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ASSESSMENT OF A COMMUNITY COLLEGE'S FIRST YEAR EXPERIENCE
COURSE: ANALYSIS OF A STUDENT RETENTION AND SUCCESS STRATEGY

by

Mark Lanting

Dissertation

Submitted to the Faculty of

Olivet Nazarene University

School of Graduate and Continuing Studies

in Partial Fulfillment of the Requirements for

the Degree of

Doctor of Education

in

Ethical Leadership


May 2014

ASSESSMENT OF A COMMUNITY COLLEGE'S FIRST YEAR EXPERIENCE
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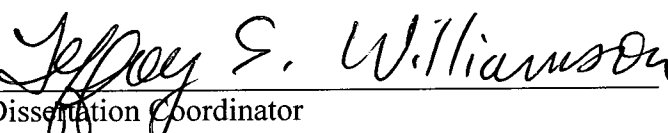
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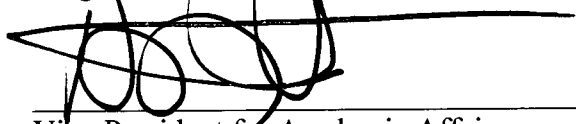
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DEDICATION

I would like to dedicate this dissertation to my family, who made great sacrifices and provided tremendous support throughout the long process. Abbey, Alistair, and Jared: I love you very much, and please know that the work done here was accomplished because of the energy and encouragement I receive from each of you.

ABSTRACT

First Year College Experience is a face-to-face three-credit college course that provided the subject for the current research. The current research was conducted at a small, Midwest community college. This course expanded the college's existing one-credit hour course called College Success Skills. In the hope of amplifying the impact of the existing course, several learning modules and objectives were designed. The current quantitative, non-experimental research demonstrated that students passing the First Year College Experience course tended to have higher GPAs than students who did not take the course.

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CHAPTER I

INTRODUCTION

At the midwestern community college featured in this study, most students wishing to take college-level courses take the Computer Adaptive Placement Assessment and Support System (COMPASS). The institution uses COMPASS as an entrance and placement assessment. This community college does not utilize other measures for admission, though some students' placements were predicated on the students' ACT scores. COMPASS assesses students' abilities in reading, writing, and mathematics. The midwestern community college featured in this study, which subsequently will be referred to as Midwestern Community College (MWCC), is not unique. Community college admissions departments across the nation use students' COMPASS scores to place incoming college freshmen either in appropriate college-level courses or in pre-collegiate noncredit developmental courses.

Based on the COMPASS results at MWCC, 93% of new college students enrolling were required to take one or more developmental classes in the 2011-2012 school year. In terms of the subsequent developmental course placements, 45% needed reading, 48% needed developmental writing and 91% needed developmental mathematics. Data generated from MWCC's Office of Institutional Research (OIR) for the 2011- 2012 school year showed that only 7% of entering freshman required no developmental coursework (Kankakee Community College, 2011).

MWCC addressed the lack of preparedness exhibited by incoming freshmen by devising retention and success interventions. The advising department focused its efforts on meeting the college's commitment to improving student orientation. For their retention and success strategies, the Health Careers Division worked with the mathematics and writing faculty to contextualize course work. Contextualization means that for college math courses, health careers students will be working with practical issues like dosages and other health-related math rather than more abstract variables that may or may not be connected to health careers. The Financial Aid Department committed its efforts to publishing resources and presentations that could help students understand their individual responsibilities and timelines.

The intervention collaboratively designed by the Humanities and Social Sciences (HSS) Division and the Retention Committee was a first year experience course, which provided both the focus and the framework for the current research. The Humanities and Social Science Division, along with the Retention Committee, designed a three-credit hour First Year College Experience course (FYCE). This new course replaced the college's existing one-credit hour course called College Success Skills.

