of the Study

Introduction and Purpose

The purpose of this quantitative study was to analyze the impact learning community participation has on measurable student success for low-socioeconomic students: GPA, same-institution retention and same-institution degree completion. Low-socioeconomic students, compared to middle and high-socioeconomic students, often enter college academically underprepared, are at a higher risk of attrition, and a higher risk of not completing degree requirements. Learning community programs are one resource some universities offer to assist students in the acclimation to collegiate academic and social culture. These programs differ in model throughout college campuses; however, understanding their impact on high-risk student academic success is important for university administration in terms of student support services and program design.

This chapter presents the results of the analyses in order of research questions. Research question one sought to determine whether there is a significant difference in mean GPA of low-socioeconomic learning community participants (LCP) compared to low-socioeconomic non-learning community participants (NLCP). Independent sample t-tests were conducted to determine whether a significant difference occurs between the two groups at specific academic checkpoints: first-semester, first-year, second-year, third-year, and fourth-year. Analyses also included descriptive statistics of mean high school (HS) GPA and ACT composite (ACTC) score.
Research questions two and three sought to analyze whether participation in a learning community had an impact on same-institution retention and same-institution degree completion rates of low-socioeconomic students. Means comparisons of low-socioeconomic LCP and NLCP students were conducted for second-year, third-year and fourth-year retention and graduation within four-year, five-year, and six-year timeframes.

**Research Question One – Grade Point Average**

Independent sample t-tests were conducted to determine whether a significant difference between the two populations occurs at specific academic checkpoints: first-semester, first-year, second-year, third-year, and fourth-year. Analyses also included descriptive statistics and group statistics of mean HS GPA and ACTC score.

**First-Semester GPA**

Hypothesis one analyzed whether there was a significant difference in mean first-semester GPA of LCP students compared to NLCP students. This hypothesis is stated in null form: There is no significant difference in average first-semester GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students. Additionally, ACTC scores and HS GPA were included for group comparison. Of the original population total (3,310), eighteen students (0.54%) were removed from the dataset due to missing first-semester GPA data (13-NLCP, 5-LCP). Fourteen students (0.42%) (13-NLCP, 1-LCP) were excluded from ACTC comparison due to missing ACTC scores and 12 students (0.36%) (12-NLCP) were excluded from HS GPA comparison due to missing data.

According to Cohen (1988), effect size is “the degree to which the phenomenon is present in the population” (p. 9). Effect size, determined by Cohen’s d is found “by dividing the
difference between the two means by the pooled standard deviation” (Hinkle, et al., 2003).

Statistically, Cohen’s d is expressed as

\[ d = \frac{\bar{X}_1 - \bar{X}_2}{s} \]

Where \( \bar{X}_1 \) is the mean of the first group, \( \bar{X}_2 \) is the mean of the second group and s is the pooled standard deviation. As noted in Hinkle, et al. (2003), in order to interpret effect size, Cohen provided the following quantitative guidelines illustrated in Table 4.1

**Table 4.1**

*Cohen’s d Effect Size Qualitative Guidelines*

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>( .25 )</td>
</tr>
<tr>
<td>Medium</td>
<td>( .5 )</td>
</tr>
<tr>
<td>Large</td>
<td>( 1.0 )</td>
</tr>
</tbody>
</table>


In addition to independent t-tests, Cohen’s d was calculated to determine effect size.

There was no significant difference in first-semester GPA for low SES LCP (M=2.51, SD=0.80) and low SES NLCP (M=2.50, SD=1.03); \( t(511.17)=0.21, p=0.84 \). Levene’s test indicated unequal variance (F=46.33, \( p < .001 \)), so degrees of freedom were adjusted from 3290 to 511.17. Cohen’s \( d = 0.01 \), indicating a small effect size. These results suggest that participating in a learning community does not have an impact on first-semester GPA averages for low-socioeconomic students.
There is a significant difference in ACTC scores for low-socioeconomic LCP (M=20.49, SD=2.93) and low-socioeconomic NLCP (M=22.25, SD=4.28); t(561.48)= -10.10, p < .001. Levene’s test indicated unequal variance (F=90.93, p < .001), so degrees of freedom were adjusted from 3276 to 561.48. Cohen’s d = 0.481, indicating small to medium effect size. These results indicate that for the participants in this study, low SES LCP had, on average, lower ACTC scores than low SES NLCP.

There is a significant difference in HS GPA for low-socioeconomic LCP (M=3.44, SD=0.38) and low-socioeconomic NLCP (M=3.35, SD=0.51); t(527.72)=4.19, p < .001. Levene’s test indicated unequal variance (F=55.87, p < .001), so degrees of freedom were adjusted from 3278 to 527.72. Cohen’s d = 0.12, indicating a small effect size. These results indicate that for the participants in this study, low SES LCP had, on average, higher HS GPAs than low-socioeconomic NLCP.

Table 4.2 displays the results of the independent t-test on first-semester GPA, ACTC and HS GPA of low-socioeconomic LCP and NLCP students. There was no significant difference (p = 0.836) for first-semester GPA of low SES LCP and low SES NLCP. Therefore, the null hypothesis is accepted.
Table 4.2

*Independent t-test Results, Means, and Standard Deviations for First-semester Grade Point Averages, ACT Composite, and high school GPA of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.*

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th>Non-Learning Community</th>
<th>sig.</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>First-semester GPA</td>
<td>358</td>
<td>2.51</td>
<td>0.80</td>
<td>2,934</td>
</tr>
<tr>
<td>ACT Composite</td>
<td>357</td>
<td>20.49</td>
<td>2.93</td>
<td>2,921</td>
</tr>
<tr>
<td>HS GPA</td>
<td>358</td>
<td>3.44</td>
<td>0.38</td>
<td>2,922</td>
</tr>
</tbody>
</table>

*Note. M = Mean. SD = Standard Deviation. Of the original population total (3,310), eighteen students (0.54%) were removed from the dataset due to missing first-semester GPA data (13-NLCP, 5-LCP). Fourteen students (0.42%) (13-NLCP, 1-LCP) were excluded from ACTC comparison due to missing ACTC scores and 12 students (0.36%) (12-NLCP) were excluded from HS GPA comparison due to missing data. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

*p<.001

While students participating in the LCP group demonstrated significantly higher average HS GPAs than NLCP students, there was no significant difference in the mean first-semester college GPAs of low SES students participating in a learning community compared to low SES students not participating in a learning community. Additionally, while the NLCP group had significantly higher ACTC scores compared to the LCP group, there was no significant difference in the mean first-semester GPAs of low SES LCP and low SES NLCP students.
First-Year GPA

Hypothesis two analyzed whether there was a significant difference in mean first-year GPA of LCP students compared to NLCP students. This hypothesis is stated in null form: There is no significant difference in average first-year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students. Additionally, ACTC scores and HS GPA were included for group comparison. Of the original population total (3,310), seventeen students (0.51%) were removed from the dataset due to missing first-year GPA data (12-NLCP, 5-LCP). Fourteen students (0.42%) (13-NLCP, 1-LCP) were excluded from ACTC comparison due to missing ACTC scores and 12 students (0.36%) (12-NLCP) were excluded from HS GPA comparison due to missing data.

An independent-samples t-test was conducted to compare first-year GPA of low SES LCP and low SES NLCP. Cohen’s d was calculated to determine effect size. There was no significant difference in first-year GPA for low SES LCP ($M=2.48$, $SD=0.74$) and low SES NLCP ($M=2.48$, $SD=0.96$); $t(515.52)=0.007$, $p=0.995$. Levene’s test indicated unequal variance ($F=50.01$, $p < .001$), so degrees of freedom were adjusted from 3291 to 515.52. Cohen’s d = 0.00, indicating no effect size. These results suggest that participating in a learning community does not have an impact on first-year GPAs for low-socioeconomic students.

