

EXAMINING THE IMPACT OF PEER EDUCATORS IN A FIRST-SEMESTER SEMINAR
CLASS

by

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This dissertation is submitted in partial fulfillment of the requirements for the degree of
Doctor of Education

Ferris State University

April 2017

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ABSTRACT

This study was conducted to investigate the effectiveness of using peer educators in a first-year experience course for developmental education students that were conditionally admitted in a rural, four-year university in Big Rapids, Michigan. The course took place in the student's first semester and was a transition seminar that was discipline-linked.

The purpose of this mixed-methods study was to determine if peer educators made a difference in the students' engagement with the campus and their ability to adapt and transition to college life. The impact on the peer educators participating in the process was also reported.

The findings indicated that peer educators did not clearly contribute to the students' transition in terms of adaptation and engagement. Quantitative measures indicated there was not a significant impact, with students indicating that peer educators were "somewhat" or "moderately" helpful. Qualitative measures show that individual students were impacted positively, but not for the majority of the classes. Peer educators gained positive experiences in being able to help students, while also voicing frustration in the lack of participation by students in events.

DEDICATION

This work would not have been possible without the support of my family. Thanks to my husband David Moore for his endless encouragement and faith in my ability, to my children Blake and Mitchell for their belief that all things are possible, and parents, Norm and Judy Browning, for their willingness to listen and counsel throughout the process.

ACKNOWLEDGMENTS

I appreciate the collective knowledge that my dissertation committee brought to the table. As dissertation chair, Sandy Balkema had a seemingly endless amount of positivity that I know is a large reason this completion was possible. Thanks also to Cameron Brunet-Koch and Lori Gonko for their willingness to work with a fairly aggressive timeline and provide thoughtful critiques and encouragement throughout the process. This collaboration was one of my favorite experiences.

It wouldn't seem right to go without mentioning the Ferris State University, Doctorate in Community College Cohort 5. This group provided guidance, support, and much needed humor on this journey. Special thanks to my core group work companions, Mike Trame and Andrew Peterson. I so appreciate the expertise and commitment you gave to each collaborative project.

For the past three plus years, Retention & Student Success has been my home. Thanks to my research partner and colleague Jody Maloney for her professionalism, and willingness to collaborate on the peer educator project. Thanks also to Shelly VandePanne, Susan McNamara, Timberly Boezwinkle, and Elizabeth Burbatt for allowing me to use you as a collective resource and a sounding board for the many projects completed through the program. Julie Rowan also provided needed expertise in the interviewing aspect of the project. In addition, the study wouldn't have been possible without the efforts of the two peer educators. Finally, a special thanks goes out to Bill Potter for the original idea of piloting a peer educator in Retention & Student Success and for trusting me to run with this idea.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

With the increased attention placed on completion rates and student debt in higher education, student success is now the holy grail of higher education. An estimated 43 million students are 1.3 trillion in debt (Sanchez, 2016). The National Student Clearinghouse Research Center reported that the national six-year completion rate was 52.9% in 2009, which was down two percentage points from the previous year (Fain, 2015). This downward trend is a concern on many levels.

For colleges, the challenge is finding the formula for improving student success in a significant way. The focus often then shifts to a student's first year because this is where the most significant drop out rates occur. In fact, before the second year of college begins for most students, almost half have already dropped out of college (Bailey, Jaggars, & Jenkins, 2011).

The Challenging Transition from High School to College

Every year thousands of college students go to school, as their parents cross their fingers and hope they will be successful. The aspect that makes this time especially hard for both students and parents is often this is the first time where the students have “a level of autonomy they have never experienced before” (American Academy of Pediatrics, 2015, para. 2). The entire environment where students study and learn is different from their previous educational experiences. Those who make a successful transition navigate this experience, while others do

not persist. Tyson (2014) reports that “colleges lose the biggest share of students in the first year” (p. 1).

Engagement on campus and making connections has long been established as an essential benchmark for persistence. Tinto (1985) noted that an inability of students to engage or “socially and intellectually integrate” was a contributing factor in student departure (p. 35). Chickering & Gamson (1987) noted the important aspects of engagement when they established their seven principles of good practice in undergraduate education. Among them are the importance of student-faculty contact, cooperation among students, and active learning; all of which feature engagement at the core. Further, Kuh (2001) defined student engagement in terms of two aspects. Student engagement is possible, first, when students put forth effort and time into activities and their studies, and second, when the college encourages and shows students the benefit of participation. Colleges often use first-year experience (FYE) courses as the platform to accomplish these goals.

The Evolution of the First-Year Experience

It is argued that the FYE seminar dates all the way back to the late 19th century (Skipper, 2016). Chism-Schmidt and Graziano (2016) explain that “the rationale, structure, and intended outcomes have evolved over time from a narrow focus...to (now) teach typically traditional-age first-year students “how to do college” in a psychosocially supportive context” (p. 7). Into the 1960s, the classes took the format of one small required class of 15-20 students. One major difference in the philosophy of the time was the “historic sink-or-swim attitude” that was taken regarding student success (Upcraft, Gardner, Barefoot, 2005, p. 1).

However, by the 1970s, college enrollment was growing astronomically and, as a result, so did the FYE classes. Chism-Schmidt and Graziano (2016) further observe that the classes

evolved to “lecture-oriented” sections, which had the unfortunate consequence of limiting class discussion and connections with peers and faculty. During this timeframe, focus started to shift to the lack of persistence of students and the growing numbers of students not graduating. Upcraft, et al. (2005) also note that many factors came together to assist in reforming education. Among them was the recession of the 1980s, emphasis of financial aid policies shifting from grants to loans, and critical national headlines featuring the lack of student success (p. 2). The University of South Carolina responded by creating UNIV 101, the very first student success course. Under the guidance of John Gardner, this officially started the FYE movement and established the National Resource Center for the First-Year Experience as the “recognized leader” (Chism-Schmidt & Graziano, 2016, USC, 2012).

FYE courses evolved because of the hope to assist with making connections and helping pave the way for adaptation to a new environment. McClenney & Arnsperger (2012) note “research and practice shows that students need to begin making critical connections from their first point of contact” (p. 44). This could be an instructor, advisor, staff member, or another student. Kuh, Cruce, Shoup, Kinzie & Gonyea (2008) established the connection between student engagement in educational activities and student grades and persistence. They found a positive relationship of the academic outcomes between year 1 and year 2 of college.

Importance of First-Year Experience Courses

Historically, FYE courses have shown to be beneficial to student, assisting with their transition both academically and socially. Goodman and Pascarella (2006) note “the body of research on first-year seminars has expanded considerably over the past fifteen years, providing substantial evidence that persistence and degree attainment have increased as first-year seminars have been implemented” (para. 14). Hunter and Linder (2005) define the course as one that is “a

small discussion-based course in which students and their instructors exchange ideas and information. In most cases, there is a strong emphasis on creating community in the classroom” (pp. 275-276). Students indicate that this type of course helps them “develop skills to become better students,” and also to “learn about college services and policies” (McClenney & Arnsperger, 2012, p. 78).

Perhaps the most substantial benefit for a college that is using an FYE course is the potential impact it can have on retention. Credé & Niehorster (2012) note that retention is best predicted by concentrating on a student’s ability to adjust to college, which is the very focus of an FYE course. The FYE course has become a necessary resource for colleges because the highest attrition rate occurs between the first and second years of enrollment (Upcraft, et al., 2005). Retaining students already admitted to the college is less expensive than recruiting new students and this has become an important factor in the development and longevity of FYE programs.

First-Year Experience Courses as a High Impact Practice

Because of the potential results, FYE courses have been recognized by the Center for Community College Student Engagement (CCCSE) as a high impact practice. As specifically shown in the CCCSE (2013) report, a positive relationship for students occurred with early connections and engaged learning after completing a course (p. 14). Additionally, the Director of the National Resource Center, Jennifer Keup (2014), reports that FYE courses have been identified by the Association of American Colleges and Universities (AAC&U) as a high impact practice and are used in over 90% of colleges across the country.

Many different variations of the FYE course exist in the hopes of finding the most effective model. As Permzadian and Credé (2015) note, some can be two weeks long, some last

for a full semester, or some for even an entire academic year; they may be offered for credit or no credit depending on the institution. Keup (2014) gives FYE courses five distinct categories: extended orientation seminars, academic seminars with uniform content, academic seminars on various topics, professional or discipline-based seminars, basic study skills seminars, and hybrid seminars. The most prevalent type identified in Keup's study is extended orientation seminars at 60%.

Not only do the formats of FYE courses vary, but also the purpose of the class. After the completion of three national surveys of freshman seminars, Barefoot and Fidler (1996) noted that the majority of these classes have three goals:

1. Helping students achieve a sense of community
2. Encouraging the involvement of students
3. Integrating students into the academic and social aspects of the institution. (p. 12)

Similarly, Ishler and Upcraft (2005) note that the purpose of first-year seminars is to enhance integration and academic interest, foster understanding of the specific institution, and provide essential opportunities relating to social integration. As such, these researchers indicate support of participation in these courses by calling the FYE "one of the most powerful predictors of first-year student persistence into their sophomore year" (p. 41).

Because of the varying formats and purposes, measuring effectiveness in FYE courses is a challenge. In an effort to reward and recognize excellent programs, Barefoot, Gardner, Cutright, Morris, Schroeder, Schwartz, Siegel, and Swing (2005), established five criteria on which to evaluate FYE courses. They were the following:

1. Evidence of an intentional, comprehensive approach to improving the first year that is appropriate to an institution's type
2. Evidence of assessment of various initiatives that constitute this approach

3. Evidence of broad impact on significant numbers of first-year students, including, but not limited to, special student sub-populations
4. Strong administrative support for first-year initiatives, evidence of institutionalization and durability over time
5. Involvement of a wide range of faculty, student affairs professionals, academic administrators, and other constituent groups. (p. 413)

Out of the 130 different programs examined against these criteria, only 13 programs received the Institution of Excellence recognition (Barefoot, et al., 2005, p. 423).

Feldman (2005) cautions that for first-year seminars there shouldn't be a gold standard for assessment. He states, "Instead, good programs are tailored to campus strengths, constraints, and norms" (2005, p. viii). This approach is supported in the above criteria where the authors acknowledge the connection to the institution's type and mission in the first criterion. Feldman's caution highlights the importance of the institution's culture in measuring effectiveness.

Issues Related to Under-prepared Students

The culture of a college often dictates how students are indoctrinated as they arrive. An essential part of this process can be the use of an FYE course. This is especially helpful with special populations such as under-prepared students. Under-preparedness of incoming freshmen has been a long-standing problem in higher education (Noel, Levitz, & Saluri, 1985, Porchea, Allen, Robbins, & Phelps, 2010). In some institutions, under-prepared students are asked to complete classes to bring them to the acceptable standard of comprehension in a subject that is predetermined by the individual college. So for example, based on incoming SAT scores, a student may need to complete MATH 010 and MATH 110 before they are able to take MATH 115 which is required for all majors. In colleges like the researcher's institution, classes can be required to be completed before admittance into a program. This study focuses on these conditionally admitted students.

Some of the students who are most often identified as under-prepared are first-generation college students and non-traditional students. When looking at the characteristics of students qualifying for developmental education, it makes sense to review what issues these students face. Both groups have been found to struggle with their academics and with persistence (Fenske, Porter & Dubrock, 2000; Pascarella, Pierson, Wolniak, & Terenzini 2004; Ishitani, 2005, Woosley, & Shepler, 2011). The issues can be revealed as an outwardly measurable construct such as low test scores, or a more intangible concept such as unclear career or academic goals. Waterhouse (1978) provides a summary of both dimensions when examining non-traditional students and found students who

1. Are unsure of themselves
2. Possess low self-concepts
3. Need financial assistance
4. Need tutoring and basic skill development
5. Possess minimal knowledge of career and educational opportunities
6. Need to feel comfortable within the learning environment. (p. 39)

Under-prepared students may only have one of these characteristics or may fall into multiple categories. Mulvey (2009) also cites attitudes toward learning and sociological factors as important information to consider when looking at whether a student is under-prepared.