The intent of the one-credit hour College Success Skills course was to help students acquire study skills and greater awareness of student support services such as tutoring and the Learning Resource Center. The course was also designed to help students become more motivated and self-aware. While the college's original College Success Skills course appeared sound, the HSS Division and Retention Committee suspected that the one-credit hour design was insufficient as students were not required to invest much time in the classroom, nor were they required to engage in meaningful projects to prepare

for college life. Furthermore, because the class was offered only in the online or hybrid learning environments, many faculty members believed College Success Skills was failing to meet the needs of all students who stood to benefit from the course. Faculty believed that having more time in the classroom interacting with the professor and fellow students would be of a greater benefit than the flexibility of online or hybrid classes.

In the hope of amplifying the impact of the existing course, the HSS Division added several learning modules and objectives and designed a face-to-face three-credit hour course called First Year College Experience. The FYCE course objectives included having learners gain self-awareness of their strengths and weaknesses as college students. Students taking the FYCE course were expected to work on improving self-management and critical thinking skills relating to the college learning process. Other goals for students taking this course were improved cultural competencies and cultural skills. Students taking the FYCE course were taught a variety of study skill strategies for college learning. Students were expected to develop information literacy skills and develop awareness of financial challenges faced by community college students. The course was also designed to help students create a master academic plan (MAP). The MAP is a tool used to ensure that students take the courses they need from one semester to the next.

The HSS Division and Retention Committee desired that the new three-credit hour FYCE course be a requirement for all developmental students. Requiring developmental students to take FYCE would mean that all students who tested below college ready in reading, math, or writing in the enrollment placement testing process would have to take FYCE. Prior to 2012, MWCC's administration had not allowed the

FYCE course to become a requirement for all students requiring developmental coursework. However, as of fall, 2012, the administration and advising departments agreed to encourage developmental students to take FYCE.

MWCC's advising department agreed that many students would need the course for a variety of reasons. MWCC's developmental courses serve as prerequisites to transfer-level courses, meaning that students in developmental writing courses could not take transfer-level English until they successfully completed the developmental writing course. Furthermore, many of the general education classes at MWCC have a prerequisite that requires students to be in college-level English courses. Therefore, on a practical level, students who test into more than one developmental course are often unable to fill their academic schedule with the 12-credit hour course load needed to meet financial aid and health insurance requirements. Furthermore, those students who have trouble finding enough classes they are qualified to take for a full load are the most likely to benefit from the curriculum of the FYCE course.

Statement of the Problem

The purpose of this research was to provide a quantitative analysis designed to determine the effectiveness of Midwestern Community College's FYCE course. The FYCE course was designed to help students who are required to take developmental coursework attain college success. College success, for the purpose of the current study, was represented by the individual student persisting, or continuing with college studies, with a minimum of 2.0 GPA and passing all classes with a grade of C or better in the semester subsequent to taking FYCE.

This study will analyze quantitative, archival student success data. To determine whether there were differences in the success rates of students who took the First Year College Success, the researcher used quasi-experimental data samples.

Research is needed to demonstrate whether the FYCE course has an influence on student success. If the course is shown to be a variable in students passing their courses and staying in college, MWCC may then require all developmental students to take the FYCE course. In a data-driven culture of assessment, MWCC must evaluate every part of its programs. Continuous Quality Improvement (CQI) informs MWCC's direction. To test and improve the quality of the community college's success and retention strategies, college faculty and administrators must synthesize relevant data to demonstrate performance indicators of specific parts of the program.

Background

Previous research suggested that many students transitioning to community colleges require developmental coursework prior to taking college-level coursework. Schacter (2008) reported that at The City University of New York, 83% of students entering its community college system were required to take developmental courses in reading, writing, or math. Schacter also mentioned that of the incoming freshmen at Normandale Community College in Bloomington, Minnesota, 75% needed to take developmental math, and close to 50% of these freshmen needed developmental writing. Administrators at El Paso Community College in El Paso, Texas discovered that 98% of their incoming students required developmental math education (Rutschow et al., 2011).