There is a significant difference in ACT Composite scores for low SES LCP ($M=20.49$, $SD=2.93$) and low SES NLCP ($M=22.25$, $SD=4.28$); $t(561.51)=-10.08$, $p < .001$. Levene’s test indicated unequal variance ($F=91.09$, $p < .001$), so degrees of freedom were adjusted from 3277 to 561.51. Cohen’s d = 0.85, indicating a medium effect size. These results suggest that for the participants in this study, low SES LCP had, on average, lower ACTC scores than low SES NLCP.
There is a significant difference in HS GPA for low SES LCP ($M=3.44$, $SD=0.38$) and low SES NLCP ($M=3.35$, $SD=0.51$); $t(527.70)=4.20$, $p = .001$. Levene’s test indicated unequal variance ($F=56.03$, $p < .001$), so degrees of freedom were adjusted from 3279 to 527.70. Cohen’s $d = 0.37$, indicating a small to medium effect size. These results suggest that for the participants in this study, low SES LCP had, on average, higher high school GPA’s than low SES NLCP.

Table 4.3 displays the results of the independent t-test on first-year GPA, ACTC and HS GPA of low-socioeconomic LCP and NLCP students. There was no significant difference ($p = 0.995$) for first-year GPA of low SES LCP and low SES NLCP. Therefore, the null hypothesis is accepted.

### Table 4.3

*Independent t-test Results, Means, and Standard Deviations for First-year Grade Point Averages, ACT Composite, and high school GPA of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013*

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th>Non-Learning Community</th>
<th>sig.</th>
<th>$t$-test</th>
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</thead>
<tbody>
<tr>
<td>First-year GPA</td>
<td>358 2.48 0.74</td>
<td>2,935 2.48 0.96</td>
<td>0.995</td>
<td>0.01</td>
</tr>
<tr>
<td>ACT Composite</td>
<td>357 20.49 2.93</td>
<td>2,922 22.25 4.28</td>
<td>0.000*</td>
<td>-10.08</td>
</tr>
<tr>
<td>HS GPA</td>
<td>358 3.44 0.38</td>
<td>2,923 3.35 0.51</td>
<td>0.000*</td>
<td>4.2</td>
</tr>
</tbody>
</table>

*Note. M = Mean. SD = Standard Deviation. Of the original population total (3,310), seventeen students (0.51%) were removed from the dataset due to missing first-year GPA data (12-NLCP, 5-LCP). Fourteen students (0.42%) (13-NLCP, 1-LCP) were excluded from ACTC comparison due to missing ACTC scores and 12 students (0.36%) (12-NLCP) were excluded from HS GPA comparison due to missing data. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.*
While students participating in the LCP group demonstrated significantly higher average HS GPAs than NLCP students, there was no significant difference in the mean first-year college GPAs of low SES students participating in a learning community compared to low SES students not participating in a learning community. Additionally, while the NLCP group had significantly higher ACTC scores compared to the LCP group, there was no significant difference in the mean first-year GPAs of low SES LCP and low SES NLCP students.

**Second-Year GPA**

Hypothesis three analyzed whether there was a significant difference in mean second-year GPA of low SES LCP students compared to low SES NLCP students. This hypothesis is stated in null form: There is no significant difference in average second-year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students. Additionally, ACTC scores and HS GPA were included for group comparison. Of the original population total (3,310), 692 students (20.9%) were removed from the dataset due to missing second-year GPA data (642-NLCP, 50-LCP). Nine students (0.27%) (8-NLCP, 1-LCP) were excluded from ACTC comparison due to missing ACTC scores and 9 students (0.27%) (9-NLCP) were excluded from HS GPA comparison due to missing data.

An independent-samples t-test was conducted to compare second-year GPA of low-socioeconomic LCP and low-socioeconomic NLCP. Cohen’s d was calculated to determine effect size. There is a significant difference in second-year GPA’s for low SES LCP (M=2.41, SD=0.68) and low SES NLCP (M=2.62, SD=0.80); t(438.76)= -5.029, p < .001. Levene’s test indicated unequal variance (F=26.77, p < .001), so degrees of freedom were adjusted from 2616 to 438.76. Cohen’s d = 0.48, indicating a medium effect size. These outcomes suggest that while
participating in a learning community during the first-year results in no significant difference in GPA, once the learning community component is removed entering the second-year, a significant difference in low SES LCP and low SES NLCP second-year GPA is present, indicating lower second-year GPA for low SES LCP compared to low SES NLCP.

There is a significant difference in ACTC scores for low SES LCP ($M=20.56, SD=2.96$) and low SES NLCP ($M=22.51, SD=4.34$); $t(513.87)=-10.24, p < .001$. Levene’s test indicated unequal variance ($F=83.20, p < .001$), so degrees of freedom were adjusted from 2607 to 513.87. Cohen’s $d = 0.90$, indicating a medium to high effect size. These results suggest that for the participants in this study, low SES LCP had, on average, lower ACTC scores than low SES NLCP.

There is a significant difference in HS GPA for low SES LCP ($M=3.45, SD=0.38$) and low SES NLCP ($M=3.40, SD=0.50$); $t(473.24)=2.01, p = .045$. Levene’s test indicated unequal variance ($F=44.54, p < .001$), so degrees of freedom were adjusted from 2607 to 473.24. Cohen’s $d = 0.18$, indicating a small effect size. These results suggest that for the participants in this study, low SES LCP had, on average, higher HS GPAs than low SES NLCP.

Table 4.4 displays the results of the independent t-test on second-year GPA, ACTC and HS GPA of low-socioeconomic LCP and NLCP students. There is a significant difference (0.000) for second-year GPA of low SES LCP and low SES NLCP. Therefore, the null hypothesis is rejected.
Table 4.4

Independent t-test Results, Means, and Standard Deviations for Second-year Grade Point Averages, ACT Composite, and high school GPA of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.

<table>
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<tr>
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<th>Learning Community</th>
<th>Non-Learning Community</th>
<th>sig.</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>Second-year GPA</td>
<td>313</td>
<td>2.41</td>
<td>0.68</td>
<td>2,305</td>
</tr>
<tr>
<td>ACT Composite</td>
<td>312</td>
<td>20.56</td>
<td>2.96</td>
<td>2,297</td>
</tr>
<tr>
<td>HS GPA</td>
<td>313</td>
<td>3.45</td>
<td>0.38</td>
<td>2,296</td>
</tr>
</tbody>
</table>

Note. M = Mean. SD = Standard Deviation. Of the original population total (3,310), 692 students (20.9%) were removed from the dataset due to missing second-year GPA data (642-NLCP, 50-LCP). Nine students (0.27%) (8-NLCP, 1-LCP) were excluded from ACTC comparison due to missing ACTC scores and 9 students (0.27%) (9-NLCP) were excluded from HS GPA comparison due to missing data. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

*p<.001

The NLCP group retained to second-year had significantly higher ACTC scores compared to the LCP group. While students participating in the LCP group retained for their second-year demonstrated significantly higher average HS GPAs than NLCP students, there was a significant difference in the mean second-year college GPAs of low SES students participating in a learning community compared to low SES students not participating in a learning community. Non-Learning Community participants earned significantly higher second-year GPAs (M = 2.62) compared to LCP second-year GPAs (M = 2.41).
**Third-Year GPA**

Hypothesis four analyzed whether there was a significant difference in mean third-year GPA of low SES LCP students compared to low SES NLCP students. This hypothesis is stated in null form: There is no significant difference in average third-year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students. Additionally, ACTC scores and HS GPA were included for group comparison. Of the original population total (3,310), 1,160 students (35.0%) were removed from the dataset due to missing third-year GPA data (1,047-NLCP, 113-LCP). Fifty-Three students (1.6%) with reported third-year GPA were removed due to missing second-year GPA, indicating student departure and then return to the university (51-NLCP, 2-LCP). The focus of this study is on same-institution retained students. One NLCP student (0.03%) was removed due to an invalid third-year GPA, data indicated a third-year GPA above the 4.0 scale. Eight students (0.24%) (8-NLCP) were excluded from ACTC comparison due to missing ACTC scores and 6 students (0.18%) (6-NLCP) were excluded from HS GPA comparison due to missing data.

An independent-samples t-test was conducted to compare first-year GPA of low-socioeconomic LCP and low-socioeconomic NLCP. Cohen’s d was calculated to determine effect size. There is a significant difference in third-year GPAs for low SES LCP ($M=2.55$, $SD=0.55$) and low SES NLCP ($M=2.81$, $SD=0.67$); $t(354.48)= -6.80$, $p < .001$. Levene’s test indicated unequal variance ($F=20.27$, $p < .001$), so degrees of freedom were adjusted from 2094 to 354.48. Cohen’s $d = 0.72$, indicating a medium to large effect size. These outcomes indicate that while participating in a learning community during the first-year resulted in no significant difference in GPA, once the learning community component was removed after the first-year, a
significant difference in low SES LCP and low SES NLCP third-year GPA is present, indicating lower third-year GPA for low SES LCP compared to low SES NLCP.