As such, to meet the needs of these students, developmental education has emerged as the predominant solution (Attewell, Lavin, Domina, & Levey, 2010). The National Association of Developmental Education (NADE, 2016) defines developmental education as “a field of practice and research within higher education with a theoretical foundation in developmental psychology and learning theory. It promotes cognitive and affective growth of all postsecondary learners, at all levels of the learning continuum” (para. 3). NADE (2016) acknowledges that developmental

education can take on many forms of assistance which could be mentoring, supplemental instruction, tutoring, counseling (academic, personal or career), and advising, as well as coursework.

Other researchers, Habley, Broom, & Robbins (2012) acknowledge that there is “renewed interest in developmental education, much of it focused on how best to improve student outcomes” (p. 256). Seidman (2005) reports a positive impact on a student’s ability to graduate upon the completion of a developmental course. In fact, in the cohort examined, 39.7% of the students graduated within six years in contrast to a 36.6% graduation rate for the overall cohort (p. 142). In conjunction with the developmental courses, an FYE course is an avenue to reach this population of students to help meet outcomes and persist. Pairing an FYE course with student assistance can have additional impact for these students.

Student Assistance in FYE

The all-encompassing term for student assistance can be encapsulated in the words “peer leader.” Peer leaders have historically been important to colleges because of their ability to impact other students and the campus community, while ultimately growing as leaders themselves (Metz, Cuseo, Thompson, 2013). As shown below, there are over 15 different ways a peer leader may be assisting on campus:

- Student leader of campus clubs and organizations
- Student ambassadors
- Peer orientation leaders
- Peer resident advisors
- Peer mentors
- Peer tutors

- Supplemental instruction leaders
- Peer leaders for learning communities
- Peer co-instructors/co-facilitators for first-year seminars
- Peer academic advisors
- Peer counselors
- Peer wellness counselors
- Peer ministers
- Peer community service leaders
- Team captains (Metz, et al., p. 10)

The pure range of responsibilities that a peer leader may undertake is truly staggering.

Some of these categories, such as peer tutors and peer mentors, are more familiar, but a newer term for student assistance is emerging in the term “peer educator.” Newton and Ender (2010) define peer educators as “students who have been selected, trained and designated by a campus authority to offer educational services to their peers” (p. 6). When used in conjunction with first-year seminars, their role is in “providing a student perspective on course topics, serving as a liaison between instructor and students, and promoting student involvement in class and on campus” (Metz, et al., p. 10). Often providing emotional support, information, and guidance, a peer educator serves as a connecting force between student and college (Brack, Millard, Shah, 2008). Additionally, a peer educator helps students “appreciate and accommodate to the challenges, adjustments, and choices they must make to succeed in college and beyond” (Metz, et al., p. 2). This becomes especially important to students qualifying for developmental education.

Having a peer educator in an FYE course has the distinct potential to assist students. This notion of cooperation among students has long been recognized by Chickering and Gamson

(1987) as one of the seven principles of good practice in higher education. The peer educator supports the concepts presented in the class, while bridging the gap that may exist between instructor and student. When first-year students are paired with upper classmen as peers, positive results can happen. This was experienced by Black and Voelker (2008) when they examined the impact of preceptors in introductory courses. A preceptor is a term used in the medical field and is similar to a peer educator in that they are a person who “guides, tutors, and provides direction on specific performance” (Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, 2003). Here it was found that preceptors helped in modeling good study habits and the students participating had significantly greater engagement. The positive environment that is created in the first-year is potentially strengthened by the presence of a peer educator.

Statement of the Problem

As previously stated, one of the populations that FYE courses serves are students who are receiving developmental education. In this study, these students are also conditionally admitted to the university. McClenney and Arnsperger (2012) note that over 60% of entering students are taking at least one developmental course (p. 29). According to Texas State University (2015), these students struggle due to a variety of factors and may have issues due to “cognition, affect, identity, and other aspects of the college context” (para. 1). Fitting in and finding someone to talk to can make all the difference. Both objectives may be accomplished when a student takes a first-semester seminar course with an assigned peer educator.

Purpose of the Study

The purpose of this study is to determine if the presence of a peer educator in a first-semester seminar class of conditionally admitted, developmental education students makes a significant difference in a student’s ability to adapt and engage on campus. In this capacity, the

peer educator would promote student involvement, provide perspective on course topics, and serve as a liaison between instructors and students. This was examined by focusing on the following research questions:

- What impact did peer educators have on students?
- What impact did the experience have on peer educators?
- What impact did the peer educator have on student performance?

Theoretical Framework

This study is based on the belief that a developmental education student's adjustment to college may be positively impacted by having access to a peer who has been through the same experience. Given that the class being studied occurs once a week, it is also possible that the peer educator can assist with engagement outside the classroom and the student's ability to adapt to their environment. The expectation is that the student might feel more comfortable asking for help from a peer.

The primary research method used for this study was an in-class peer educator survey, and final course evaluation given to first-year seminar students at the end of the semester. The surveys used both qualitative and quantitative measures to assist in gaining a more complete picture of the student experience. The secondary method included interviews conducted of the two peer educators to gain their perspectives on working in this role.

Institution Background

The research took place in the first-semester seminar course at a rural, four-year, publicly supported institution. The enrollment on the main campus is typically around 14,000 students (FSU, 2016). The students enrolled in the classes studied were from the Retention and Student

Success (R&SS) unit. In addition, the students were conditionally admitted and all qualified for developmental education support.

The research included a convenience sample of freshmen in two different Ferris State University Seminar (FSUS) courses of 18-25 developmental education students each. One course consisted of students hoping to qualify for programs in the College of Engineering Technology (CET), and the other consisted of students aspiring to qualify for programs offered through the College of Health Professions (CHP). Each course was taught by an R&SS instructor who was assisted by a peer educator. Both classes had a control class with students from the same respective colleges (CET & CHP), the same instructor, but no peer educator. The peer educators in each class were students who had successfully completed the FSUS course the previous year and had qualified for a program in their respective College (CET & CHP).

Significance of the Study

Given the state of U.S. colleges, in terms of degree completion and student debt, it is important to be vigilant in finding ways to help students be successful. This is especially true for developmental education students because they already start school at a disadvantage and are working to catch up. This impacts a significantly large number of students. Smith (2016) reported that “86% of students believe they are academically prepared for college, but 67% test into developmental course work” (para. 10). Should this research show that a peer educator makes a difference in a developmental education student’s persistence, ability to adjust, or overall success, this would be a helpful model to follow in FYE courses for these first-year students.

Definition of Terms

The following terms are used throughout this study and are defined here to aid understanding and comprehension.

Academic Probation	A student is placed on academic probation when their GPA falls between a 1.4 and 2.0 in their first semester
Academic-Themed Seminar	FYE course that focuses on a common academic theme
ACT	American College Test, a standardized test that students take for entrance into college
CET	College of Engineering Technology
CHP	College of Health Professions
Developmental Education	Education that is provided for conditionally admitted students to assist in their academic progress
Discipline-Linked Seminar	FYE course linked to a major, offered in a specific unit or department
Engagement	The willingness of a student to participate in activities and events outside of class
First-Generation Students	The first in an immediate family to seek schooling in higher education
First-Year Experience Course	Also known as FYE, first-year seminar, success courses, specific courses designed to help students adjust to college and be successful students
FSU	Ferris State University
FSUS 100	Ferris State University Seminar, a first-semester experience course at Ferris State University in the State of Michigan
GPA	Grade point average, a scale from 0 to 4.0 that measures academic success
Learning Community	When a group of students takes a series of classes together and, potentially, live in the same space
Non-traditional student	A student who doesn't seek higher education immediately following high school graduation, or may be going to college part-time
Peer Educator	A more experienced student who has been trained and selected to offer educational assistance to a class of fellow students
Peer Mentor	A more experienced student who is paired with a student to provide one-on-one assistance that may be academic or social in nature

Peer Tutor	A student knowledgeable in a subject who is paired with a student seeking assistance or knowledge in that subject to provide one-on-one academic assistance
Persistence	Enrollment by a student in higher education that is continuous until a degree is completed or an educational goal is attained
Professional Seminar	FYE course linked to a major, offered in a specific unit or department
Program Change	When a student becomes academically eligible to move from the college of R&SS to their major and college of choice
Retention	An institutional measure which examines success in retaining students
R&SS	Retention and Student Success, the college (unit) within Ferris State University where the research took place
SAT	Scholastic Aptitude Test, a standardized test that students take for entrance into college
Student Engagement	The willingness of a student to participate in activities and events outside of class
Transition Seminar	FYE course that assists students in learning strategies and skills for success in college

Organization of the Study

This research study is reviewed in five chapters. Chapter 1 introduces the context of the research problem, which includes the purpose, research methodology, primary research questions, and a definition of terms relevant to the research. Additionally, the significance of the study and a theoretical framework are provided.

Chapter 2 reviews the relevant literature relating to a student's first-year. Specifically, the focus is on the transition from high school to college, and the importance of students being able to adapt and engage in their environment. Further review is given to different FYE formats and forms of student assistance in this course.

Chapter 3 provides an overview of the mixed methods used in the study, which included a peer educator survey, final course evaluation, and peer educator interviews. Further, the sample

selection, data collection, means of analysis, and discussion of validity, limitations, and assumptions are provided.

Chapter 4 presents the analysis of the survey data and the peer educator interviews. Consideration of the data is also given with respect to attendance, grades, and persistence, as well as probation and dismissal rates.

Finally, Chapter 5 establishes the conclusions and implications based on the data analysis and link to the research questions. Recommendations for further research are discussed in the context of FYE courses.

Summary

This chapter serves to provide information on the inherent importance of FYE courses and how they have evolved into a high impact practice. Variations of first-year experience format and purposes are also reviewed, with an emphasis on the assistance to developmental education students. The high student debt, lack of completion, and high volume of students who are conditionally admitted illustrate underlying challenges in helping students persist. This study proposes that the introduction of a peer educator in an FYE class can positively impact the ability of a student to adapt and adjust to college.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

This chapter presents a review of the literature surrounding First-Year Experience (FYE) courses and their connection to student success. Specifically, the research questions for this study focus on the impact of peer educators on the students' ability to engage on campus and adapt to their new college environment; therefore, the research reviewed will focus on this experience in a student's first year. Additionally, an overview of research completed on the different formats of FYE classes will be featured. Finally, peer assistance in the FYE classroom will be examined.

Student Engagement

Since this research looks at the ability to impact student engagement, it helps to understand the previous findings on this topic. The most significant research in the area of student engagement started with Astin's (1977) study that was both longitudinal and multi-institutional and consequently showed the impact of the college experience on students in a book called *Four Critical Years* (Wooten, Hunt, LeDuc, & Poskus, 2012). Astin (1977) found that a student's satisfaction with an institution was largely influenced by the student's degree of engagement. The results of the study led researchers to examine the different ways students get involved on campus and cemented the engagement component in FYE courses.

In later work, Kuh, Schuh, and Witt (1991) examined fourteen four-year universities in a year-long study called the College Experiences Study. Institutions were chosen because of their success with engagement, and commonalities of best practices included high expectations of

students, as well as an ethic of membership. This was described as a philosophy that said “because you have chosen us, and we have chosen you, we will do everything we can to help you succeed” (Kuh, et. al, 1991, pp. 56-57). This study showed persistence is positively impacted when students participated in out-of-class activities.

These findings were backed up by Tinto (1993), who found one of the major causes of departure was not feeling connected to an institution socially and intellectually. Later studies by Astin (1993, 1999) also showed how a connection to campus and peers correlated to student success in terms of learning, academic performance, and retention, when the role of a student’s cognitive and affective development was examined. Tinto (1999) also highlighted enhanced student learning when there is active involvement with peers, faculty, and staff.