Adding to the body of research about students' needs for developmental education at community colleges, Attewell, Lavin, Domina, and Levey (2006) used data from the

1988-2000 National Education Longitudinal Study, and found that from a sample of 6879 high school graduates who enrolled in community colleges, 58% took one or more developmental courses. Bailey (2009) used national data generated from Achieving the Dream: Community Colleges Count (commonly referred to as ATD), a national initiative. Eighty three community colleges in 15 states participated and submitted data on their students' enrollment in developmental courses. Bailey reported that in mid-2008, ATD had collected information relative to 256,672 students. Using this large sample and the data associated with each student, Bailey found that 59% of college students were enrolled in at least one developmental course. Conley (2010) found that up to 80% of first-year college students at some community colleges required developmental courses. Similarly, only half of community college students complete a credential or transfer to a four-year college after six years (Hess, Schneider, Kelly, & Carey, 2009).

Alliance for Excellent Education (2011) reported that approximately 85% of current jobs and 90% of new high-paying jobs will require a workforce with at least some college experience. Supporting the necessity of post-secondary education, Carnevale (2008) predicted that by 2012, 63% of all jobs in the United States would require at least some postsecondary education or training. Altbach, Berdahl, and Gumport (2005) asserted that meeting the wide demand for higher education is an essential concern, and increased access to higher education may be the most important trend worldwide.

Students in developmental courses in community colleges typically present low success rates. Bailey, Jeong, and Cho (2010) demonstrated that only 33% of community college students requiring developmental math and 46% of community college students needing developmental reading completed their developmental course sequences within

three years. Therefore, while community colleges provide open access to higher education, developmental students might not persist to graduation. If a student does not pass developmental math, reading, or writing, that student will not meet prerequisites needed to take college-level coursework. Because of the problems connected with developmental coursework, community colleges across the nation are forming strategies to prepare high school students for the rigor of college-level coursework (Rutschow et al., 2011). To facilitate the need for higher education, interventions are necessary to help students become college-ready.

Williams, Mathur, and Gaston (2009), designed what they called My Academic Plan (MAP). The plan's intention was to help students persist through their community college courses, and achieve their academic goals. Students using MAP received personalized academic assistances based on their academic goals and academic history. In two years, 42,000 MAP plans were generated. The researchers found that students who used Map had a higher success rates in their classes then those who did not use MAP

Maye (1997) researched the effectiveness of the Hampton University bridge program. University administrators instituted Hampton's bridge program to improve the academic performance of incoming freshmen. The researcher found that no study or formal evaluation of the bridge program existed. The researcher concluded that the bridge program was falling short of institutional expectations and program improvement was needed. Tinto (1996) agreed with evaluating strategies like the summer bridge program at Hampton, invoking quality controlled early intervention as the most important strategy an institution of higher education could enact to improve student success. Nationally, there exists different approaches to bridge programs; however, in general, bridge programs

demonstrably helped prospective college students' transition to a new academic environment (Kezar, 2000).

Schaid (2001) studied COMPASS results of two groups of students in Ohio. As high school students, one group had been through Tech Prep, a college preparatory program, and the other group had no exposure to the Tech Prep program. Schaid found that because Tech Prep students took the COMPASS during their junior year of high school, students chose to take higher-level math and English courses in their senior year of high school to help prepare for college coursework. Tech Prep students retaking COMPASS for academic placement in a community college scored markedly higher on the COMPASS than the group that had no exposure to the Tech Prep program.

The El Paso Community College in El Paso, Texas collaborated with K-12 school districts to develop a comprehensive college readiness program (Rutschow et al., 2011). In response to the fact that 98% of their students needed developmental courses, El Paso Community College, with area stakeholders, launched a College Readiness Consortium. The El Paso Community College Readiness Consortium developed a multifaceted plan to help high school students prepare for college in order to avoid developmental coursework at the community college. Community College Research Center (2010) concurred that a large number of students beginning their community college experience were underprepared for college curricular expectations and therefore required developmental coursework.