There is a significant difference in ACTC scores for low SES LCP ($M=20.63$, $SD=2.96$) and low SES NLCP ($M=22.97$, $SD=4.36$); $t(408.51)= -10.97$, $p < .001$. Levene’s test indicated unequal variance ($F=70.80$, $p < .001$), so degrees of freedom were adjusted from 2086 to 408.51. Cohen’s $d = 1.09$, indicating a large effect size. These results indicate that for the participants in this study, low SES LCP had, on average, lower ACTC scores than low SES NLCP.

There is no significant difference in HS GPA low SES LCP ($M=3.47$, $SD=0.36$) and low SES NLCP ($M=3.46$, $SD=0.48$); $t(375.23)= 0.44$, $p = .659$. Levene’s test indicated unequal variance ($F=37.78$, $p < .001$), so degrees of freedom were adjusted from 2088 to 375.23. Cohen’s $d = 0.05$, indicating a small effect size. These results indicate that through attrition, there is no significant difference in HS GPA of low SES LCP compared to low SES NLCP retained through the third-year.

Table 4.5 displays the results of the independent t-test on third-year GPA, ACTC and HS GPA of low-socioeconomic LCP and NLCP students. There is a significant difference (0.00) for third-year GPA of low SES LCP and low SES NLCP. Therefore, the null hypothesis is rejected.
Table 4.5

Independent t-test Results, Means, and Standard Deviations for Third-year Grade Point Averages, ACT Composite, and high school GPA of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th>Non-Learning Community</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>sig.</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third-year GPA</td>
<td>248</td>
<td>2.55</td>
<td>1,848</td>
<td>2.81</td>
<td>0.65</td>
<td>0.000*</td>
<td>-6.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT Composite</td>
<td>248</td>
<td>20.63</td>
<td>1,840</td>
<td>22.97</td>
<td>4.36</td>
<td>0.000*</td>
<td>-10.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS GPA</td>
<td>248</td>
<td>3.47</td>
<td>1,842</td>
<td>3.46</td>
<td>0.48</td>
<td>0.659</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. M = Mean. SD = Standard Deviation. Of the original population total (3,310), 1,160 students (35.0%) were removed from the dataset due to missing third-year GPA data (1,047-NLCP, 113-LCP). Fifty-Three students (1.6%) with reported third-year GPA were removed due to missing second-year GPA, indicating student departure and then return to the university (51-NLCP, 2-LCP). One NLCP student (0.03%) was removed due to an invalid third-year GPA, data indicated a third-year GPA above the 4.0 scale. Eight students (0.24%) (8-NLCP) were excluded from ACTC comparison due to missing ACTC scores and 6 students (0.18%) (6-NLCP) were excluded from HS GPA comparison due to missing data. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

*p<.001

While the NLCP group retained to third-year continued to have significantly higher ACTC scores compared to the LCP group, the LCP group retained to the third-year had no significant difference in HS GPA compared to the NLCP group. There was a significant difference in the mean third-year college GPAs of low SES students participating in a learning
community (M = 2.55) compared to low SES students not participating in a learning community (M = 2.81).

**Fourth-Year GPA**

Hypothesis five analyzed whether there was a significant difference in mean fourth-year GPA of low SES LCP students compared to low SES NLCP students. This hypothesis is stated in null form: There is no significant difference in average fourth-year GPA of low-socioeconomic learning community participants compared to low-socioeconomic non-learning community students. Additionally, ACTC scores and HS GPA were included for group comparison.

Of the original population total (3,310), 1,325 students (40.0%) were removed from the dataset due to missing fourth-year GPA data (1,181-NLCP, 138-LCP). 121 students (3.7%) with reported fourth-year GPA were removed due to missing GPA recordings prior to the fourth-year, indicating student departure and then return to the university (113-NLCP, 7-LCP). The focus of this study is on same-institution retained students. Two NLCP students (0.6%) were removed due to invalid fourth-year GPA, which indicated a fourth-year GPA above the 4.0 scale. Six students (0.18%) (6-NLCP) were excluded from ACTC comparison due to missing ACTC scores and 4 students (0.12%) (6-NLCP) were excluded from HS GPA comparison due to missing data.

An independent-samples t-test was conducted to compare fourth-year GPA of low-socioeconomic LCP and low-socioeconomic NLCP. Cohen’s d was calculated to determine effect size. There is a significant difference in fourth-year GPAs for low SES LCP (M=2.64, SD=0.53) and low SES NLCP (M=2.91, SD=0.61); t(299.26)= -7.06, p < .001. Levene’s test indicated unequal variance (F=10.27, p = .001), so degrees of freedom were adjusted from 1860 to 299.26. Cohen’s d = 0.81, indicating a medium to high effect size. These outcomes suggest
that while participating in a learning community during the first-year resulted in no significant
difference in GPA, once the learning community component was removed after the first-year, a
significant difference in low SES LCP and low SES NLCP fourth-year GPA is present,
indicating lower fourth-year GPA for low SES LCP compared to low SES NLCP.

There is a significant difference in ACTC scores for low SES LCP ($M=20.76$, $SD=2.96$)
and low SES NLCP ($M=23.21$, $SD=4.35$); $t(355.38)= -10.78$, $p < .001$. Levene’s test indicated
unequal variance ($F=64.51$, $p < .001$), so degrees of freedom were adjusted from 1854 to 355.38.
Cohen’s $d = 1.14$, indicating a large effect size. These results suggest that for the participants in
this study, low SES LCP had, on average, lower ACTC scores than low SES NLCP.

There is no significant difference in HS GPA for low SES LCP ($M=3.48$, $SD=0.36$) and
low SES NLCP ($M=3.49$, $SD=0.47$); $t(324.17)= -1.81$, $p = .857$. Levene’s test indicated unequal
variance ($F=28.769$, $p < .001$), so degrees of freedom were adjusted from 1856 to 324.17.
Cohen’s $d = 0.02$, indicating a small effect size. These results suggest that through attrition, of
the students retained through fourth-year, there is no significant difference in HS GPA of low
SES LCP compared to low SES NLCP.

Table 4.6 displays the results of the independent t-test on fourth-year GPA, ACTC and
HS GPA of low-socioeconomic LCP and NLCP students. There is a significant difference ($p = 
0.000$) for fourth-year GPA of low SES LCP and low SES NLCP. Therefore, the null hypothesis
is rejected.
Table 4.6

*Independent t-test Results, Means, and Standard Deviations for Fourth-year Grade Point Averages, ACT Composite, and high school GPA of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.*

<table>
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<th>Non-Learning Community</th>
<th>sig.</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth-year GPA</td>
<td>218</td>
<td>1,644</td>
<td>0.000*</td>
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<tr>
<td>ACT Composite</td>
<td>218</td>
<td>1,638</td>
<td>0.000*</td>
<td>-8.08</td>
</tr>
<tr>
<td>HS GPA</td>
<td>218</td>
<td>1,640</td>
<td>0.857</td>
<td>-10.78</td>
</tr>
</tbody>
</table>

*Note. M = Mean. SD = Standard Deviation. Of the original population total (3,310), 1,325 students (40.0%) were removed from the dataset due to missing fourth-year GPA data (1,181-NLCP, 138-LCP). 121 students (3.7%) with reported fourth-year GPA were removed due to missing GPA recordings prior to the fourth-year, indicating student departure and then return to the university (113-NLCP, 7-LCP). The focus of this study is on same-institution retained students. Two NLCP students (0.6%) were removed due to an invalid fourth-year GPA, data indicated a fourth-year GPA above the 4.0 scale. Six students (0.18%) (6-NLCP) were excluded from ACTC comparison due to missing ACTC scores and 4 students (0.12%) (6-NLCP) were excluded from HS GPA comparison due to missing data. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.*

*p<.001

While the NLCP group retained to the fourth-year continued to have significantly higher ACTC scores compared to the LCP group, the LCP group retained to the fourth-year had no significant difference in HS GPA compared to the NLCP group. There was a significant difference in the mean fourth-year college GPAs of low SES students participating in a learning
community (M = 2.64) compared to low SES students not participating in a learning community (M = 2.91).