However, it is important to note that not all engagement leads to a positive influence on student learning (Terenzini, Pascarella, & Blimling, 1996). These researchers noted that those students showing less cognitive growth in this study had certain commonalities in engagement. For example, the students who “live at home while in college, belong to a sorority or fraternity, participate in men’s intercollegiate football or basketball, work full-time, spend more hours socializing with friends, or have fewer academically or intellectually related out-of-class encounters with faculty members and other students” (p. 618). The circumstances highlighted here led to less positive outcomes with engagement.

Engagement has also been examined in relation specifically to FYE courses. Strayhorn (2009) conducted research to determine if FYE seminar participation was correlated with retention. This was measured in terms of satisfaction with college life, social integration, and academic integration. Findings include that the most highly satisfied were those identified as high-achieving women as compared to their peers. Another study by Adams (2009) found that

FYE is effective in terms of retention because of its ability to effect academic and social integration, student's institutional commitment, and goal commitment.

Around this same time, a comprehensive study was completed by Kuh, Kinzie, Whitt, Schuh, & Associates (2010) who examined 20 four-year institutions that were identified as having higher-than-predicted student engagement and graduation rates. The study found that the very premise of engagement, which is “what students do during college counts more for what they learn and whether they will persist in college than who they are or even where they go to college” (Kuh, et al., 2010, p. 9). Within the community college arena, these results were supported in a study by Brown, King, and Stanley (2011), who also emphasized that retention and student success largely happen through student engagement, and there is a “need for everyone (college-wide leaders) to be on the same page when it comes to retention and student success” (Lowry, 2016, p. 972).

On a different track, research by Cole and Korkmaz (2010) pointed to the importance of engagement in high school as a predictor of engagement in college. This study also emphasized the use of longitudinal data as useful in terms of measuring engagement. An important result from this study was a clearer, broader definition of “engagement” to include the background and precollege characteristics of incoming students.

Different Formats of First-Year Experience (FYE) Classes

How an FYE class is designed can also determine the degree of a student's ability to adapt, as well as the amount of student engagement that is generated. The format of the course can assist in gaining specific outcomes that may be related to college readiness, understanding and acclimating to the institution's culture, or a broader social aim, such as acceptance and recognition of diversity.

Learning Communities

An FYE course can take the form of a learning community. Early on, Knight (2003) looked at three types of learning communities: residential, non-residential, and those based on student need. At the institution Knight examined, it was found that learning communities were successful in “promoting student outcomes such as improved retention, improved grades and increased credit hours earned” (Knight, 2003, p. 10). In searching for characteristics of the most successful learning communities, it was discovered that this happened when:

1. Students received clear communication of the objectives
2. Students spent an extended amount of time engaged in program activities (weekends/nights)
3. More time commitment and attention was given to students by staff and faculty
4. Students had differing backgrounds
5. Faculty and students collaborated outside class
6. There was a history of carrying out local-level assessment of outcomes (p. 10)

Pike, Kuh, and McCormick (2011) examined how a learning community format impacted the amount of student engagement and found a positive relationship for first-year students and seniors measured across six dimensions: academic effort, integrative and higher-order thinking, diversity experiences, active and collaborative learning, student-faculty interaction, and supportive campus environment. From their study, Pike, et. al (2011) recognized that learning communities did not directly impact student learning, but instead, they found that “membership in a learning community appears to boost student engagement which...leads to a host of positive educational outcomes” (p. 317). Rocconi (2010) similarly found students participating in a learning community indirectly experienced educational gains because of the student engagement component. This was most evident in total effects of four variables: “experiences with faculty

members ($\beta=.25$), effort in their coursework ($\beta=.25$), experiences with student acquaintances ($\beta=.19$), and gender ($\beta= -.14$)” (p. 186).

More recently, Chism-Schmidt, and Graziano (2016) note that high impact practices, such as learning communities and service learning, enhance student engagement when paired with first-year seminars. Specifically of note were the four positive effects revealed by using the National Survey of Student Engagement (NSSE) which included academic challenge, collaborative learning, student-faculty interaction, and a supportive campus environment (Chism-Schmidt & Graziano, 2016). The notable result of this experience identified by Chism-Schmidt and Graziano (2016) was that students were “more frequently using deep learning behaviors, such as integrating and applying information from different courses to practical problems, discussing ideas with faculty members and peers, and making judgements about the value of information” (p. 5).

Academic & Transition-Themed Seminars

FYE courses may also be in a format that is more focused on dialogue with students and has an academic theme. One such study looked at 100 freshman students who participated in a one credit first-year seminar course and who completed a pre- and post-test related to intergroup relationships to focus on dialogue (Thakral, Vasquez, Bottoms, Matthews, Hudson, & Whitley, 2016). Gains were found in terms of intergroup collaboration and action, understanding, and relevance of diversity in higher education.

Students’ awareness of and acceptance of diversity has been a focus in some studies of FYE efforts (Lee, Williams, & Kilaberia, 2012; Laurs, Eggeling, & Harris 2013). Lee, et al. (2012), explored how engagement with diversity was facilitated in a first-year experience course with a focus on dialogue. Students found this opportunity “increased their openness to engaging diversity and their confidence in effectively communicating with diverse individuals” (p. 211).

Lauri, et al. (2013), dug deeper with the first-year experience and combined student-leader training with cross-cultural values to nurture inter-cultural awareness across all areas of campus. This campus had a combination of both Anglo and Maori cultures and the hope was to bring better understanding across cultures. Here the ultimate goal was to “empower student leaders with the confidence in community-building to support their peers’ retention and success” (p. 108). The overall result was that the student leaders responded positively to this approach and expressed the need for a “university-wide values framework” (p. 109).

Additionally, dialogue in the form of classroom discussion was found to be beneficial in the persistence of at-risk students in a first-year seminar (Pittendrigh, Borkowski, Swinford, & Plumb, 2016). In this study, the persistence was higher for students enrolled in the Knowledge and Community seminar. Additionally, those students who were “higher-motivated” persisted 5.6 percentage points over those who did not take the seminar (Pittendrigh et. al, 2016, p. 6).

In the search for a format of first-year success, Zerr and Bjerke (2016) studied the difference between academic-themed and transition-themed first-year seminars, with the former being a 3-credit class and the latter being a 2-credit class. Barefoot and Koch (2015) define an academic-themed course as one that has a “focus on a common academic theme,” while a transition-themed seminar has a “focus on helping students learn strategies and skills for college survival” (Slides 7). Zerr and Bjerke’s overall impression was that students gained more benefit from the academic-themed course. The credit difference, although noted by researchers, did not seem to be a factor in terms of retention, GPA, or number of credits earned; these factors remained stable across both groups. The academic-themed first-year seminar class rated significantly better in terms of academic engagement (Zerr, et, al., 2016).

Discipline-Linked Seminars

An additional type of FYE class is discipline-linked, where a class is “offered in a department or unit and is linked to specific majors” (Barefoot & Koch, 2015, Slide 8). One would think that this would have great benefit to students; however, some significant differences are noted with discipline-linked seminars. When looking at transition-themed seminars, academic seminars and discipline-linked seminars, students rated discipline-linked seminars lowest in engaging pedagogy at 18.3%; whereas transition-themed seminars were rated at 30.5%, and academic-themed seminars were rated at 36.5%. Barefoot and Koch (2015) explain that these ratings were based on seven criteria including:

1. A variety of teaching methods
2. Meaningful class discussions
3. Challenging assignments
4. Productive use of class time
5. Encouragement to speak in class
6. Encouragement for students to work together
7. Meaningful homework (Slide 14)

According to this study, students indicate less satisfaction and fewer learning outcomes achieved with the discipline-linked course.

Number of Credit Hours

Another notable variation in FYE courses is the number of credit hours allotted for the class across institutions. Credit hours range between one and three hours per class. In 2001, a landmark study called the First-Year Initiative (FYI) benchmarking survey was conducted on over 31,000 students in 62 institutions (Swing, 2002). The purpose was to examine the learning outcomes of first-year seminars to determine effectiveness. The seminars consisted of 73%

transition-themed, 14% academic-themed, 8% discipline-themed, and 5% mixed (Swing, 2002). Upon review, this research indicated that across the seminar types, two- and three-credit hour FYE courses consistently out-performed the one-credit class, with the exception of the Policies and Procedures outcome, as noted below [bold highlights from the original source] (Barefoot, 2011). This study was based on the percentage of students rating the course “high” in the following categories (Barefoot & Koch, 2015).

Table 1: FYE Performance by Category Linked to Credit Hour

	CREDIT HOUR		
	1	2	3
Study Strategies	15.9	20.6	19.4
Academic Skills	10.9	12.7	17.3
Critical Thinking	23.1	26.1	34.2
Faculty Connections	24.9	28.3	29.6
Peer Connections	26.1	35.5	37.3
Out-of-class Involvement	14.8	18.5	18.6
Policies / Procedures	33.3	35.3	30.4
Campus Services	35.9	41.0	35.4
Time / Priorities	24.6	27.7	25.2
Wellness / Spirituality	18.5	24.0	23.0
Belonging	55.3	58.5	60.2
Course Satisfaction	28.1	34.9	35.4
Engaging Pedagogy	24.1	30.1	37.0

Although one might expect that the overall percentages would be higher, the added class time and contact that students have with their instructor in the two- and three-credit hour FYE classes seems to be making a difference in the student ratings in relation to these outcomes. The lesson here is that “contact hours should align with your institution’s desired outcomes” (Barefoot & Koch, 2015, slide 16). So for example, if the seminar was a one-credit class, the students would be best served if the plan was to focus on outcomes related to belonging, policies and procedures,

and campus services. Focusing on fewer outcomes may also increase the effectiveness of the class.

Peer Assistance

When considering the different ways that engagement and adjustment to college can happen, how might this be impacted by the presence of a peer whose purpose is to assist? When examining peer assistance and the subsequent impact on students, the results remain largely positive (National Resource Center, 2012). The National Resource Center (2012) found two common themes identified across four studies, which included the varied and significant benefits a peer leader experiences when participating in this role and the correlation between the structure of the peer leader role and the quality of support provided for students.

Peer Assistance: Benefits for Students

Shook & Keup (2012) note that “given the powerful and ubiquitous qualities of peer influence, higher education professionals have begun to harness this in student education, support, and service delivery by using undergraduate peers in leadership roles” (p. 6). Peer educators were initially used in health care where students took the role of educating other peers about healthy choices (McLean, 1994; Campbell, 2005; Brack, Millard, & Shaw, 2008), and this trend continues today (Mead & Chapman, 2013). The use of peer educators has since branched out over time and now includes “supplemental instruction, first-year seminars, academic advisement, and academic coaching” (Latino & Unite, 2012, p. 1).

The benefits of peer leadership for students are far reaching, and include retention and persistence (Tinto, 1993; Schwitzer & Thomas, 1998; Cuseo, 2010). Tinto (1993) noted the connection early on by recognizing that “interaction with one’s student peers...proves to be an important element in voluntary departure,” so the stronger the connection, the better the

persistence (p. 53). Schwitzer and Thomas (1998) similarly found in a peer-mentor support program for minority participants that 81% of the students persisted in the study, where the non-participatory students persisted at a rate of 73% (p. 43). Cuseo (2010) makes a strong argument for the use of peers and why this practice is relevant today: “connecting new students with more experienced peer mentors and role models who have made the transition successfully can supply a source of positive peer power that fuels first-year students to advanced levels of academic performance and higher rates of persistence to graduation” (p. 4). This study in particular makes the use of a peer educator intentional and part of a formal program to impact performance.