Provoked by a lack of research pertaining to first year experience courses, Ellison (2010) focused on FYCE curricular needs specific to the community college setting. Ellison intended that the information gathered would improve first year experience

courses for community college students by tailoring FYCE curriculum for their needs. By focusing on what topics should be included in FYCE classes, Ellison aimed to improve the students' experience and, in turn, improve student retention. Through a study of student focus groups, Ellison ascertained the course material perceived as most relevant and important to community college students. Ranking as most important was instruction on how high school and community college are different. Also important to students was instruction on the purpose of college. Ellison also found that students desired mentoring from college personnel who could share important aspects of community college services designed to help students achieve their academic goals.

Leon (2011) engaged in research of a first year experience course designed for student athletes. The course was designed to connect students with academic advising, to help students with study and time management skills, and to help familiarize students with resources that were expected to improve student success. Leon investigated differences in groups of students who participated in first year experience courses and students who did not participate. Leon also researched whether students who participated in the first year experience course had stronger GPAs in terms following the course. Leon found that students who participated in a first year experience course earned a higher GPA while taking the first year experience course than students who were not exposed to the first year experience course.

After decades of research in college readiness, Conley (2010) provided a theoretical framework describing the attributes of a college-ready student by expounding upon four key dimensions of college and career readiness. Conley listed the dimensions of college and career readiness as key cognitive strategies, key content knowledge,

academic behaviors, and contextual skills and awareness, also known as college knowledge.

Research Questions

The purpose of this research was to provide a quantitative analysis designed to determine the effectiveness of Midwestern Community College's FYCE course. The FYCE course was designed to help students who are required to take developmental coursework attain college success. College success, for the purpose of the current study, was represented by the individual student persisting, meaning continuing with college studies with a minimum of 2.0 GPA, and passing all classes with a grade of C or better in the semester subsequent to completing FYCE. This study investigated the following research questions:

1. To what extent did developmental students who completed the First Year College Experience course achieve collegiate success?
2. To what extent did developmental students who did not complete the First Year College Experience course achieve collegiate success?
3. What are the differences in the collegiate success developmental students achieved who completed the First Year College Experience course compared to those who completed the College Success Skills course?

Description of Terms

College readiness. The amount of preparation students need to avoid developmental coursework and enroll and succeed in a college-level course at an institution of higher education (Conley, 2007).

Community College. A community college is typically a two-year associate degree granting institution of higher education. Students can take all of their general education coursework and some classes for their baccalaureate major. The community college also offers programs of vocational preparation leading to certification in a variety of fields (American Association of Community Colleges, 2012).

COMPASS assessment. Computer Adaptive Placement Assessment and Support System (COMPASS) provides assessment modules in reading, writing skills, and mathematics for postsecondary institutions to use in evaluating the skill levels and placement in either developmental or college credit math and/or English (ACT COMPASS Tests, 2011).

Continuous quality improvement (CQI). CQI is a philosophy of continual improvement of the processes designed to provide services that meet or exceed expected outcomes (Shortell, Bennett, & Byck, 1998).

Credit hour. A measure of academic credit earned for completion of a course or program of study. One semester credit hour is generally earned for 15 contact hours per term. Each contact hour is expected to require three hours of additional work outside the classroom for preparation and assignments (Illinois Board of Higher Education, 2010).

Datatel Colleague. Colleague is a database management software that consists of integrated modules to manage student academic records, financial information, and human resources records (Datatel Colleague Products, 2011).

Developmental education. Courses or services provided for the purpose of helping underprepared college students attain their academic goals (Boylan, 2002).

Grade point average (GPA). GPA is the average of a student's earned grades calculated by point values assigned to letter grades. GPA is used to determine eligibility for financial aid and eligibility for athletic programs. Student GPA is also used in admission, retention, or graduation decisions. (Illinois Board of Higher Education, 2010).

Open door institution. Open door is a term used to describe an institution of higher education that has no admissions criteria other than a high school diploma or high school diploma equivalency (Schaid, 2001).

Retention. Retention rates refer to the percentage of freshman students who return to college the following school year (Hawaii Institutional Research Office, 2003).

Persistence. This term was defined as a student who continued to be enrolled in the institution from one semester to the next. Persistence is also commonly understood to mean first-year to second-year fall retention (Fike & Fike, 2008).