Research Question Two - Retention

Research question two sought to analyze whether participation in a learning community had an impact on same-institution retention of low-socioeconomic students. In addition to the populations of study, the University of Mississippi’s office of IREP provided retention rates for non-low SES students within the studied cohort years of fall 2010, 2011, 2012, and 2013 for comparison. Table 4.7 displays the same-institution retention rates of low SES LCP, low SES NLCP, and non-low SES students.

Table 4.7

<table>
<thead>
<tr>
<th></th>
<th>Returned Second Year</th>
<th>Returned Third Year</th>
<th>Returned Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES LCP</td>
<td>86.23%</td>
<td>68.87%</td>
<td>60.88%</td>
</tr>
<tr>
<td>Low SES NLCP</td>
<td>78.24%</td>
<td>64.49%</td>
<td>59.20%</td>
</tr>
<tr>
<td>Non Low SES</td>
<td>84.46%</td>
<td>77.00%</td>
<td>73.30%</td>
</tr>
</tbody>
</table>

Note. A total of 4 Low SES LCP students, 16 Low SES NLCP students, and 27 Non Low SES students did not return to year 4 due to graduation. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

Low SES LCP students, with a second-year retention rate of 86.23%, had the highest retention rate compared to both low SES NLCP (78.24%) and non-low SES (84.46%) students for second-year retention. This suggests participation in a learning community during the first year has an impact on second-year retention. However, low SES LCP third-year retention drops
to 68.87%, and while still higher than low SES NLCP (64.49%), non-low SES student third-year retention was highest at 77%. This held true for fourth-year retention as well with a group comparison order of non-low SES students (73.3%), low SES LCP (60.88%), and low SES NLCP (59.2%). While participation in a first-year learning community showed an impact in second-year retention for low SES students, that impact was not as apparent in third and fourth year retention. However, low SES LCP had slightly higher third-year and fourth-year retention rates compared to low SES NLCP, suggesting that first-year learning community participation may have some impact in subsequent years.

**Research Question Three – Degree Completion**

Research question three sought to analyze whether participation in a learning community had an impact on same-institution degree completion rates of low-socioeconomic students. In addition to the populations of study, the University of Mississippi’s office of IREP provided graduation rates for non-low SES students within the studied cohort years of fall 2010, 2011, 2012, and 2013 for comparison. Table 4.8 displays the same-institution graduation rates of low SES LCP, low SES NLCP, and non-low SES students.

**Table 4.8**

*Same-Institution Graduation Rates of Low-Socioeconomic Learning Community Participants, Low-Socioeconomic Non-Learning Community Participants, and Non-Low Socioeconomic Students, 2010-2013 Freshmen Cohorts.*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Graduated in 4 Years</th>
<th>Graduated in 5 Years</th>
<th>Graduated in 6 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES LCP</td>
<td>363</td>
<td>22.59%</td>
<td>42.42%</td>
<td>48.21%</td>
</tr>
<tr>
<td>Low SES NLCP</td>
<td>2,946</td>
<td>29.43%</td>
<td>45.49%</td>
<td>49.39%</td>
</tr>
<tr>
<td>Non Low SES</td>
<td>10,079</td>
<td>45.90%</td>
<td>63.71%</td>
<td>66.67%</td>
</tr>
</tbody>
</table>
Note. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

Studies have routinely documented higher graduation rates for middle and upper SES students compared to low SES students; graduation outcomes for this study remain consistent with the literature. Interestingly, while participation in a learning community seemed to have some positive impact on low SES retention, low SES LCP fourth-year (22.59%), fifth-year (42.42%), and sixth-year (48.21%) graduation rates were lower compared to low SES NLCP fourth-year (29.45%), fifth-year (45.49%), and sixth-year (49.39%) graduation rates. This suggests that first-year learning community participation has little to no impact on low SES degree completion.

Summary

The impact of learning community participation on low-socioeconomic student academic success was measured by grade point average, same-institution retention, and same-institution degree completion. Independent t-test results on first-semester, first-year, second-year, third-year, and fourth-year GPA indicate no significant difference in first-semester and first-year GPA of low SES LCP and low SES NLCP. However, there is a significant difference in second-year, third-year, and fourth-year GPA in which low SES NLCP earned higher GPAs than the low SES LCP. This finding indicates that while not significant, participation in a learning community may have had an impact on low SES LCP GPA for first-semester and first-year GPA. However, once the learning community support was removed after the first-year, low SES LCP GPA declined. Interestingly, the low SES LCP group HS GPA means were significantly higher than the low SES NLCP.
Literature suggests that HS GPA is the most significant indicator of college success (Noble & Steward, 2002; Ransdell, 2001; Zheng, et al.), the findings of this study do not correlate with this literature. However, the low SES NLCP group ACTC scores were significantly higher than low SES LCP. Seidman (2012) found that while HS GPA and ACTC scores were consistent predictors of Caucasian student success, they were inconsistent for minority students.

The low SES LCP group was retained to second-year at a significantly higher rate (86.23%) than both the low SES NLCP group (78.24%) and non-low SES students (84.46%). This finding suggests participation in the learning community did have an impact on second-year retention for low-socioeconomic students. While the low SES LCP continued to be retained at a higher rate than the low SES NLCP group, they fell below the non-low SES group for third and fourth year retention. This finding aligns with low-socioeconomic success literature. Although findings indicate participation in the learning community impacted low-socioeconomic student retention, the low SES LCP group graduated at lower rates for four-year, five-year, and six-year checkpoints compared to both the low SES NLCP and non-low SES groups. This suggests that participation in a learning community did not have an impact on low-socioeconomic degree completion.
CHAPTER V
Interpretations and Implications

Introduction and Purpose

This quantitative study evaluates the impact, if any, learning community participation has on measurable student success for low-socioeconomic students. With the introduction of the Federal Pell Grant, access to higher education became a reality for many low SES students. While access is the first positive step for educational equality and opportunity, on average, low SES students continue to trail behind middle and upper SES students in terms of GPA, retention and degree completion (Alon, 2011; Bailey & Dynarksi, 2011; Burros, et al., 2013; Chen & DesJardins, 2008; Nichols, 2015). Often this gap is attributed to low SES students, on average, possessing variables deemed high-risk to academic success. These high-risk variables include coming from an underperforming high school, earning lower standardized test scores, earning lower high school GPAs, more often being minority students, more often being first-generation students, and often having lower self-perceptions of competency and belonging (Engstrom & Tinto, 2008; Inkelas, et al., 2007; Reason, 2003; Wei, et al., 2002). While academic success was once considered the responsibility of the student, the role of the institution has become understood as an important variable in a student’s path to academic success (Bean, 1979; Strange & Banning, 2001, 2015; Tinto, 2012a).

Learning community programs are one option many universities implement to aid student acclimation to college academic expectations and social campus connections. Learning community programs vary in structure, are often dependent on financial resources, and focus on
specific institution student need. Many studies on learning community impact concentrate on the program’s overall student population; this study contributes to existing research on learning communities by evaluating the impact of learning community participation on a specific student population, low-socioeconomic students.

Prominent theories focused on student departure and retention agree that the more positive a student’s academic and social experience is on campus, the more likely they are to stay and graduate from the university (Bean, 1979; Strange & Banning, 2001; Tinto, 2012a). As discussed in Strange and Banning (2001), in connection with organizational theory, universities design and redesign programming to meet the needs of their organization. While no two learning communities are alike, they are designed and continuously redesigned to help acclimate new students into the academic expectations of college and help integrate students into positive social connections on campus. Learning communities are typically a first-year program, offering variations of linked curriculum, living learning residential options, mentoring, advising, and faculty support (Engstrom & Tinto, 2008, Fink & Inkelas, 2015; Tinto, 1999, 2004). Ideally, through the shared experiences and structured support, students are better prepared for the academic rigors of college, become effectively integrated in the university culture, develop positive place-identity with the university, and ultimately have successful college careers.

This study evaluated the impact of FASTrack, a first-year learning community at the University of Mississippi, on low-socioeconomic student academic success. While the University of Mississippi has multiple learning community programs, FASTrack was selected because its program contains multiple elements of learning community practices, is open to all first-year students, does not require a GPA, and provided an adequate low-socioeconomic student population. The FASTrack learning community program elements include: full year
programming, linked courses, advising services, mentoring services, and a residential option (FASTrack, 2019).