A second benefit acknowledged in the literature is improved skills for students through interaction with peers (Astin, 1993; Donahue, 2004; and Kuh, Kinzie, Schuh, Whitt, & Associates, 2010). In Astin’s (1993) longitudinal study, student-student interaction showed the strongest impact on leadership skills, resulting in an increase in leadership by +13.2%, contrasted with those with the least interaction with peers at a decrease of -3.6% (p. 123). Donahue’s (2004) study had students reflect through narrative on their first-year experience. One student said:

Many of my friends that I have met here help me get my work done. They encourage me at times to go to the computer lab with them to finish an assignment or to stay up a little later to do some studying. (p. 83)

These results give relevance to peer influence on study skills and habits and are supported by Kuh, et al. (2010), who found that when faculty members use group quizzes in a large lecture class, that students were more likely “to study with peers and more willing to pose questions to their peers when they were unclear about class material” (p. 249).

A third benefit for students who interact with peers is increased support and student satisfaction (Coffman & Gilligan, 2002; Sanchez, Bauer, & Paronto, 2006; Wasburn, 2008; Colvin & Ashman, 2010). The increased support offered by a peer often leads to better student

satisfaction with the college experience as observed by Coffman and Gilligan (2002). These researchers studied first-year college students and found that social support accounted for a 37% variance in life satisfaction, showing a significant positive relationship (Coffman & Gilligan, 2002, p. 64). This positive interaction with peers can also translate to satisfaction with the institution (Sanchez, Bauer, & Paronto, 2006). Further, Wasburn (2008) found that two is better than one, in terms of numbers of peers supporting a student. More student satisfaction was reported when interacting with two peer leaders over the course of a semester (Wasburn, 2008). The support can be further enhanced when the peer leader takes on more than one role. This can be seen in Colvin and Ashman's (2010) definition of the five roles of a peer mentor as a "connecting link, peer leader, learning coach, student advocate, and trusted friend" (p. 131). The increased support is evident in the many ways that the peer mentor is interacting with the student at different times throughout the journey.

Peer Assistance: Benefits to Underrepresented Students

Peer educators have been shown to improve academic success for students who are underrepresented. Tucker (2014) notes the advantage of such an approach for first-generation students because of the ability of "extending a hand academically and socially to others who come from similar backgrounds and home situations" (para. 14).

Similar success was met with Latino students in a program called *Promotores de Educacion* at California State University. Researchers reported both evaluation and recruitment goals were achieved for the participating students (Rios-Ellis, Rascón, Galvez, Inzunza-Franco, Bellamy, & Torres, 2015).

Research completed by Schwitzer and Thomas (1998) and Kim (2009) includes other underrepresented groups. Schwitzer and Thomas (1998) found positive results with peer mentors for African-American students at a primarily white institution. In this study, students reported

improved problem resolution and higher two-year retention rates than their non-participating peers. Positive results were also seen in a study of minority immigrants. When using a peer network that mirrored their same ethnicity, students were able to positively make the transition and continue their education from freshman to sophomore year (Kim 2009).

Peer Assistance: Benefits to Peer Educators

However, the benefits of using peer educators are not limited to the students on the receiving end. The peer leaders themselves also experience positive outcomes because of the opportunity to work with other students. These include contributing to the community, learning new skills, and gaining relevant practice experience (Newton & Ender, 2010). Additional benefits were noted by Wawrzynski and Beverly (2012) as gains in “higher-order thinking skills, intrapersonal development, interpersonal development, appreciation and awareness of diversity, and presentation and communication skills” (p. 53).

These findings were supported by earlier work that noted the gain in skills and abilities of peer educators upon serving in this role (Sawyer, Pinciario, & Bedwell, 1997; Badura, Millard, Johnson, Stewart & Bartolomei, 2003). Sawyer, et al. (1997) completed a study on the participation of students in a sexuality peer education program and found “increased levels of self-esteem, confidence, and safer sexual behavior” that was revealed through qualitative data (p. 211). Similarly, Badura, et al. (2003) also gathered qualitative data on the outcomes of students participating in a volunteer peer education program. The highest reported targeted outcome variables included factual knowledge (57%), helping others (57%), and friendships (48%) (p. 3). In both cases, these students were volunteers at their respective institutions in a peer education program and gained unexpected benefits from the experience.

Use of Peer Educators

In the National Survey of First-Year Seminars, the presence of peer educators jumped from 5% in 2009 to 46% in 2012-2013. Interestingly, however, two-year campuses, in particular, reported that undergraduate peers were not often used in first-year seminars (Young & Hopp, 2014). Since the time at the institution is shorter, it makes it more difficult to recruit and retain upper-class students in this capacity. Young and Hopp (2014) point to peer leaders being an untapped “area of opportunity for all institutions...who have found unique ways to navigate the institution, particularly those part-time students with other obligations, such as work and family, would be a helpful resource for first-year students from all backgrounds” (p. 52). This same phenomenon of lack of networking with peers was earlier observed by Roueche and Roueche (1982), so it is interesting that it still exists today.

Summary

This chapter provided an analysis of how engagement has impacted retention and student success in relation to the first-year experience. The ability of a student to adapt was also analyzed with respect to different formats of FYE courses, including learning communities, academic- and transition-themed classes, differing lengths (credit hours), and discipline-linked seminars. Finally, peer educators were introduced in terms of the benefits for students as a whole, as well as for specific underrepresented groups. It was discovered throughout the process that peer educators experience benefits from this role and are often underutilized.

Given the inherent disadvantage a one-credit FYE course has in achieving outcomes (Barefoot & Koch, 2015) and the underutilization of peer educators (Young & Hopp, 2014), this study hopes to capitalize on the very benefits that the presence of a peer educator can bring. This

is especially true in reference to a population of students completing developmental education that need to persist and graduate.

The next chapter explains the research methodology used to answer the research questions reviewed in Chapter 1. Chapter 3 will provide an overview of the study to include the research plan for sample selection, method, data collection, and data analysis.

CHAPTER 3: METHODOLOGY

Introduction

In this chapter the researcher reviews the purpose of the study, the research questions, design strategy, and research plan, to include data collection and analysis. This study is based on previous research showing that peer educators have been beneficial in assisting students to adapt and adjust to college.

Although extensive research has been done on student engagement and how students adapt to college, the focus of this study is to determine if peer educators can positively influence the transition of students who are conditionally admitted to a university and qualify for developmental education. This takes place in a one-credit first-semester experience course, FSUS 100, with the academic advisor as the primary instructor, in addition to a peer educator.

Purpose of the Study

The purpose of this study is to determine if the presence of a peer educator in a first-semester seminar class of developmental education students makes a significant difference in a student's ability to adapt to and engage on campus.

Research Questions

The focus of this study is to examine the possible effectiveness of peer educators in a first-semester experience course for students qualifying for developmental education. McClenney and Arnsperger (2012) reveal how “students inevitably talk about how much it means to them when someone — a person they can name — knows who they are and

intentionally makes a connection with them” (p. 44). This intentional contact means something to students, but how does it translate to actual impact on the educational experience? For this reason, this study will examine what impact a peer educator has on developmental first-year students in a first-semester seminar class. This will be done by focusing on the following research questions:

1. What impact did peer educators have on students?
 - a. How did the peer educator impact the student’s ability to adapt to college?
 - b. How did the peer educator impact student engagement on campus?
2. What impact did the experience have on peer educators?
 - a. What did the peer educators gain from the experience?
 - b. What did the peer educators see as challenges?
 - c. What did the peer educators see as their contribution to the class?
3. What impact did the peer educator experience have on the student’s overall performance?

Site of the Study

The research took place at a rural, four-year, publicly supported institution, where the enrollment is typically around 14,000 students on the main campus (FSU, 2016). There were 101 sections of the first-year seminar course taught in 2015 (FSUS Course Evaluation Report, 2015). According to the official course record, fourteen of these sections were specifically designated for developmental education students (Ferris State University Seminar Banner Gold, 2015).

At this institution, developmental education students are those who are admitted to the college, but not to their desired program because of a lower than needed GPA or placement test score (ACT or SAT). In the Retention and Student Success (R&SS) unit, 391 students out of 1,134 were First-Time in Any College (FTIAC) in 2015, which is the largest group out of any other individual college at Ferris (FSU Factbook, 2015, p. 52). These 391 students are required

to complete a minimum of one semester in the R&SS unit to work toward qualifying for their program of choice.

Sample Selection

The impact of a peer educator on an FYE course was explored over the course of a semester. This population was chosen for the study because students requiring developmental education will increase their time to degree and already face more challenges than other students. A convenience sample was chosen of freshmen in two different first-semester seminar courses and included between 18-25 students each. One section consisted of students hoping to qualify for admission into programs within the College of Engineering Technology (CET). The other included students hoping to qualify for programs within the College of Health Profession (CHP). Each of the two classes had a control class with students from the same respective colleges (CET & CHP) and same instructor, but no peer educator. Peer educators were sophomores who had completed the course the previous year and been admitted into the same college as the freshman students' desired college.

This study takes place in R&SS, where the instructor of the first-semester seminar class is often the student's advisor, which is the case in this research. This allows for extra contact with the student and better communication between the student and instructor/advisor. Because of this dual role, the advisor is guaranteed to see the student at least once a week in class, in addition to any advising appointments.

Demographics of Student Sample

The largest population of students in each class is highlighted below. The College of Engineering Technology (CET) class population had at least 80% male students in each class.

The opposite was true in the Health Profession (HP) classes, where over 88% of the students were female.

Table 2: Student Sample Demographics

	CET CONTROL	CET PEER EDUCATOR	HP CONTROL	HP PEER EDUCATOR
Black Female	0	0	7	9
Black Male	5	2	0	0
White Female	2	1	10	9
White Male	10	18	2	2
Hispanic Female	0	0	3	3
Hispanic Male	0	3	1	1
Mixed Race Male	0	0	1	0
Mixed Race Female	1	0	1	0
Totals	18	24	25	24

The peer educators for each of the classes matched the predominant gender type of the class to which they were assigned. Thus, for example, in the CET class the peer educator was a white, male, sophomore student. In the HP class, the peer educator was a black, female, sophomore student.

Design Strategy

The design of this study recognized the complexity of the situation being studied. For example, given the presence of both the instructor and the peer educator, the researcher wanted to discover:

- What experiences with the peer educator seem to have the most impact for students?
- Does having another person in the classroom who is not a participating student have an impact on the classroom dynamic?
- Given that much of the interaction is with a group of students in a one-credit class, is this an effective model?

These questions would be difficult to answer without a conversation, observation, and open-ended questions. The focus, as Merriam (2009) notes, is to “achieve an understanding of how people make sense of their lives, delineate the process...of meaning-making, and describe how people interpret what they experience” (p. 14). Examining the phenomenon of the impact of peer educators on students needs to be examined with this qualitative lens.

Conversely, other aspects of the questions lend themselves to quantitative analysis, making a mixed method approach the best choice. In comparing and contrasting the control and experimental group, the researcher sought to determine if peer educators are able to help students with their transition from high school to college and if they are able to help students feel more comfortable in engaging in activities on campus. By asking both groups these questions we may gain a better understanding of the differences. For example, was there more participation in the mandatory events with the presence of the peer educator? Overall, were students more successful? Did they persist into the second semester, make program changes, and get better grades? These aspects cannot be determined without comparing the control and study classes.

Course Background

The course where this research took place is a first-semester experience course which has been mandatory for students since 2002 (Ferris State University, 2004). All first-semester students are automatically enrolled in an FSUS class, along with any transfer students who have completed fewer than 12 credits at a higher-education institution. This course has historically received top-down support from administration, as shown by the president of the University having taught the class in the early years.