Stratified sampling. Stratified sampling is a sampling technique used to help determine differences in performance and achievement between two or more groups in a population. Stratifying involves segmenting groups in a population according to similar qualities like age, race, or gender. Once the groups are segmented out, the groups can be compared to determine similarities and differences in performance and achievement (Podgurski, Masri, McCleese, Wolff, & Yang, 1999).

Bridge program. Bridge programs are intensive experiences that help students develop the knowledge and skills necessary for college success. Many bridge programs focus on college readiness in reading, writing, or math. Bridge programs also introduce students to college culture and expectations (Kezar, 2000).

Traditional student. Bye, Pushkar, and Conway (2007) defined traditional students as 25 and younger, who are most likely to have continued through the education system at a conventional rate.

Significance of the Study

This research regarding MWCC's First Year Experience course comes at a time when student success and retention have become critical issues to state funded and accredited institutions of higher education. In January, 2012, The Illinois General Assembly introduced *An Act Concerning Education* (2011/2012), which provoked the convening of a panel to design matrices for performance-based funding for all public institutions of higher education in Illinois. According to *An Act Concerning Education*, performance-based funding is to be in place in Illinois at the beginning of Fiscal Year 2013; therefore, state-funded institutions of higher education now have economic pressure to develop new plans and initiatives designed to help college students succeed. The results of this research could aid community college administrators and faculty who are in the various stages of forming institutional student retention and success strategies.

This research regarding MWCC's FYCE course was designed to test for potential causal relationships between FYCE course completion and higher levels of student success. This inaugural research and subsequent research were designed to test the effectiveness of the FYCE course at MWCC.

Process to Accomplish

The purpose of this research was to provide a quantitative analysis designed to determine the effectiveness of Midwestern Community College's FYCE course. The FYCE course was designed to help students who are required to take developmental coursework achieve college success. College success, for the purpose of the current study, was represented by the individual student persisting, meaning continuing with college studies, with a minimum of 2.0 GPA and passing all classes with a grade of C or better in the semester subsequent to taking FYCE.

The FYCE course was designed as a foundational course with emphases on active learning strategies and effective study skills that focus on the learner's role and responsibility in the learning process. Time management, study methods, test-taking tips, information literacy, and financial awareness were covered. Because of the material covered, the designers of the course expected that students completing FYCE would have higher GPAs than students who had no FYCE course. The FYCE course was also designed with the intent of helping students gain the necessary study skills to help them pass their courses at a quicker rate than those students who lacked the advantage of FYCE. In order to determine how successful the course is, research is needed to inform best practices.

Population

The population consisted of archival data samples of developmental students who completed the FYCE course. In the spring 2013, semester 58 students were expected to have completed FYCE and subsequently re-enroll at MWCC. For the purposes of this study, the 58 students who completed FYCE will be referred to as Group A. This student

data will be compared to data derived from a demographically similar group of 119 students, Group B, who had not taken the FYCE course or its predecessor course, College Success Skills. The researcher also collected archival data 49 students who took the College Success Skills course, Group C, to compare with the cohort of FYCE students, Group A. The data for the students who took the College Success Skills course were also selected through stratified sampling. The combined groups of student data, representing those who did and who did not take the FYCE and those who took College Success Skills provided the sample size of 226 for this research.

The data for Groups B and C were selected through stratified sampling because the researcher wanted to divide the groups along the line of characteristics of importance for this research. The further rationale behind using stratified sampling was to assure that similar demographics of students were being compared between the FYCE, non-FYCE, and CSS groups (Gay, Mills, & Airasian, 2009). This kind of sampling is also advantageous because it allows for a more descriptive analysis of the combined population of students (Garson, 2009).

Methodology

1. To what extent did developmental students who completed the First Year College Experience course achieve collegiate success?

To determine rates of success, the researcher used post-hoc, archival data samples. The performance indicators assessed by the researcher were the GPA and grade data.