Permission was received from the University of Mississippi’s Institutional Review Board (IRB), office of Financial Aid, the office of the Registrar, and the office of Institutional Research, Effectiveness, and Planning (IREP) to identify low-socioeconomic students and to access high school GPA, ACT Composite scores, college GPA, retention data, and graduation data for low-SES students in fall 2010, 2011, 2012, and 2013 cohorts. The office of Financial Aid identified low-socioeconomic students through FAFSA applications and verified Pell Grant eligibility. The student data was coded and de-identified prior to granting access to the researcher. Lastly, IREP provided retention and graduation data of non-low socioeconomic students in the studied timeframe for comparison purposes.

This chapter includes discussion of major findings as related to literature on learning communities and low-socioeconomic student success in higher education. Also included is a discussion on the connection of the study to models of institutional departure, student attrition, and campus ecology. Finally, chapter five concludes with a discussion of study limitations, areas for future research, and a brief summary.

Student success can be defined and measured in multiple ways. For this study, student success was defined by three measurable outcomes: GPA, same-institution retention, and same-institution degree completion. This chapter contains discussion and future research possibilities to help answer the research questions:

1. Is there a significant difference in the average GPA of low SES student learning community participants compared to low SES non-participants?
2. Do low SES students participating in a learning community have higher same-institution retention rates compared to low SES non-participants?

3. Do low SES students participating in a learning community have higher same-institution degree completion rates compared to low SES non-participants?

Summary of the Findings

This study examined the impact learning community participation, if any, had on low-socioeconomic student success in a 4-year public university. Quantitative findings show mixed results in regards to GPA and retention; however, findings in regards to graduation show no impact on low-socioeconomic student success based on learning community participation. While the findings of this study did not support existing learning community research, the findings did support existing research on low-socioeconomic student academic outcomes.

Grade Point Average

GPA and ACTC as a Predictor of College Success

Incoming high school GPA and standardized college admission test scores are generally accepted as the leading predictors of college success (Ransdell, 2001). Individually, studies have shown that HS GPA was a more accurate predictor of first-year college GPA earnings of 2.5 or higher than ACTC scores. Noble & Steward (2002), found that taking both HS GPA and ACTC into consideration together provided more accurate college success predictions than considering them individually. Higher HS GPA and high ACTC scores typically correlate to higher probability of college success, while lower HS GPA and lower ACTC scores correlate to lower probability of college success. However, Seidman (2012), over the course of a 13-year study, found that while HS GPA and ACTC scores were consistent indicators of Caucasian student
success, they were found to be inconsistent in regards to minority student success. In general, the majority of low SES students are minority students.

Independent t-tests of low SES LCP and low SES NLCP students in fall cohorts 2010, 2011, 2012, and 2013 found a significant difference in HS GPA for first-semester, first-year, and second-year, indicating higher incoming HS GPA for the LCP group. As the population changed due to student attrition, there was no significant difference in HS GPA for third-year and fourth-year, signifying that of the remaining students, their incoming college-success predictor variables were similar. Table 5.1 displays the independent t-test results of incoming HS GPA for low SES LCP and low SES NLCP.

Table 5.1

*Independent t-test Results, Means, and Standard Deviations for Incoming High School Grade Point Averages of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.*

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th>Non-Learning Community</th>
<th>sig.</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>First-Semester HS GPA</td>
<td>358</td>
<td>3.44</td>
<td>0.38</td>
<td>2,922</td>
</tr>
<tr>
<td>First-Year HS GPA</td>
<td>358</td>
<td>3.44</td>
<td>0.38</td>
<td>2,923</td>
</tr>
<tr>
<td>Second-Year HS GPA</td>
<td>313</td>
<td>3.45</td>
<td>0.38</td>
<td>2,296</td>
</tr>
<tr>
<td>Third-Year HS GPA</td>
<td>248</td>
<td>3.47</td>
<td>0.36</td>
<td>1,842</td>
</tr>
<tr>
<td>Fourth-Year HS GPA</td>
<td>218</td>
<td>3.48</td>
<td>0.36</td>
<td>1,640</td>
</tr>
</tbody>
</table>

*Note. M = Mean. SD = Standard Deviation. *p<.001

The low SES LCP group had a significantly higher first-semester and first-year mean HS GPA compared to the low SES NLCP group. Following previous study findings, the low SES LCP group would be predicted to be more academically successful than the low SES NLCP group, at least within the first year. However, there was a significant difference in ACTC scores
for first-semester, first-year, second-year, third-year, and fourth-year, indicating higher ACTC scores for the low SES NLCP group. Table 5.2 displays the independent t-test results of ACTC scores for low SES LCP and low SES NLCP.

**Table 5.2**

*Independent t-test Results, Means, and Standard Deviations for Incoming ACT Composite scores of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.*

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th>Non-Learning Community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>First-Semester ACTC</td>
<td>357</td>
<td>20.49</td>
</tr>
<tr>
<td>First-Year ACTC</td>
<td>357</td>
<td>20.49</td>
</tr>
<tr>
<td>Second-Year ACTC</td>
<td>312</td>
<td>20.56</td>
</tr>
<tr>
<td>Third-Year ACTC</td>
<td>248</td>
<td>20.63</td>
</tr>
<tr>
<td>Fourth-Year ACTC</td>
<td>218</td>
<td>20.76</td>
</tr>
</tbody>
</table>

*Note. M = Mean. SD = Standard Deviation. *p<.001

The national ACT average composite score for the class of 2013 was 20.9, this represents a drop of 0.48% compared to the average ACTC score (21) for the class of 2010 (Aldric, 2019). Low SES LCP students in fall cohorts 2010-2013 scored below the national average, while the NLCP group scored nearly 11% higher than the 2013 average. Using these figures, the low SES NLCP group would be predicted to be more academically successful than the low SES LCP group.

**College Grade Point Average**

Academic acclimation for new college students is a focal point for learning community programs, often this is reached by creating linked curriculum and providing faculty advising and support. GPAs are a common measurement of academic success and predictors of persistence to
degree completion; therefore, GPAs are also often a measurement of learning community program success (Reason, 2003). In response to Research Question One, for first-semester and first-year GPA, there was no significant difference between low SES LCP and low SES NLCP GPA. However, there was a significant difference in second-year, third-year, and fourth-year GPA, wherein low SES NLCP had higher GPAs than the low SES LCP group. There is a clear disconnect between HS GPA for both the low SES LCP (fourth-year HS GPA M = 3.48) and low SES NLCP (fourth-year HS GPA M = 3.49) compared to low SES LCP college first-year GPA (M = 2.48) and low SES NLCP college first-year GPA (M = 2.48). This disconnect seems to support literature regarding the common practice of grade inflation in secondary education (Gershenson, 2018; Hurwitz, et al., 2018; Woodruff, et al., 2004). However, this same literature notes that grade inflation, though present in all socioeconomic levels, is more prominent in more affluent communities. Table 5.3 displays the independent t-test results of college GPA for low SES LCP and low SES NLCP.

Table 5.3

Independent t-test Results, Means, and Standard Deviations for First-Semester, First-Year, Second-Year, Third-Year, and Fourth-Year Grade Point Averages of Low-Socioeconomic Learning Community Participants and Low-Socioeconomic Non-Learning Community Participants, 2010-2013 Freshmen Cohorts.