The course has ten objectives that instructors are asked to teach students throughout the course of the semester: As a result of taking the FSU Seminar class students will:

1. Become familiar with campus resources and technology (academic, student, and personal support services)
2. Develop an awareness of learning strategies to adapt in various educational environments
3. Gain an understanding of wellness issues that directly affect their health and safety
4. Learn to develop effective time management and goal setting strategies
5. Learn to understand, respect, and value diversity in its many forms
6. Learn about academic advisor/advisee relationships and course registration
7. Become active participants and contributors in the campus and community
8. Learn about and understand academic integrity and classroom etiquette skills that foster appropriate conduct in a post-secondary institutional setting
9. Be introduced to financial literacy
10. Learn about the University's mission, core values, and historical development (Ferris State University, FSUS 100 Goals and Objectives, 2016).

The effectiveness of the course is measured through a course evaluation of fifty questions about the objectives that students answer in the last two weeks of the semester (Appendix D).

All instructors teaching FSUS 100 receive formal training and consist of faculty and staff. In 2015, of the 76 FSUS instructors, 34 were faculty members and 33 were staff members. The requirements to teach the first-semester seminar include the following:

- Master's Degree (unless special permission granted by department head/chair)
- Completion of the new instructor training workshop
- Approval of the instructor's supervisor
- A minimum of one year of employment at Ferris State University
- Participation in regular FSUS instructor training

All staff and faculty involved in this study are full-time employees of the University. The two instructors both have Master's degrees and 16 total years of teaching experience in higher education.

Data Collection

Data were collected over the course of the semester, including attendance at mandatory events and program changes that were made in the first semester. The students in R&SS are conditionally admitted to the University. When students become academically eligible after completing designated developmental education courses and achieving the required GPA, they can then make a program change into their desired major. Final grades, rate of probation and dismissal, and persistence from fall to spring were also tracked at the end of the semester (see Appendix A).

To gather information directly from students, a Peer Educator Survey was given in class during the fourteenth week (see Appendix B & C). Two questions from this survey mirrored the FSU Seminar Final Course Evaluation, so a comparison could be made between the peer educator class and control class (see Appendix D). On the Peer Educator Survey the questions appear as numbers 5A and 6A and ask about adaptation to college and engagement in activities. Responses to each of these were compared to the control groups. They appear as questions two and forty-three in the FSU Seminar Course Evaluation.

Also during the fourteenth week of class, interviews were conducted with the two peer educators. Questions are shown in Appendix E. The interview was conducted by a third party experienced in interviewing, not associated or known by the two peer educators. This interview was semi-structured and was audio recorded and transcribed.

Data Processing and Analysis

In order to organize and code the data, all information was transcribed. The peer educator survey and peer educator interview answers were analyzed and sorted thematically. This was done through open coding, which meant initially the researcher was open to finding anything and was not set to a specific outcome (Merriam, 2009). Notes were made in the margins of the transcripts to identify segments of data that might be useful. Upon completion of open coding, analytical coding was completed. For this step, open codes were grouped to assist in the interpretation of the data (Merriam, 2009). Following the advice of Merriam (2009), the categories had to meet four criteria, in addition to being responsive to the research question:

1. Be as *sensitive* to the data as possible
2. Be *exhaustive* (enough categories to encompass all relevant data)
3. Be *mutually exclusive* (a relevant unit of data can only be placed in one category)
4. Be *conceptually congruent* (all categories are the same conceptual level) (p. 186)

This analysis assisted the researcher in revealing a theory of what actually happened in the research process.

For the quantitative data, statistical comparisons were made among persistence, grades, program changes, probation and dismissal rates, and attendance across the experimental and control groups.

Pilot Study

Because of the study design, it was not possible to pilot the survey or interview questions in a traditional way. However, the peer educator survey and interview questions were shared with the Associate Provost of Retention and Student Success and the Director of Student Academic Affairs for their input prior to the beginning of the study. Further, the questions were

also shared with a random selection of students to make sure the terminology and wording made sense.

Validity and Reliability

In this study, validity was addressed in the following ways. First, peer reviews were conducted with the Associate Provost, Academic Advisors, and the Director of Student Academic Affairs in R&SS to determine if the findings made sense to those who were knowledgeable on the topic. Next, member checks were used by the FSUS instructors. In this way, the instructors were soliciting feedback on the emerging results from those participating in the study (Merriam, 2009). Finally, triangulation of the three types of data — peer interviews, the final course evaluations, and peer educator surveys — was also incorporated.

Bias and Assumptions

In each class, a peer educator was chosen from the specific college (Health Professions or Engineering Technology) in which the current students were hopeful to be admitted to in the future. The assumption is that having a peer educator that was from their future college would prove helpful to these students. One of the instructors knew both the peer educators because each had completed FSUS the previous fall as a student in her class. Since the quality of each student's work was known, as well as their out-going personalities, the students were chosen with the hope that these positive features would assist in a successful relationship between the student and peer educator.

Limitations

First, bias is possible given that the researcher is one of the instructors in the study. Second, the study analyzed conditionally admitted, developmental education students and, thus,

the study results wouldn't provide insight into non-conditionally admitted students. Third, the different genders of the peer educators and gender make-up of the classes may limit the study. Finally, the research project took place at FSU, in the city of Big Rapids, where it was bound by the place and timeframe.

Summary

Given the inherent disadvantage a one-credit FYE course has in achieving outcomes (Barefoot & Koch, 2015) and the underutilization of peer educators in certain areas (Young & Hopp, 2014), this study hopes to capitalize on the very benefits that the presence of a peer educator can bring. This is especially true for a population of students completing developmental education who need to persist and graduate. The intentional design using a peer educator who has successfully completed the transition improves chances for effectiveness in working with students. It will now be seen whether the planning matches the anticipated results for student success.

The next chapter will illustrate the execution of the research study through an analysis of the data collected. This will include research conclusions and considerations for further research.

CHAPTER 4: RESULTS AND ANALYSIS

Introduction

The purpose of this mixed methods study was to determine if the presence of a peer educator in a one-credit, first-semester seminar class of developmental education students makes a significant difference in a student's ability to adapt and engage on campus. Two different classes of conditionally admitted freshmen were analyzed. One section consisted of students who are seeking to qualify for admission into the College of Engineering Technology (CET), while the other section consisted of students hoping to qualify for the College of Health Professions (CHP) program. Control classes were used from the same respective colleges. Data were collected through evaluations at the end of the class and peer educator interviews, in addition to grades, attendance, participation, and student performance data.

In the subsequent pages, each research question is reviewed individually in terms of results and analysis. For research question one and two, the Peer Educator Survey results are examined, along with the Final Course Evaluation results. For research questions three through five, the Peer Educator Interview results are reviewed and analyzed. For the final research question (six), data collected on high school GPA, persistence, program changes, probation and dismissal are shared and analyzed. Finally, related data are analyzed collectively across questions.

Discussion of the Research Questions

The research focused on the impact of peer educators on a student's ability to engage and adapt, the peer educator's experience, and the student's performance. This was analyzed through the following research questions:

1. How did the peer educator impact the student's ability to adapt to college?
2. How did the peer educator impact student engagement on campus?
3. What did the peer educators see as their contribution to the class?
4. What did the peer educators see as challenges?
5. What did the peer educators gain from the experience?
6. What impact did the peer educator experience have on the student's overall performance?

Research Question 1: How did the peer educator impact the student's ability to adapt?

The focus of the first research question was on how the students were adapting to their new college environment. In order to address these questions, students in the peer educator course were asked to complete a Peer Educator Survey in class (Appendix B & C) during the fourteenth week (out of fifteen weeks) of class. They also completed questions from the Final Course Evaluation after the fourteenth week of class (Appendix D). These surveys have two questions in common related to the research question:

Q#2: Participation in an FSU Seminar improved my ability to adapt to college life and the Ferris Community, and

Q#43: Because of the FSU Seminar I will be more likely to attend future campus/community events.

RQ#1: CET Adaptation to College Life Results

RQ#1: CET Survey Data

The CET mean scores were 3.50 (5-point scale) on the Peer Educator Survey, and 4.10 in the Final Course Evaluation. In comparison, the Control Class results were 3.64 (see Table 3).

Table 3: Q#2, Adaptation to College, CET Results

CET PEER EDUCATOR SURVEY	CET FINAL COURSE EVALUATION	CET CONTROL CLASS
3.50	4.10	3.64

When the students took the shorter seven question Peer Educator Survey, they rated their experience lower than when they took the 50-question Final Course Evaluation. They also rated their experience lower than the control class. In the follow-up question for the Peer Educator Survey, students were asked to rate the degree of impact: *To what degree did a peer educator improve your ability to adapt*; Large extent = 2 students, Somewhat = 11 students, Small Extent = 4 students, Not At All = 3 students.

RQ#1: CET Peer Educator Survey Responses

In reviewing the theme of adjustment or transition, there were seven responses given that were related to adapting:

- A peer educator made it a smoother transition.
- Helped us learn about Ferris and helped us adjust.
- Helped us adjust and taught us where things were.
- Helped guide the way to other doors and helped out with small college problems.
- Helped me figure out where everything was.
- Didn't really care about peer educator. No impact on me.
- I don't know since the transition was already very smooth.

Of the comments provided by the students, five were positive, one was negative, and one was neutral.

RQ#1: CHP Adaptation to College Life Results

RQ#1: CHP Survey Data

The CHP mean scores were 3.65 (5-point scale) on the Peer Educator Survey, and 3.82 in the Final Course Evaluation. In comparison, the Control Class results were 3.96 (see Table 4).

Table 4: Q#2, Adaptation to College, CHP Results

CHP PEER EDUCATOR SURVEY	CHP FINAL COURSE EVALUATION	CHP CONTROL CLASS
3.65	3.82	3.96

Similar to the CET section, when the students took the shorter seven question Peer Educator Survey, they rated their experience lower than when they took the 50-question Final Course Evaluation. They also rated their experience lower than the control class.

In the follow-up question for the Peer Educator Survey, students were asked to rate the degree of impact: *To what degree did a peer educator improve your ability to adapt:* Large extent = 4, Somewhat = 4, Small Extent = 4, Not At All = 1, No Response = 1.

RQ#1: CHP Peer Educator Survey Responses

In reviewing the theme of adjustment or transition, students provided five responses related to adapting:

In reviewing the theme of adjustment or transition, responses related to adapting were:

- Gave me information that I wouldn't have known and helped me very well.
- By answering questions that I had and helping me with things I needed help with.
- Helped adapting to college much easier.
- Being able to go to someone if I needed to.
- Having (the peer educator) there to help with assignments.

Of the responses, all five were positive. No comments were negative or neutral.

Analysis of Research Question #1: Adaptation to College Life

In reviewing both the CET and CHP data for the ability to adapt, the lowest scores came from the classes with the peer educator. These results indicate that the students in the peer educator classes may not feel as confident in their ability to adapt to college as the control class did. It also may be important to note that the mean score for all 100 sections of FSUS was higher at (Q2) 3.93 than the peer educator sections as well. These results indicate that the peer educator class scores for adapting (CET score 3.50, and CHP score 3.65) were not only lower than the control class it was compared to, but also all other sections of FSUS combined (3.93).

Given that the Course Evaluation was 50 questions and the Peer Educator Survey was much shorter at 7 questions, one would expect a more positive outcome if the student was experiencing survey fatigue. Research has indicated when respondents experience survey fatigue they would normally choose scores closer to the neutral category (3) (Ben-Nun, 2008). In this case, the mean score on the Final Course Evaluation would be lower than the Peer Educator Survey, when in fact the opposite was true. This means that survey fatigue was most likely not a factor here.

The impact of the peer educator on the students' ability to adapt can best be viewed by looking at the combined results of the two classes. Of the respondents, 44% responded that they were "Somewhat" impacted by the peer educator in both classes. This outcome was not as positive as predicted.

However, the qualitative data indicates that individual students were impacted more positively with comments like "a peer educator made it a smoother transition," or "gave me information I wouldn't have known and helped me very well." However, the students'

description of the experiences seemed to vary widely as well, with comments like “Didn’t really impact me” or “Don’t really know because the transition was already smooth.”

Research Question 2: How did the peer educator impact student engagement on campus?