Frequencies, descriptive statistics, analysis of variance, and an independent-samples *t*-test were conducted to answer the first research question. Analysis of variance was used in this study to examine gender, ethnicity, and age to determine if groups were equivalent

on these variables to give more confidence that differences found between groups were likely due to MWCC's First Year Experience course. Other descriptive charts and tables were used to present the data.

2. To what extent did developmental students who did not complete the First Year College Experience course achieve collegiate success?

To assess the extent to which students not taking the FYCE course achieved college success, the researcher used post-hoc, archival data samples. The performance indicators assessed by the researcher were the GPA and grade data. Frequencies, descriptive statistics, analysis of variance, and an independent-samples *t*-test were conducted to answer the second research question. Analysis of variance was used in this study to examine gender, ethnicity, and age to determine if groups were equivalent on these variables to give more confidence that differences found between groups was likely due to MWCC's First Year Experience course. Other descriptive charts and tables were used to present the data.

3. What are the differences in the collegiate success developmental students achieved who completed the First year College Experience course compared to those who completed the College Success Skills course?

Student data derived from those who completed FYCE were compared with archival data from students who had similar course schedules who were also students of similar age, ethnic, and gender demographics but who instead completed the College Success Skills course. The performance indicators assessed by the researcher were the GPA and grade data of the two groups.

Independent samples *t*-tests were used to compare performance in GPA and grades of those students who completed FYCE and those who did not. Frequencies, descriptive statistics, analysis of variance, and an independent-samples *t*-test were conducted to answer the third research question. Analysis of variance was used in this study to examine gender, ethnicity, and age to determine if groups were equivalent on these variables in order to give more confidence to any findings concerning differences found between groups being due to MWCC's First Year Experience course. Descriptive analyses and tables were used to present the data.

The archival data for the current study were collected from the Office of Institutional Research (OIR) at MWCC and was compiled using the Datatel Colleague Database System, the college's data-tracking program that stores and sorts institutional data on each enrolled student. This study examined gender, ethnicity, and age to determine if groups were equivalent on these variables to give more confidence that differences found between groups was likely due to the FYCE course.

Viability of the Study

Because the FYCE course had been created, adopted and scheduled by MWCC, statistically significant data existed by Spring 2012. Furthermore, because the college added more sections of this course in spring and Fall 2013, the designers of the course were confident that new information would be continually available, allowing researchers to track the progress and effectiveness the course.

Ethics

Because of the archival nature of the research questions, risks associated with the research process were minimal. Students' names and other identifying factors were not

revealed during the course of the research. Prior to this research, MWCC's OIR was able to remove students' names and student identification numbers to from all gathered data to insure students' absolute anonymity and privacy.

Summary

In order to understand the current dynamics of developmental education fully and to prepare strategies to help developmental students, an understanding of current and past research in the field is needed. The next chapter will look at the theories of intervention, prior strategic implementations, and more current indicators of best practices in helping developmental students learn. After analyzing all of this information, a clearer picture of the basis for this study will emerge.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In today's economic climate those entering the workforce need college credits to be competitive; however, college students who are required to take developmental courses often do not succeed or take longer than their peers to complete college courses. This chapter reviews the literature relevant to (a) employment and college student success, (b) retention and readiness theory, (c) retention and readiness interventions, (d) model first year experience programs, and (e) academic planning. Both successful programs and programs that demonstrated a need for improvement will be analyzed in order to establish where further research and fine tuning are needed for student retention and success strategies like the first-year college experience coursework.

Employment and College Student Success

Carnevale (2008) predicted that by 2012, 63% of all jobs in the United States would require at least some postsecondary education or training. Nonetheless, Carnevale perceived a shortage in students with at least some college experience. Aside from labor-market concerns, Carnevale shared the cultural implication that too few college graduates value a liberal arts education by stating, "Postsecondary institutions have cultural and political missions to ensure that we have an educated citizenry that can continue to defend and promote our democratic ideals" (p. 29). Carnevale continued by making an argument for the intrinsic value of education, and he shared that Americans need to value

both the pragmatic and the culturally beneficial components of education. Carnevale called for balance in education's role to help students garner both economic freedom and cultural literacy.