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th></th>
<th>Non-Learning Community</th>
<th></th>
<th>sig.</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>First Semester GPA</td>
<td>358</td>
<td>2.51</td>
<td>0.80</td>
<td>2,934</td>
<td>2.5</td>
<td>1.03</td>
</tr>
<tr>
<td>First Year GPA</td>
<td>358</td>
<td>2.48</td>
<td>0.74</td>
<td>2,935</td>
<td>2.48</td>
<td>0.96</td>
</tr>
<tr>
<td>Second Year GPA</td>
<td>313</td>
<td>2.41</td>
<td>0.68</td>
<td>2,305</td>
<td>2.62</td>
<td>0.80</td>
</tr>
<tr>
<td>Third Year GPA</td>
<td>248</td>
<td>2.55</td>
<td>0.55</td>
<td>1,848</td>
<td>2.81</td>
<td>0.65</td>
</tr>
<tr>
<td>Fourth Year GPA</td>
<td>218</td>
<td>2.64</td>
<td>0.53</td>
<td>1,644</td>
<td>2.91</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Note. M = Mean. SD = Standard Deviation. *p<.001
While there was no significant difference in first-semester and first-year GPA between the low SES LCP and NLCP groups, it is important to note that once participation in the learning community ceased after year-one, there was a significant difference in GPA for second, third, and fourth year. Low SES LCP students earned lower GPAs than the NLCP group after participation in the learning community ended, suggesting that first-year participation may have a minor impact in first-semester and first-year GPA. Literature suggests that participation in a learning community has a positive impact on first-semester and first-year GPA, even noting that the impact of learning community participation is present after the first-year (Hotchkiss, et al., 2006; Tinto, 2012a). Additionally, Zhao and Kuh (2004) found that seniors who participated in a learning community, at any time in their college career, had higher grades than those who had not. The GPA results of this study are inconsistent with those of other studies. However, other learning community studies focused on the whole learning community population, this study narrows the population focus to low-socioeconomic participants.

**Retention and Degree Completion**

The goal of any learning community is to aid in student transition to university academic expectations and positive social engagements. Learning community literature has found that students who participate in a freshman year learning community have a smoother integration into campus life, are more involved in campus activities, more engaged with peers and faculty, and in terms of retention and degree completion, are positively impacted (Bean, 1979; Engstrom & Tinto, 2008; Pascarella, et al., 1991; Shapiro & Levine, 1999; Stater, 2009; Strange & Banning, 2015; Tinto, 2003; Tinto & Goodsell, 1993; Zhao & Kuh, 2004). Studies also found that low-socioeconomic students consistently have lower retention rates and degree completion rates in comparison to middle and upper-socioeconomic student groups (Alon, 2011; Bailey & Dynarski,
2011; Burros, et al., 2013; Cabrera et al., 2001; Chen & DesJardins, 2008). This study’s findings only support the literature in terms of second-year retention. Table 5.4 displays the same-institution retention rates of low SES LCP, low SES NLCP, and non-low SES students.

**Table 5.4**

*Same-Institution Retention Rates of Low-Socioeconomic Learning Community Participants, Low-Socioeconomic Non-Learning Community Participants, and Non-Low Socioeconomic Students, 2010-2013 Freshmen Cohorts.*

<table>
<thead>
<tr>
<th></th>
<th>Returned Second Year</th>
<th>Returned Third Year</th>
<th>Returned Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES LCP</td>
<td>363</td>
<td>86.23%</td>
<td>68.87%</td>
</tr>
<tr>
<td>Low SES NLCP</td>
<td>2,946</td>
<td>78.24%</td>
<td>64.49%</td>
</tr>
<tr>
<td>Non Low SES</td>
<td>10,086</td>
<td>84.46%</td>
<td>77.00%</td>
</tr>
</tbody>
</table>

*Note.* A total of 4 Low SES LCP students, 16 Low SES NLCP students, and 27 Non Low SES students did not return to year 4 due to graduation. All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

The low SES LCP group had a higher second-year retention rate (86.23%) compared to the low SES NLCP group (78.24%) and even surpassed the non-low SES group (84.46%). These results suggest participation in a learning community has an impact on second-year retention for low-socioeconomic students. However, this should be considered with caution. While the second-year retention was impressive, there seems to be a disconnect between the high second-year retention rate and low mean first-year GPA (2.48) of the LCP group. With universities offering probationary periods, it is possible to be retained, but not academically successful as defined by low GPA and lack of credit hours completed. Conversely, it is possible not to be retained, but have been academically successful. Many non-academic variables such as family obligations, financial constraints, and campus culture can be determining factors in student
retention. Investigating the social integration curriculum of the learning community and retention decisions through qualitative student surveys would be an area for future research.

The retention rate of the low SES LCP group dropped 20.13% by third-year retention. This finding is inconsistent with the learning community literature; however, it does support low-socioeconomic student success literature. Additionally, low SES NLCP retention dropped 17.57% and non-low SES retention dropped 8.83% by third-year. These findings suggest that while all groups declined drastically between second and third year, the low SES LCP group, without the support of a learning community program, seemed to have higher increased drop-out rates. Again, in addition to measurable academic factors such as GPA, many unknown variables affect a student’s decision to leave a university. Including qualitative methods, such as student surveys and interviews, would be beneficial in future research of learning community impact on low-socioeconomic student success.

Degree completion findings of this study support the literature pertaining to the degree completion gap of low-socioeconomic students and non-low SES students. Some learning community studies found that learning community participation has a positive impact on degree completion (Cambridge-Williams, et al., 2013; Garcia, 2008; Olds & Miller, 2013), while other studies have shown that learning community participation has no impact on graduation (Johnson & Stage, 2018; Nosaka & Novak, 2014). The findings of this study suggest that learning community participation had no impact on graduation for low SES students. Participation in a learning community also did not have an impact on the gap between low SES and non-low SES graduation rates. Table 5.5 displays the same-institution graduation rates of low SES LCP, low SES NLCP, and non-low SES students.
Table 5.5
Same-Institution Degree Completion Rates of Low-Socioeconomic Learning Community Participants, Low-Socioeconomic Non-Learning Community Participants, and Non-Low Socioeconomic Students, 2010-2013 Freshmen Cohorts.

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Graduated in 4 Years</th>
<th>Graduated in 5 Years</th>
<th>Graduated in 6 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low SES LCP</td>
<td>363</td>
<td>22.59%</td>
<td>42.42%</td>
<td>48.21%</td>
</tr>
<tr>
<td>Low SES NLCP</td>
<td>2,946</td>
<td>29.43%</td>
<td>45.49%</td>
<td>49.39%</td>
</tr>
<tr>
<td>Non Low SES</td>
<td>10,079</td>
<td>45.90%</td>
<td>63.71%</td>
<td>66.67%</td>
</tr>
</tbody>
</table>

*Note.* All student success measures exclude students who are deceased or have a military exemption as of and after the time of exemption.

The low SES LCP group had the lowest graduation rates for all three checkpoints: 4-years (22.59%), 5-years (42.42%) and six-years (48.21%) compared to both low SES NLCP and non-low SES student groups. Low-socioeconomic student graduation rate is consistently lower than middle and upper socioeconomic students, therefore this finding supports the literature.

While findings in studies on learning community impact on graduation is mixed, findings of this study support literature findings of no impact on learning community participant graduation rates. The majority of learning community programs are structured for first-year intervention, which is why most studies only focus on first to second year outcomes; however, with degree completion being a priority outcome and success measurement for institutions, understanding any connection between university programs and graduation is important for student affair administrators tasked with increasing retention and graduation rates.

**Limitations of the Study and Suggestions for Future Research**

As with all learning community studies, the first limitation of the study is generalizability. Learning communities are created to answer a need of the specific organization and their students; therefore, every learning community program is unique. Thus, generalizability
of the findings is limited. Replicating this study with other learning community programs would be beneficial for specific program review and contribution to learning community literature.

Low-socioeconomic students from fall freshmen 2010, 2011, 2012, and 2013 cohorts were studied. One must be careful not to analyze an entire learning community program based on the impact outcomes of one population within the program. Replicating the study on the learning community participants as a whole or by other population variables would provide a more accurate review of the program. Students were identified as low-socioeconomic based on submitted FAFSA applications and verified Pell Grant eligibility through the University’s office of IREP and Financial Aid. FAFSA applications are voluntary, thus it is possible that low-socioeconomic students were grouped as non-low SES students. Additionally, this study focused on one learning community; therefore, some students identified as low SES non-learning community participant may have participated in another learning community or academic support program on campus. Participation in a program or learning community other than FASTrack could have had an impact on the academic success variables measured. Furthermore, for this particular learning community, programming and administrative leadership has changed since these cohorts completed the program. Replicating the study with low SES students who participated in the current program curriculum would be a beneficial comparison to program analysis on low-socioeconomic student success impact.

This study focused on quantitative academic success data in terms of GPA, retention, and degree completion. While these are important variables and the results are important for the analysis of program impact on low SES students, they only illustrate a portion of the picture. Student engagement, social integration, place-identity, and involvement in campus organizations are also important missions of learning communities. These variables can also play an essential
role in a student’s decision to remain at an institution. Including qualitative components, such as student surveys and interviews, would provide a more well-rounded analysis of learning community impact on low-socioeconomic student academic success.