Although “student engagement” can take many meanings, this study was most interested in the student’s willingness to participate in activities and events outside of class, and their future likelihood to do so.

RQ#2: CET Engagement on Campus Results

RQ#2: CET Survey Data

The CET mean scores were 3.64 (5-point scale) on the Peer Educator Survey, and 3.75 in the Final Course Evaluation. In comparison, the Control Class results were 4.23 (see Table 5).

Table 5: Q#43, Engagement on Campus, CET Results

CET PEER EDUCATOR SURVEY	CET FINAL COURSE EVALUATION	CET CONTROL CLASS
3.64	3.75	4.23

The scores recorded in the Peer Educator survey were the lowest across the board, lower than the control class, and the Final Course Evaluation scores. In the follow-up question for the Peer Educator Survey, students were asked to rate the degree of impact on attending events: *To what degree did having a peer educator in the class make it more comfortable for you to attend future campus/community events*; Large extent = 3 students, Moderate amount = 6 students, Small Extent = 7 students, Not at All = 4 students.

RQ#2: CET Peer Educator Survey Responses

Related to the theme of engagement, six student responses were provided:

- Help you get involved.
- Learned a lot about what Ferris is about, and things to get involved in.

- We became friends outside of the class.
- Relatable face to see around campus.
- Helped me figure out where everything was.
- I mean it was only one hour in the day, so it's not like I really knew (the peer educator)

Of these student responses, five were positive and one was negative.

RQ#2: CHP Engagement on Campus Results

RQ#2: CHP Survey Data

The CHP mean scores were 3.5 (5-point scale) on the Peer Educator Survey, and 4.10 in the Final Course Evaluation. In comparison the Control Class results were 3.71 (see Table 6).

Table 6: Q#43, Engagement on Campus, CHP Results

CHP PEER EDUCATOR SURVEY	CHP FINAL COURSE EVALUATION	CHP CONTROL CLASS
3.50	4.0	3.71

Continuing the trend, the Peer Educator Survey is observed as the lowest score across the board, lower again than the control class and the Final Course Evaluation scores. In the follow-up question for the Peer Educator Survey, students were asked to rate the degree of impact on attending events: *To what degree did having a peer educator in the class make it more comfortable for you to attend future campus/community events*: Large extent = 2, Moderate amount = 9, Small Extent = 3, Not At All = 0.

RQ#2: CHP Peer Educator Survey Responses

In the theme of engagement, two student responses were provided:

- Made you feel comfortable about stepping out of comfort zone and being more active on campus.
- Helpful to have the extra help getting caught up once a week.

RQ#2 Quantitative Results: Engagement at Mandatory Events

In order to determine if peer educators made a difference in getting students to attend mandatory events, the attendance was recorded for three specific events. Beer, Booze, and Books was the first mandatory event in the auditorium, which was a presentation given by a professional speaker. The session covered education around the consumption of alcohol and being a responsible student, whether drinking or not drinking. The second event, Sexual Health and Wellness, was a presentation that also took place in the auditorium. This session was given by the Title IX Coordinator, and the Director of the Health and Counseling Center. This event covered how to communicate with a partner, make good choices, what consent is, and what resources are available on campus. Both sessions took place in the auditorium for all sections of FSUS. There were two showings, one at 11 AM, and one at 7:30 PM.

For both the Beer, Booze, and Books and Sexual Health and Wellness events, a planned time was set where the peer educators were to meet up with the class and attend the event with them. Although the student was required to attend the event itself, attending with a peer educator was presented as an option to the students and was not required. The expectation was that students might feel more comfortable attending the event with a peer, and was meant to bolster participation in the events. Although both peer educators met at the designated place each time, not one student chose to participate for either presentation.

The third event was a Program Change Fair. This event was exclusively for Retention and Student Success (R&SS) students. The purpose of this event was to help students meet the faculty from the program in which they ultimately wish to be admitted. The students in R&SS are conditionally admitted to the University while they complete courses to make them academically eligible in their chosen major. When students become academically eligible, they can then make a program change into that area. This event served to acquaint students with the

faculty and staff contacts they would need to make that change. Peer educators assisted with this event by being available to guide students to the correct table and answer student questions.

The intent of measuring the attendance at these events was to determine whether going to the event with the peer educator, in the case of the Beer, Booze, & Books, and Sexual Health & Wellness presentations, would bolster participation. Because not one student attended with a peer educator, this could not be measured. What follows here is a comparison between the control and peer educator class for informational purposes, which not surprisingly had mixed results.

When comparing the CHP control class and peer educator class, the peer educator class had higher attendance at Beer, Booze, and Books (96% vs. 68%) and the Sexual Health and Wellness (96% vs. 92%) presentation. However, at the third event, the Program Change Fair, attendance was lower (60% vs. 76%) from the peer educator class. When comparing the CET control class and peer educator class, the peer educator class also had higher attendance for two events: The Sexual Health & Wellness presentation (88% vs. 67%) and the Program Change Fair (50% vs. 33%). However, at the third event, the Beer, Booze, and Books presentation, attendance was lower (75% vs. 78%) in the peer educator class (see Table 7x).

Table 7: Student Engagement in Required Events

	GNST - CHP MAJORS		GNST - CET MAJORS	
	CONTROL GRP	PEER EDUCATOR	CONTROL GRP	PEER EDUCATOR
Attendance at Mandatory Events				
Beer, Booze & Books	68%	96%	78%	75%
Sexual Health & Wellness	92%	96%	67%	88%
Program Change Fair	76%	60%	33%	50%

Analysis of Research Question #2: Engagement on Campus

In reviewing both the CET and CHP data in terms of a student's ability to engage, the lowest scores again came from the classes with the peer educator. These data indicate that the students in the peer educator classes may not feel as confident in their ability to engage in campus events as the control class did. It also may be important to note that the mean score for the Final Course Evaluation in all 100 sections of FSUS was higher (Q43) 3.94 than the peer educator sections as well. This means that the peer educator class scores for engagement (CET score 3.64, and CHP score 3.50) were not only lower than the control class they were compared to, but also to all other sections of FSUS combined (3.94).

The impact of the peer educator on the students' ability to engage can best be viewed by looking at the combined results of the two classes. Of the respondents, 44% said they were impacted a "Moderate Amount" by the peer educator in both classes. Since the students did not attend any of the events with a peer educator as planned, the attendance data of the required events is inconclusive.

The qualitative data was helpful in interpreting some of the individual student experiences. For example, one student stated that the peer educator "made you feel comfortable about stepping out of (your) comfort zone and being more active on campus." Another student stated that the peer educator can "help you get involved." These responses provide a more complete picture of what some of the students experienced and indicate that in some cases, having the assistance of a peer educator was helpful.

Research Question 3: What did the peer educators see as their contribution to the class?

In the last week of the semester, both peer educators were interviewed by a staff member in the Faculty Center for Teaching and Learning. They answered a series of twelve questions

(see Appendix E). The results pertaining to this research question were gathered from the interview transcripts.

RQ#3: Results and Analysis – Peer Educator Contribution to Class

Responses from the peer educator interviews included a perception that both peer educators felt that hand-on activities were some of the most valuable parts of the student experience in FSUS. In addition, both felt they were well prepared for the role because they had taken the class the previous year and had been through the freshman experience at the same institution. The CET peer educator mentioned being surprised about getting phone calls and texts from students outside of class. This educator enjoyed the additional interaction with students.

A review of the interview transcripts also indicates that the peer educators felt comfortable in their role and felt most useful when they were assisting or adding value in the classroom. This perception may largely be because this is where they had most of their interaction with students, given the lack of participation in the offered meet and greet events facilitated by the peer educator.

Research Question 4: What did the peer educators see as challenges?

RQ#4: Results and Analysis – Peer Educator Challenges

Some of the interview responses from the CET peer educator indicated that he would have liked a more active role in the classroom and more time with the instructor to prepare. Both teams met one hour a week, but this peer educator felt more time would have been beneficial. The CHP peer educator felt well prepared and did not express this sentiment. The CHP peer educator expressed being surprised that students did not take advantage of the help sessions or extra credit and found a hard time understanding why they did not. Finally, both peer educators mentioned help sessions as being “least valuable” or “unexpected” because students did not

utilize them. Both experienced at least three sessions where not one student attended. This was frustrating to the peer educators.

The analysis shows that the old adage holds true, “students don’t do optional.” In designing the peer educator experience, the instructors thought students would participate because it was their opportunity to be with a peer who knew the ropes, but this did not hold true, and the presence of the peer educator did not bolster participation in any way. The frustration expressed on the part of the CET peer educator indicates that it would make sense to define roles more clearly up front. Initially, there was no intent to have the peer educators take a more active role in the classroom, other than participating in discussion and providing examples. Thus, at least for the CET peer educator, it would seem that more emphasis here may have been needed.

Research Question 5: What did the peer educators gain from the experience?

RQ#5: Results and Analysis – Peer Educator Gains

The CET student reflected on the favorite aspect of being a peer educator:

Probably the relationship with the students...knowing that I’m someone that they put trust in to give them a good answer and lead them down the right path, and knowing that I’m going to make a positive difference in their life and help them get towards their ultimate goal of achieving a degree with good standing with the university and good standing with future employers. That’s huge knowing that I’m doing something here other than just working towards something for myself. Being part of something bigger, I guess you could say.

When asked about the experience of being a peer educator, the CHP student said:

I really liked the position. It allowed me to engage with other people and learn how to talk to them, because in my profession – I’m going to have to learn how to talk to different people and learn how to understand them, especially with diverse cultures. I’m going to have to understand where they are coming from, so it really helped me get ahead – some experience of how other people can react to certain situations and how to talk and communicate.

The only caution mentioned by the peer educator when asked about becoming a peer educator was to make sure you have the time devoted in your schedule to do so.

In analyzing the comments above, it becomes clear that there were significant benefits for the peer educators in the experience. They were able to see how their role assisted students and how the experience could be beneficial moving forward.

Research Question 6: What impact did the peer educator have on a student's overall performance?

To examine this research question, data were collected on grades, persistence, and program changes, as well as probation and dismissal rates. These data were expected to provide an overall picture of how each class of students performed academically.

RQ#6: Quantitative Results: Impact of GPA on Persistence & Success

The classes with the highest and lowest average high school GPA both happened to be College of Engineering (CET) students. The class with the lowest average high school GPA was the CET control class. These students performed the worst in terms of persistence (50%), had the highest percentage of classes with a DFW grade (33%), and the lowest number of program changes (22%). DFW stands for grades of a D, F, or a W, which stands for withdraw. The percentage measures the rate at which a group of students falls into these categories. Ten students from this CET control class were dismissed from the University because of low grades, with two later being readmitted, and one additional student on academic probation. This accounts for 61% or 11/18 of the students (see Table 8).

Table 8: Quantitative Results of GPA, Persistence, and Success

	CHP MAJORS		CET MAJORS	
	CONTROL GRP	PEER EDUCATOR	CONTROL GRP	PEER EDUCATOR
# in Cohort (n)	25	25	18	24
Course Grades				
% DFW	20%	20%	33%	25%
Mean HS GPA	2.78	2.78	2.63	2.88
Probation / Dismissed (GPA <2.0)	24%	20%	61%	46%
Persistence - Fall-spring	92%	80%	50%	83%
Program Changes After One Semester	36%	33%	22%	42%

In contrast, the CET peer educator class had the highest average high school GPA and performed much better in terms of persistence (83%), a lower percentage of DFW grades (25%), and more program changes (42%). Ten students processed program changes, four were dismissed from the University because of low grades, and one was later readmitted. However, seven continuing students were placed on academic probation.

Within the College of Health Professions (CHP) sections, the students' persistence was higher (92%) in the control class than the peer educator class (80%), although both numbers are considered above average when compared to institutional retention data. The average high school GPA in both the control and peer educator class were the same at 2.78.