Despite the great need for some level of higher education, research suggested that a great number of students transitioning to community colleges require developmental coursework prior to taking college-level coursework. Schacter (2008) reported that at The City University of New York, 83% of students entering its community college system were required to take developmental courses in reading, writing, or math. Schacter also mentioned the incoming freshmen at Normandale Community College in Bloomington, Minnesota, where 75% of the incoming freshman needed to take developmental math and close to 50% of incoming freshmen needed developmental writing. Conley (2010) found that up to 80% of first-year college students at some community colleges required developmental courses.

To increase understanding of why so many students required developmental education in college reading, Burgess and Jones (2010) investigated the possibility of a correlation between media immersion and the need for remediation. In their account of method, Burgess and Jones explained, "209 students completed a survey designed to assess literacy habits, media usage habits, attitudes towards different literacy genres, and reasons for not engaging in reading behaviors" (p. 494). The researchers testified that they intentionally chose demographic groupings representative of a midwestern regional university. This demographic mixing included the necessity of selecting a large group of developmental students. According to Burgess and Jones, 101 students (48.3% of their sample population) took a developmental reading course while in college or had a history

of reading disability. This strong representation of students with a developmental reading background provided a depth and direction for the research, useful to support studies about reading habits as they relate to the developmental education in institutions of higher education.

Burgess and Jones (2010) provided several layers of information about the gender and racial demographics represented in the study. Perhaps most important were the developmental students' results, which demonstrated that students in developmental courses were not as likely to read for enjoyment. The results regarding avid readers also proved interesting. Burgess and Jones's results showed that 41 (38%) of the non-developmental students in their study read for enjoyment twice a week. Burgess and Jones found that only nine (9%) of the developmental reading students read for enjoyment twice a week.

Burgess and Jones (2010) will be useful in research of the high rate of students requiring developmental courses in higher education. The research of Burgess and Jones showed that developmental students demonstrate deficiencies, not just in their high-stakes test scores, but also with respect to their use of time.

Students in developmental courses in community colleges typically present low success rates. Utilizing data that included information from 57 community colleges and data from over 250,000 students, Bailey, Jeong, and Cho (2010) found that only 33% of community college students required to take developmental math and 46% of community college students needing developmental reading completed their developmental course sequences within three years. Therefore, while community colleges provide open access to higher education, it appears that developmental students are less likely than their non-

developmental peers to succeed. If a student does not pass developmental math, reading, or writing, that student will not meet prerequisites needed to take college-level coursework. Not passing developmental courses has been demonstrated to impact the completion rates of developmental students.

To address the issue of high rates of student failure and departure, Byrd and Macdonald (2005) studied first generation college students navigating through the sequences of general education requirements. As part of their research, the researchers investigated the implications of open enrollment on nontraditional college students. Open enrollment is a term used by colleges to describe a practice of allowing all applicants admission, regardless of prior educational background or standardized test scores (Schaid, 2001). Nontraditional students are those who do not fit the typical profile of the American college student, meaning that these students may be over the age of 25 (Bye, et al., 2007). The student may already have a spouse and children, and the student may already be a viable part of the workforce (Bye et al.).

Byrd and Macdonald (2005) gathered information in order to provide answers for important questions about what it means to be college-ready. The researchers sought to demonstrate what educational assets nontraditional students brought to the classroom, thus leading to a conversation of how nontraditional learners have strengths and not just shortcomings. The researchers also investigated how students prepared for college with methods that could not be measured by standardized testing.

To achieve their objectives, Byrd and Macdonald (2005) investigated first-generation college students' understanding of college readiness issues. The first-generation participants in Byrd and Macdonald's study had succeeded in matriculating

from pre-baccalaureate studies in various community colleges to upper-division universities. All participants were 25 or older.