**Recommendations**

The learning community chosen for this study, FASTrack, at the University of Mississippi, was selected because its programming offered many features many program components in learning community design: a full year program, linked courses, advising services, mentoring services, and an option for residential living. Additionally, the learning community is available to all students through an application process. Freshmen cohorts for fall 2010, 2011, 2012, and 2013 were selected to warrant an acceptable quantity of low SES learning community participants and to ensure access to six-year graduation data. Based on the findings of this study, FASTrack does not have an overall impact on measurable student success for low-socioeconomic students. The most positive impact finding for FASTrack was second-year retention for low SES LCP, which surpassed second-year retention for both the low SES NLCP group and non-low SES students for fall 2010-2013 cohorts. Learning communities are formed with the goal of enhancing student college experience by positively impacting their academic success through both academic acclimation and preparation, and by creating place-identity through positive social engagement with peers, campus organizations, faculty, and administrators. Learning community programs should routinely be evaluated based on measurable academic goals such as GPA, retention, and degree completion. Based on literature reviewed and the findings of this particular study, FASTrack could enhance programming for a more positive impact on academic success for low SES students. The researcher recommends the following actions: (a) create linked curriculum through cross-genre faculty collaboration by
creating a faculty learning community (FLC), (b) mandate structured study support services for the first year, and (c) the University of Mississippi could increase low SES student success by creating a structured multiple-year undergraduate learning community program.

**Linked Curriculum and Faculty Learning Community**

FASTrack literature states it “provides a strong foundation of academic success by easing student transitions into the University of Mississippi” (FASTrack, 2020). Strategically creating diverse cohorts (20 students max) is beneficial for many social reasons. Often college is the first opportunity students have to interact with peers from different cultures, backgrounds, and socioeconomic status. Research indicates that interacting in diverse settings has a positive impact on critical thinking skills, empathy, cognitive skills, and increased general world knowledge (Geelhoed & Talbot, 2003; Hu & Kuh, 2003; Lou & Jamieson-Drake, 2013; Pascarella, et al., 2001). However, this also brings diverse academic preparedness to the cohort. Strategically selecting cohort groups that will provide the positive aspects of diverse interaction, but also provide a positive support structure is important for both the social and academic integration into higher education. Understanding the varied academic needs in a diverse cohort structure should lead to curriculum development that allows for both support and growth opportunities.

Students often struggle transitioning to the academic rigor and expectations of college. High school experience can range from academically challenging, to affluent resources and high engagement, to limited resources and little engagement. As college freshmen, students are expected to have mastered study skills, time management skills, critical thinking skills, writing skills, collaboration skills, and computer skills. Unfortunately, for some students, college is their first experience needing any of these required skills. Creating a curriculum that challenges student academic growth in knowledge and skill, and prepares them for the college environment,
while providing guidance and support, is imperative for the future success of underprepared and low SES students. In order to successfully select, plan, and link curriculum for the academic benefit of students in the learning community, a faculty learning community (FLC) should be appointed.

Often learning communities state a linked course system, but stop short of providing curriculum-linked courses. Typically, the only aspect linking learning community courses together are the shared students (Mintz, 2019; Tinto, 2003). Creating curriculum-linked courses provides a more student-centered, strategic learning community program. Once the specific cohort courses are selected, the director of the student learning community should then create a faculty learning community with the instructors teaching the cohort courses. Cohort courses should be cross-disciplined, linked by theme and learning objectives, provide a wide range of assignments requiring multiple study techniques, include strategic in-class and online instruction, include high faculty-to-student and student-to-student engagement, and have linked assessment plans that move the students along Bloom’s Taxonomy’s pathways (Engstrom & Tinto, 2008; Lenning & Ebbers, 1999; Mintz, 2019; Tinto, 1999, 2003).

Creating a curriculum that introduces students to as many of the academic expectations they will find in the classroom will allow students to enhance the study, thinking, and writing abilities they already have, and learn new skill sets as well. Providing a challenging curriculum in a small, supportive and collaborative environment, like a learning community cohort, allows for students to try, fail and try again, without fear of being socially or academically ostracized. Learning community literature has found that participants are more engaged with faculty and peers, participate more in course discussion and faculty office hours, and are more active creating study groups outside the classroom than first-year students not participating in a
learning community (Engstrom & Tinto, 2008; Inkelas, et al., 2007; Rocconi, 2011; Strange & Banning, 2001; Tinto, 2003, 2004; Tinto & Reimer, 1998; Zhao & Kuh, 2004). Creating curriculum linked courses takes high levels of communication and collaboration with the faculty involved.

Many instructors begin their career in the classrooms with no formal instruction of curriculum development, student learning style strategies, or learning-centered assessment. Additionally, the current system of higher education instruction often leaves instructors siloed within their classroom or department, often searching out instruction and learning knowledge via self-directed discussion with peers, academic articles, or self-selected conferences (Baker, 1999). Faculty learning communities (FLC) are structured working groups of instructors collaborating on teaching techniques, current teaching issues, specific topics such as online instruction or student engagement, or working together to create unified and integrated programming (Banasik & Dean, 2016). Research has shown that participation in a FLC has a positive impact on curriculum and assessment design, course design, self-efficacy, teaching methods, campus collaboration, and student engagement and learning outcomes (Banasik & Dean, 2016; Cox, 2004). Additionally, MacGregor, et al., (2000), found that faculty involved in creating student learning community curriculum develop a sense of community and “make significant gains in personal, social, and professional development” (p. 3).

Developing linked curriculum, themes, and learning objectives takes a collaborative effort from all instructors teaching courses selected for the cohorts. Creating a faculty learning community within the administrative directive of the student learning community allows time within schedules for faculty to collaborate, discuss, and create a strategic plan to provide the curriculum and support students need to accomplish the objectives of the learning community.
Additionally, participation in the FLC benefits the instructors as well, especially in terms of shared ideas, new knowledge, and collaborative networking.

**Structured Study Support**

Research has shown that for many low-socioeconomic students, the academic transition to college is difficult. Many come from underprepared high schools and do not possess the study, time management, and discipline skills necessary to be academically successful (Burros, et al., 2013; Wei, et al., 2002). It can be argued that regardless of background and high school performance, smoothly transitioning to the academic expectations of college can be challenging for all first-year students. Often first-year students, especially underprepared students, are not accustomed to the time commitment or proficient in the study techniques needed to be academically successful. This lack of academic experience, paired with new social independence, often creates a challenging first-year environment. Creating and mandating structured study environments, with tutorial and general study support would provide an opportunity to practice study skills, create study groups, and have scheduled time dedicated to academic work. Research has shown that students who participate in tutoring or supplemental instruction show greater cognitive gains and have positively impacted academic performance than those who do not (Cohen, et al., 1981; Edlin, et al., 2019; Lidren, et al., 1991; Oja, 2012).

One mission of learning community programs is to teach students the skills needed to be successful in college. Including study skill and time management instruction in the learning community curriculum will teach students the most productive ways to study and the most productive use of their time. Additionally, creating a space of structured study with additional support in the forms of peer tutors and academic mentors will allow students to practice new study and time management skills, and participate in study sessions in a guided and supportive
environment. Adding these structures to the learning community curriculum may help with GPA for the first year within the program, and potentially teach students the skills they need to be successful in college beyond participating in a learning community. Thus, having a positive impact on GPA throughout their college career, which in turn, impacts retention and degree completion.

**Multiple-Year Learning Community Program**

University students are a diverse group, some enter ready for the academic challenges ahead; however, many, especially those from underperforming high schools, those from low-SES backgrounds, and first generation students, are not. Creating a multiple-year learning community program with specific goals, structures and student population needs in mind would create a proactive and progressive structure for student support and growth. Research of multiple-year learning community programs brings up very little. Zhao and Kuh (2004) studied freshmen and senior students who completed the National Survey of Student Engagement (NSSE) and found that for seniors, if they had participated in a learning community at any point within their career, showed higher levels of student engagement and academic success. However, the survey does not provide an opportunity to note if the learning community was a first-year program or other.