Analysis of Research Question #6: Impact on Student Performance

Given the sample size, one cannot ascertain correlation, but instead look to see if trends are consistent across the two peer educator groups. The percentage of students placed on probation or dismissed from the University was lower in both of the peer educator classes, but these trends do not hold true across the category of persistence. The CHP students had higher persistence rates in the control class, while the CET students had higher persistence rates in the

peer educator group. This same pattern held true for program changes. The CHP control group processed more program changes (36% vs. 33%), whereas the CET peer educator group processed a higher percentage of program changes (42% vs. 22%).

Looking at student performance measures, one might question whether a better predictor of success might be high school GPA, given that the groups with GPAs of 2.78 or above were more successful in terms of persistence and ability to process a program change. Each also had lower probation and dismissal rates and a lower percentage of failing. Controlling for a student's high school GPA would be a useful consideration in future research related to peer educators.

Analysis of Research Question #1 and #2: Adaptation to College Life Results

Research Question 1: How did the peer educator impact the student's ability to adapt?

Research Question 2: How did the peer educator impact student engagement?

When combining the results of the two questions together, the research indicates that in both cases the class with the peer educator had the lowest mean scores for ability to adapt, and engagement on campus, when compared to the control class. This would suggest that the peer educator did not positively impact these two areas for students. When asked specifically about peer educator impact, the scores of the two classes combined revealed that students were "Somewhat" or "Moderately" impacted on the measures of ability to adapt, and engagement on campus.

In this area, the qualitative data can provide a more complete story. Most of the qualitative data suggest positive experiences with a peer educator. These ranged from comments where students talked about the peer educator helping them adjust, getting them out of their comfort zone, and helping them to get involved. It would seem to indicate in these cases that

there were instances where the peer educator was helpful to specific students, but these comments came from no more than six students per class.

Analysis of Research Question #3, #4, and #5

Research Question 3: What did the peer educators see as their contribution to the class?

Research Question 4: What did the peer educators see as challenges?

Research Question 5: What did the peer educators gain from the experience?

When reviewing the peer educator research questions (#3-5) related to the interviews, one can gain perspective on the value of this experience. The peer educators overall believed that this job had a positive impact on their lives, citing both the future benefits of working with others, and the opportunity to help the students adapt and adjust. Further, they felt it was beneficial to have completed the FSUS class the past fall, so they had real experiences that they could share with students.

Both were baffled by the lack of interest the students showed in either receiving extra help with homework outside class, or attending events with them. This was by far the most frustrating part of their experience. This may have led to some of the feelings expressed where the CET peer educator felt he could have done more. If the students had given the optional parts of the program a chance, peer educators would have had much more frequent and meaningful contact with students.

Summary

The purpose of this chapter was to share the results of the peer educator survey, the peer educator interview, and the collected student performance measures and analyze their significance. Although the initial research hypothesis was that peer educators would positively

impact both the ability of a student to adapt and engage, the results were largely mixed with no identifiable pattern. There is evidence, however, based on some of the narrative comments, that the peer educator helped some of the students.

Peer educators were able to identify positive experiences from their role, while also acknowledging the challenges of getting students to participate. The in-class discussions were highlighted as an area where peer educators felt they made a difference.

Additional insight related to the results and analysis of this study will be discussed in Chapter 5.

CHAPTER 5: SUMMARY OF FINDINGS AND IMPLICATIONS

Introduction

This chapter presents a summary of the findings of this research study examining the effects of the presence of a peer educator in a first-semester FYE seminar class. This chapter also includes a discussion of the limitations of the study, reflections on the study, and implications for future research.

Summary of Findings

Despite indicators from previous research that peer educators would have a clear positive impact on a student's ability to adapt and engage in college, the quantitative measures gathered in this study do not support this theory. The students in the control class without a peer educator out-paced the classes with a peer educator in both ability to adapt to college and engagement in outside activities. In contrast, the qualitative data indicates individual students were impacted positively by the presence of a peer educator, although not in significant numbers.

The data from this study also reinforced the notion that students "don't do optional," even with a peer educator encouraging involvement. Since many of the activities that included the peer educators were based on optional activities outside class, these activities greatly impacted the amount of time that peer educators spent with the students, since fewer than 10% of the students participated at any time. Thus, the time that the peer educators spent with students was primarily in the class sessions. Otherwise their contact occurred before or after class. Because the class was a one credit class, meeting fifty minutes a week, the limited amount of class time

seemed to be an additional detriment to the peer educators making progress in helping the students transition to college life.

Both of the instructors initially thought that the students would see the optional opportunities to interact with peer educators as positive and worthwhile. Instead the students viewed them as just another item to be added to their busy lives, and the optional planned times with a peer educator were not used by the students.

The peer educators were disappointed by the lack of interaction with the students. Because both students had been successful previously in their FSUS classes, they could not understand why the students were not taking advantage of the extra help that they were offering. Put in the same situation, both reported that they would have gladly used this opportunity.

Alternatively, the peer educators reported a definite benefit in helping individual students and were able to see the value in this contribution. A common frustration expressed was their wish of having a more widespread impact with students.

The initial hope of this research was that at this institution, it would help conditionally admitted students completing developmental education to adapt to college life, and engage in activities, and events on campus. Hence, these factors would contribute to the students making a successful transition. For this one credit, first-semester seminar course, the research findings indicated that the peer educator did not make a significant impact on the student experience to warrant continuation of the practice of using peer educators at this institution.

Limitations of the Study

One limitation of this research study could be the scope of the study because it focuses entirely on conditionally admitted students in two sections of the FYE course. Conditionally admitted students consist of a total of 14% of the FSUS sections (FSU Banner Gold, 2015). At

the institution where the study took place, the majority of the FYE sections consist of students who are already associated with an academic program (86%) — not conditionally admitted students, and thus, the effect of a peer educator may have been different with these populations (FSU Banner Gold, 2015).

In addition, many colleges, such as community colleges, do not define under-prepared students in the same way. While many of these students may have to complete developmental education classes to be accepted into degree programs or continue with their education, they are not conditionally admitted. Again, the effect of a peer educator with these populations may also be different.

A second limitation of the study is that it examines only two classes with a peer educator, and compares these to two sections without peer educators. This small sample size also makes it difficult to make assumptions about a broader population.

Another potential limitation of the study is the role of the researcher—being one of the instructors of the FYE course—within the study and the potential effects of this involvement. In the study, the researcher taught the CET peer educator and the CET control class. This involvement as an instructor, while not affecting the students' involvement in the course activities or progress in the course, could indicate a bias.

Finally, the research is bound by the place and timeframe in which it took place. The institution was a rural, four-year university that grants associate, bachelor's, and graduate degrees in Big Rapids, Michigan.

Reflections on the Research Study

The dual role of being both a researcher and participant in the study may have created some limitations, but it also provided a rich opportunity for additional reflection on the study and its features. These reflections provide suggestions for future research.

First, given the one-hour credit structure of the FSUS class, it is often difficult for instructors to develop relationships with students quickly. This is true for both the instructor and the peer educator. One fifty-minute class session per week challenged the instructors' ability to develop an effective faculty relationship with the students; it also challenged the peer educators' ability to establish a peer-to-peer relationship as well.

For the students, having a peer educator in the class with an instructor allows more opportunity to get questions answered and receive additional assistance. For the instructor, it actually makes the classroom environment more complicated, because a third party is now always present. While the student may have two people to approach with questions, our experience demonstrated that most students only reached out to one individual. It was an "either/or" situation; students either sought out the instructor or the peer educator. The students would typically default to the instructor in the classroom, likely because the instructor was seen as the authority in that environment. However, given the comments received in the study, we know that some students did make contact with peer educators outside of class, although it was not common.

The peer educators' involvement in the classes was another aspect of this complex student/faculty relationship. When designing the study, specific consideration was given to the role of the peer educator. The institution where the study took place is known as a teaching institution, so having a teaching assistant was not an option or even a wanted consideration. This

is because any instructors in the classroom have a minimum of a Master's Degree and no graduate or teaching assistants are given responsibilities of a teaching function. The quality of instruction for students is of primary importance. Giving a peer educator more involvement in the classroom was possible in terms of sharing personal experiences, but if any part of the teaching function was relinquished, the student was then a teaching assistant, not a peer educator. As stated previously, because the class met only once a week, there were few opportunities for the peer educator to be involved. To bridge that gap, the instructors designed time that was intended for peer educators to interact with students at events or help sessions, which were not well attended. Therefore, if consistent contact was made in a class that met more than once a week, this could possibly have had a more positive impact.

Additionally, the gender of the peer educator could have been a factor in this research study. First, in both classes the peer educator was the same gender as the majority of the students in the class. The COHP classes were primarily female, as was their peer educator. The CET classes were primarily male, as was their peer educator.

Gender may also have been a factor in the way the students performed in the two classes. The classes with the lowest DFW and probation and dismissal rates were in the COHP classes (peer educator and control), indicating that they are academically stronger. DFW stands for grades of a D, F, or a W, which stands for withdraw. The percentage measures the rate at which a group of students falls into these categories. Is there some factor that makes COHP students academically stronger students than CET students? Some of these reflections led to some considerations of future research.

Implications for Future Research

These reflections have prompted the researcher to recommend future alternatives to the FYE courses at the target institution. In addition, they provide significant insight into areas for future research.

A. Role of Peer Educators. As discussed above, the role of the peer educators was limited — and constrained — by the study parameters. Future studies could examine slightly different roles, such as peer mentors or teaching assistants, on similar measures of engagement and success.

B. Extended FYE courses. As indicated in the section above, the limited contact of the one-credit course may have affected the success of the peer educator role. Useful studies might examine different FYE structures and the role of peer educators within them. Two- or three-credit FYE classes, or full-year courses using a peer educator might provide more positive, valuable outcomes. These structures would also allow the peer educator to spend more time with the students in the class itself.

C. Sample size. Given the size of this sample, a study with multiple sections of an FYE class may also provide valuable input. Multiple sections provide additional insight into the dynamics of different instructors, peer educators, and students.

D. Gender of the Peer Educator. In this study, the gender of the peer educator most closely matched the majority of the students in the class. According to Arts and Welsch (2014) the gender of a teacher has an impact on student performance, where “male and female teachers are more effective when teaching their own gender” (as cited in Geerlings, Cole, Batt, & Lynch, 2016). Thus, it would seem likely these effects may extend to similar situations involving peer educators. However, what about those students in the class whose gender was not represented?

Would it be beneficial to have two peer educators of different genders and allow the students to self-select with whom they interact?

E. Gender of the Students. In this study, the CET students were primarily male and the CHP students were primarily female. Academic performance indicators of low DFW and probation and dismissal rates show that the CHP class (both the control and peer educator group) outperformed in these measures. What role does this observation play in future research on gender, performance, and field of study? Is it due to incoming GPA, or expectations for a student going into a particular field of study, or other factors?

Conclusion

While the results of this study did not support the initial hypotheses, they provide valuable insight into what was not effective. Peer educators may be able to impact the student experience in terms of adapting and engaging on campus for some FYE classes, but in a first-semester, one-credit, developmental education class like this one, they are not. Some of the challenges were the emphasis on optional outside events that students did not attend, and the design of the class being fifty minutes once a week. It just was not enough time to make the needed connections with the peer educator, in addition to the instructor.

Future considerations for an FYE program such as this one would be changing the outside contact with peer educators from optional to required, while modifying the amount of time the class meets during the week. Finding the right combination of peer assistance for an FYE course is a challenge, but is often the tipping point for a successful program. In the end, what makes the quest worthwhile is seeing a student's face when they make a successful transition and complete the journey toward their desired career.

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APPENDIX A: CHP & CET COMPARISON — STATUS, GRADES,
ATTENDANCE, PERSISTENCE

	GNST - CHP MAJORS		GNST - CET MAJORS	
	CONTROL GRP	PEER EDUCATOR	CONTROL GRP	PEER EDUCATOR
# in Cohort (n)	25	25	18	24
Course Grades				
% DFW	20%	20%	33%	25%
Mean HS GPA	2.78	2.78	2.63	2.88
Probation / Dismissed (GPA <2.0)	24%	20%	61%	46%
Persistence - Fall-spring	92%	80%	50%	83%
Program Changes After One Semester	36%	33%	22%	42%
Attendance at Mandatory Events				
Beer, Booze & Books	68%	96%	78%	75%
Sexual Health & Wellness	92%	96%	67%	88%
Program Change Fair	76%	60%	33%	50%

APPENDIX B: CET PEER EDUCATOR SURVEY & RESULTS

1. Please indicate what activities you participated in with your peer educator and their level of helpfulness to you in your FSUS class. **Circle one answer per line.**

	Did not participate	Very Helpful	Moderately Helpful	Not Helpful	NR
Campus Tour	3	6	9	0	2
BlackBoard / Technology Assistance	6	7	6	0	1
Homework Assignment Assistance	7	3	9	0	1
Meeting to attend Beer Booze, and Books Presentation	3	8	8	1	0
Meeting to attend Sexual Health and Wellness Presentation	4	4	10	2	0

2. Was your transition from high school/home to college impacted by having a peer educator in your FSUS class?

Yes	No	NR
6	13	1

If your answer was Yes go to question 3. If you answer was No go to question 4.

3. How was your transition from high school/home to college impacted by having a peer educator in your FSUS class?

- Help finding things around campus.
- You have someone who has been attending Ferris for over a year.
- Helped guide the way to other door and help out with small college problems.
- Helped us learn about Ferris and helped us adjust.
- Helped me figure out where everything was.
- Pretty rough.
- A peer educator made it a smoother transition.

4. In what additional ways could the peer educator have assisted in your transition from high school/home to college?

- I'm not sure.
- Didn't really care about peer educator. No impact on me.
- None.
- Nothing.

- By explaining the difference in the course load.
- I mean it was only one hour in the day so it's not like I really knew him.
- I do not know since the transition was already very smooth.
- I don't know, was just personally easy for me I was the shy type.
- None, I found it pretty easy to transition.
- Honestly I cannot think any other way that I would need help they did an amazing job the first time.
- Classwork.
- She was fantastic.
- They help you get involved.

5. A. Participation in an FSU Seminar class (FSUS 100) improved my ability to adapt to college life and the Ferris community. Please indicate your level of agreement:

Strongly Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree
4	9	5	0	2

B. To what degree did having a peer educator in this class improve your ability to adapt to college life and the Ferris community.

To a Large Extent	A Moderate Amount	To a Small Extent	Not At All
2	11	4	3

6. A. Because of participation in an FSU Seminar class (FSUS 100) I will be more likely to attend future campus/community events. Please indicate your level of agreement:

Strongly Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree
3	7	8	1	1

B. To what degree did having a peer educator in the class make it more comfortable for you to attend future campus/community events?

To a Large Extent	A Moderate Amount	To a Small Extent	Not At All
3	6	7	4

7. What did you find most valuable about your experience of having a peer educator in your FSUS class?

- I'm not sure.

- No impact.
- Relatable face to see around campus.
- Nothing, this class was pointless and a waste of time and money.
- He helped out the teacher.
- He was cool.
- Nice to have a conversation with.
- That it's not a teacher helping us with our work.
- I didn't really looking at him for help just a kid asking to help out.
- He helped out.
- The projects we did it was nice that he gave examples.
- What I found most valuable is when you really needed help they were there to answer any questions.
- Give tips on future classes and becoming academically successful in the future.
- He is still in college.
- He helped us adjust and taught us where things were.
- Showed me how everything worked. She was very educated and helped me a lot.
- We learned a lot about what Ferris is about, and things to get involved in.
- We became friends outside of the class.

APPENDIX C: CHP PEER EDUCATOR SURVEY & RESULTS

1. Please indicate what activities you participated in with your peer educator and their level of helpfulness to you in your FSUS class. **Circle one answer per line.**

	Did not participate	Very Helpful	Moderately Helpful	Not Helpful	NR
Campus Tour	6	6	2	0	0
BlackBoard / Technology Assistance	1	5	8	0	0
Homework Assignment Assistance	3	6	4	0	1
Meeting to attend Beer Booze, and Books Presentation	1	4	7	1	0
Meeting to attend Sexual Health and Wellness Presentation	1	5	6	2	0

2. Was your transition from high school/home to college impacted by having a peer educator in your FSUS class?

Yes	No	NR
7	7	0

If your answer was Yes go to question 3. If you answer was No go to question 4.

3. How was your transition from high school/home to college impacted by having a peer educator in your FSUS class?

- This course helped me balance my time management, and organization skills. It impacted me because it taught me to step out of my comfort zone as well.
- She gave me information that I wouldn't have known and helped me very well.
- By answering questions that I had and helping me with things that I needed help with.
- The transition was different because
- Because it motivated me and she was in my shoes.
- Just missing home.
- She motivated me to be successful and work hard.

4. In what additional ways could the peer educator have assisted in your transition from high school/home to college?

- She could have helped by giving more examples of her personal experience.
- Doing a great job. Can't really help with that.
- Helping me more.
- She was great I just did not need that much help.

5. A. Participation in an FSU Seminar class (FSUS 100) improved my ability to adapt to college life and the Ferris community. Please indicate your level of agreement:

Strongly Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree
4	3	4	2	1

- B. To what degree did having a peer educator in this class improve your ability to adapt to college life and the Ferris community.

To a Large Extent	A Moderate Amount	To a Small Extent	Not At All
4	4	4	1

6. A. Because of participation in an FSU Seminar class (FSUS 100) I will be more likely to attend future campus/community events. Please indicate your level of agreement:

Strongly Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree
4	4	4	1	1

- B. To what degree did having a peer educator in the class make it more comfortable for you to attend future campus/community events?

To a Large Extent	A Moderate Amount	To a Small Extent	Not At All
2	9	3	0

7. What did you find most valuable about your experience of having a peer educator in your FSUS class?

- The fact that the instructor gave helpful advice and tips every week, and made you feel comfortable about stepping out of comfort zone and being more active on campus.
- Teaching me how to use time management because that's a big part of college.
- When asking questions, they were very beneficial.
- Having her there to help with assignments.
- Was very helpful.
- Their very helpful.
- Being able to go to someone if I need to.
- I didn't.
- It was very helpful.
- Helpful to have the extra help getting caught up once a week.
- Having someone that has been to college before and their personal experiences.
- She helped adapting to college a lot easier.

APPENDIX D: QUESTIONS FROM FSU SEMINAR FINAL COURSE
EVALUATION, FALL 2015

Fill-in the corresponding space to indicate your level of agreement with statements 1-50 using the following scale:

5	4	3	2	1
Strongly Agree	Slightly Agree	Neutral	Slightly Disagree	Strongly Disagree

Participation in an FSU Seminar improved my ability to:

1. recognize where to get help at the library (FLITE).
2. adapt to college life and the Ferris community.
3. organize my time to meet my responsibilities.
4. understand that diversity comes in many forms.

My FSU Seminar course helped me learn how to use campus technology tools like:

5. MyFSU
6. MyDegree
7. FerrisConnect
8. MAP-Works

My FSU Seminar course helped me learn how to:

9. understand and avoid procrastination.
10. create a weekly study schedule.
11. use a planner and to-do list.
12. set realistic goals.
13. apply study skills strategies to use in my academic courses
14. register for future classes.
15. interact with faculty.
16. interact with my academic advisor.
17. adjusting my study strategies to the way a professor is teaching.

The FSU Seminar course helped me learn where to go to:

18. receive academic assistance with my classes.

19. join a student organization.
20. receive personal counseling.
21. receive education and career counseling
22. receive disability services.
23. access personal health and wellness support.
24. find cultural events and activities.

The FSU Seminar increased my understanding of:

25. academic honesty.
26. differences and similarities among the members of the diverse Ferris community.
27. the FSU student dignity and anti-harassment policy.
28. test taking strategies.
29. the FSU core values (collaboration, diversity, ethical community, excellence, learning, opportunity).
30. the university's general education requirements.
31. appropriate student conduct (Code of Student Community Standards).

The FSU Seminar increased my understanding of wellness issues such as:

32. the impact of drug and alcohol use.
33. sexual health and responsibility.
34. campus safety.

The FSU Seminar gave me better financial awareness by assisting my understanding of:

35. financial aid.
36. basic budgeting.
37. ways to minimize student debt.
38. Satisfactory Academic Progress (SAP).

Because of my FSUS Seminar:

- 39. I know it is important to regularly check my Ferris e-mail.
- 40. I can describe how to use the library's (FLITE) services.
- 41. I understand appropriate classroom etiquette.
- 42. I understand appropriate audience (in public) etiquette.
- 43. I will be more likely to attend future campus/community events.

The instructor of this course:

- 44. used a variety of teaching methods.
- 45. promoted meaningful class discussion.
- 46. assigned meaningful homework/activities that covered the major objectives of this class.
- 47. was enthusiastic and displayed an interest in students and their learning.
- 48. I would take another course with this instructor.

Overall assessment and future plans

- 49. Overall, to what extent do you agree that your FSU Seminar course prepared you for future success at Ferris?
- 50. I plan on returning to Ferris next semester.

APPENDIX E: PEER EDUCATOR INTERVIEW QUESTIONS

1. Out of the tasks and activities in which you participated in the FSUS class with students, what do you think was most valuable to you?
2. Out of the tasks and activities in which you participated in the FSUS class with students, what do you think was most valuable to the students?
3. Out of the tasks and activities in which you participated in the FSUS class with students, what do you think was least valuable to you?
4. Out of the tasks and activities in which you participated in the FSUS class with students, what do you think was least valuable to the students?
5. In reflecting on your training for the peer educator position throughout the semester, where did you feel you were well trained?
6. In reflecting on your training for the peer educator position, where did you feel you could have used more training?
7. What was unexpected about being a peer educator?
8. What was your favorite aspect of being a peer educator?
9. What was your least favorite aspect of being a peer educator?
10. If someone asked you if they should be a peer educator, what would you say?
11. How did your contact with the instructor impact your ability as a peer educator?
12. How would you describe the environment in the classroom throughout the semester?

APPENDIX F: IRB APPROVAL, FERRIS STATE UNIVERSITY

FERRIS STATE UNIVERSITY

Institutional Review Board for Human Subjects in Research

Office of Academic Research, 220 Ferris Drive, PHR 308 - Big Rapids, MI 49307

Date: June 10, 2015

To: Sandra Balkema and Brooke Moore

From: Dr. Joshua Lotoczky, Interim IRB Chair

Re: IRB Application #150509 (*Examining the Impact of Peer Educators in a First-Year Seminar Class*)

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "*Examining the Impact of Peer Educators in a First-Year Seminar Class*" (#150509) and determined that it meets Federal Regulations Expedited-category 2G. This approval has an expiration of one year from the date of this letter. As such, you may collect data according to the procedures outlined in your application until June 10, 2016. Should additional time be needed to conduct your approved study, a request for extension must be submitted to the IRB a month prior to its expiration.

Your protocol has been assigned project number (#150509), which you should refer to in future correspondence involving this same research procedure. Approval mandates that you follow all University policy and procedures, in addition to applicable governmental regulations. Approval applies only to the activities described in the protocol submission; should revisions need to be made, all materials must be approved by the IRB prior to initiation. In addition, the IRB must be made aware of any serious and unexpected and/or unanticipated adverse events as well as complaints and non-compliance issues.

Understand that informed consent is a process beginning with a description of the study and participant rights with assurance of participant understanding, followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document and investigators maintain consent records for a minimum of three years.

As mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) the IRB requires submission of annual reviews during the life of the research project and a Final Report Form upon study completion. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,



Ferris State University Institutional Review Board
Office of Academic Research, Academic Affairs

Version 1.2015