Summer bridge programs are shorter-duration versions of learning communities. These programs begin and end the summer prior to fall freshmen start. The mission of summer bridge programs mirrors that of first-year learning communities, to help students transition from high school and acclimate to the college environment (Allen & Bir, 2012; Cabrera et al., 2013). Like first-year learning communities, literature of summer bridge academic success impact varies and is not generalizable to other programs. The University of Mississippi hosts a summer bridge
program, JumpStart, which seeks to “provide participants the tools needed to make the next four years a success” (JumpStart, 2019). Another learning community at the University of Mississippi, Luckyday, offers a Sophomore Year Experience Program with partnerships with the Career Center and Campus Landscape Services to build “upon the foundation set by the Luckyday freshmen year experience” (The Luckyday Program, 2019). Researching the impact of a second year learning community program would be valuable for reference and planning.

As students navigate from first-year to second, the role of major selection becomes a priority. This provides an opportunity to create new or continue first-year learning community cohorts through partnerships with major advisors and career services. As students move into their selected majors, this provides an opportunity to provide major specific learning community cohorts with linked curriculum, major advisors, peer mentors, and supplemental instruction. This has been an effective practice and structure for STEM majors (Russell, 2017; Solanki, et al., 2019). Finally, as students enter their senior year, the focus of completion, internships, job applications, workforce soft skills, and graduate school applications offer opportunities to partner with career services, major advisors, and local and national businesses. Creating structured support throughout a student’s path to graduation is a proactive measure to aid in student success within the institution and prepare them for success as they enter the job-force.

Conclusion

Learning communities can offer positive experiences for students and help create academic and social curriculums that impact a student’s academic success. This is especially important for low-socioeconomic students who often enter college underprepared and as literature has shown, often have lower GPAs, lower retention rates, and lower graduation rates than their middle and upper socioeconomic peers. In terms of this study, low-socioeconomic
students participating in FASTrack at the University of Mississippi in fall cohort years 2010–2013 did not experience an overall academic success impact through their learning community participation. Participation in the first-year learning community had no significant impact in low SES LCP first-semester and first-year GPA. However, there was a significant difference in second-year, third-year, and fourth-year GPA in which low SES NLCP GPA was higher than low SES LCP. This may indicate that learning community participation may actually impact low-socioeconomic student GPA for the first-year, but once learning community support was removed, these students no longer benefited. Additionally, second-year retention was significantly higher for low SES LCP compared to both low SES NLCPs and non-low SES students overall. While this indicates participation in a first-year learning community impacts second-year retention for low-socioeconomic students, it is possible to be retained at a university under a probationary status and not be academically successful in terms of GPA.

Learning communities differ because they are created in universities based on the institution’s specific student needs, budgetary restrictions, and faculty restrictions. Creating productive learning communities goes beyond simply placing student cohorts in the same schedule. Course curriculum in terms of theme, assignments, and assessments must be strategically linked by participating faculty. This level of curriculum design, one that crosses schools and departments, is a commitment of time and resources; however, creating a faculty learning community within the administrative design of the student learning community could help with organization and time management.

Low-socioeconomic students continue to succeed at vastly lower rates than their middle and upper-socioeconomic peers. Universities, as theorized by Bean (1979), Strange and Banning (2001, 2015) and Tinto (1987, 2012a), have a responsibility to design an environment which
fosters academic success. Learning communities can provide programming that can support, acclimate, and impact low-socioeconomic students’ academic and social integration into university expectations and culture. To impact students in a learning community, especially low-socioeconomic and underprepared students, courses must be strategically linked by curriculum, participating faculty must collaborate on appropriate assignments and assessments that will teach college classroom skills, and mandatory study hall and tutorial support must be designed within the program. Additional qualitative research, such as student surveys and interviews, would also add to the body of learning community literature in terms of understanding student perspective on both the academic and social aspects and impacts of the learning community.
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EXPERIENCE:

DIRECTOR OF ACADEMIC OUTREACH

University of Mississippi / Oxford, MS. / January 2015 – Present

- Directs and coordinates the development of online and hybrid courses and programs with Deans, Chairs, and Graduate Program Coordinators.
- Manages an Instructional Design Team developing online teaching endorsement programs and continuing education workshops.
- Supervises the development of a systematic online course evaluation and review process.
- Developed the University of Mississippi Online Program Management System, which includes: market research, program development and course design, marketing strategies, course and program review.
- Responsible for managing summer, intersession, and online courses for enrollment and profitability.
- Responsible for fiscal operations, including department budget, faculty salaries, select scholarships, faculty grants, expenses and profitability, and revenue distribution to the Office of the Provost, Schools, and The College.
- Supervise and coordinate activities of staff: Assistant Director (1), Instructional Design Team (4), Manager (1), and Operations Supervisor (1).
- Assists the Associate Provost with research and other department management projects.
- Insures academic guidelines and policies for Summer and Online are congruent with SACSCOC and NC-SARA regulations.
- Responsible for end-of-term Provost reports.
- Responsible for staying informed of new educational technology and best practices.
- Assists Marketing in the development of advertising, marketing strategies, and social media presence.

ASSOCIATE DIRECTOR OF STUDENT-ATHLETE DEVELOPMENT / DIRECTOR OF ACADEMIC ENRICHMENT

University of Mississippi / Oxford, MS. / November 2011 – December 2014

- Responsible for the continued development and growth of the Academic Enrichment Program.
- Responsible for designing and overseeing the Summer Bridge Program: REBS (Rising to Excellence and Building Success).
- Co-created and managed the reading development program: Rebel Reading.
- Supervised and evaluated an assistant director/tutorial coordinator (1), learning specialists (4), full-time interns (2), and part-time tutorial support staff members (145).
- Oversaw budgetary issues with Rebel Reading and Academic Enrichment Tutorial Support.
- Founding member of the Wellness Concern Committee.
- Responsible for the Tutorial Staff Handbook and training programs.
- Assisted the Senior Associate Athletic Director for Academics in creating, implementing, and evaluating department policies, procedures, and programming.
- Created a tiered support program for student-athletes.
- Developed and implemented an Academic Enrichment student-athlete case-load rubric and “graduation” rubric.
- Worked with learning deficient and high-risk student-athletes.
- Acting liaison with Psychological Services Center, Office of Student Disability Services and Human Resources.
• Administered and scored in-house learning deficiency screenings for all incoming student-athletes.
• Administered in-house learning style inventory and background questionnaires for all incoming student-athletes.
• Developed Individual Education Plans for student-athletes within the Academic Enrichment Program.
• Conducted weekly meetings with Academic Enrichment staff.
• Conducted monthly meetings with Academic Strategists.
• Recruited, hired, trained, monitored and evaluated Tutorial Staff: Academic Strategists (15), Mentors (25), and Subject Tutors (105).
• Conducted and organized monthly Tutorial Staff trainings.
• Responsible for end-of-semester and end-of-year Academic Enrichment Program Statistics Reports.
• Responsible for all confidential student-athlete assessment documentation.
• Met with prospective student-athletes on campus for official and unofficial visits.

ADDITIONAL EXPERIENCE

LEARNING SPECIALIST / ACADEMIC ADVISOR
University of Tulsa / Tulsa, OK. / July 2008 – November 2011

LEARNING SPECIALIST / MENTOR COORDINATOR
University of Georgia / Athens, GA. / July 2007 – July 2008

ASSISTANT ATHLETIC DIRECTOR/ENGLISH TEACHER/SOCcer COACH/ADMISSIONS ASSISTANT

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Leon High School / Tallahassee, FL. / August 2004 – August 2005

ATHLETIC ACADEMIC ADVISOR / TUTORIAL COORDINATOR / EDUCATIONAL ASSISTANT
Florida State University / Tallahassee, FL. / August 2003 – August 2004
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- Academic Continuity Committee (March 2020-Present)
- Keep Teaching Committee (March 2020-Present)
- Center for Excellence in Teaching Board (Fall 2016-Fall 2019)

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  - Director of Academic Enrichment
  - Instructional Design and Training Specialist (multiple committees)
  - Manager of Summer, Winter, and Online Sessions
  - Learning Specialist (multiple committees)
  - Athletic Academic Support Tutorial Coordinator

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  - Senior Associate Athletic Director of Academic Services
  - Associate Provost/Director of Outreach and Continuing Education
  - Athletic Academic Advisor (multiple committees)