Byrd and Macdonald (2005) engaged in a qualitative analysis, during which eight volunteers from a small university, who had attained an associate's degree from a community college, were interviewed for 30-60 minutes, and the researchers transcribed each interview verbatim to facilitate accurate data analysis. Byrd and Macdonald summarized their results by stating, "themes emerged and were organized into the following categories: (a) skills and abilities perceived as important for college readiness, (b) background factors and life experiences that contribute to college readiness, and (c) nontraditional student self-concept" (p. 26). Participants in Byrd and Macdonald's study indicated the following specific areas as most important for college success: ability in time-management, applying oneself and goal focus, and self-advocacy. The researchers remarked that the sample group's comments emphasized these life-skills instead of academic skills.

Byrd and Macdonald's (2005) research serves to prompt those involved with retention initiatives to consider a broader set of implications, both positive and negative, when considering the transitioning of nontraditional students. One of the areas of weakness for nontraditional students had to do with generally low reading ability. Nevertheless, the authors focused on other skills that may make up for any deficits experienced by the nontraditional student. Some of the positive aspects of this study were that nontraditional students often came to the community college setting with strengths in important areas like "time management, goal focus, and self-advocacy skills" (p. 32). Byrd and Macdonald asserted that compared to traditional students, nontraditional

students actually have an academic advantage because of practical, work ethic skills developed outside of the college classroom.

Byrd and Macdonald (2005) demonstrated usefulness for other student retention researchers interested in potentially applying their research information to enhance services for both the traditional and the nontraditional students. Byrd and Macdonald's study indicated that with institutional support, the nontraditional student could survive the academic rigors of the associate's degree. Byrd and Macdonald's study also served to indicate that traditional students could benefit by acquiring assistance in the areas where nontraditional students already show some strength.

Retention and Readiness Theory

Tinto's (1987) research centered on the issues of student retention and persistence. Tinto provided a theoretical framework for student retention initiatives for decades. In this seminal work, Tinto explained the many reasons why many students do not persist in college, and these explanations have been used to design the curricular foundations for first-year experience programs. For example, Ellison (2010), whose research is cited later in this review, employed Tinto's principles as a framework for a study on the curriculum of a community college's first-year experience course. Beyond explanation of the causes of student attrition, Tinto offered notable and applicable guidelines and best practices in student success program design.

Tinto (1987) argued that the reasons students leave college are not exclusively based in the personality of the student, but that the complexity and sometimes confusing qualities of the learning environment impact students' decisions to leave college as well. Tinto observed that students received little assistance in learning how to navigate their

way to completion of a degree or program. To elucidate on this point, Tinto provided the example of rites of passage in tribal societies. Tinto postulated that formal and ceremonial rites of passage provide a functional method of helping young people find their way into adulthood. Tinto suggested that Western society lacks formal transitioning for adolescents, and argued that because of the lack of help in transitioning from one phase of life to the next, many students lose focus and cannot find their way through a complicated system like higher education.

Tinto (1987) observed that institutions of higher education can be isolating for many students, and he invoked the idea that college students can be “increasingly isolated and left on their own to make difficult choices” (p. 101). Exploring the reasons for this sense of isolation, Tinto suggested that institutions with rigid intellectual and behavioral norms could lose students who are unprepared to assimilate or acclimate quickly to the culture. According to Tinto, each institution should be responsible to develop integrative mechanisms to help students attain social and intellectual membership with the institution of higher education. Regarding integrative mechanisms in higher education, Tinto wrote:

one would expect institutions with low rates of departure to be those which are able to more fully integrate their students into their social and intellectual life.

Conversely, institutions with high rates of departure are more likely to be those which are unable to do so. (p. 104)

Tinto encouraged institutions of higher education to consider restructuring social and intellectual conditions; moreover, he challenged colleges and universities with the “creation of alternative mechanisms for the integration of individuals into its ongoing

social and intellectual life” (p. 104). Tinto followed this challenge, not with specific strategies, but with dimension of institutional action.

Tinto (1987) made clear that there is no single student retention strategy that will work in all institutions and with all students. Because of the plethora of missions and visions of institutions of higher education, Tinto’s encouragement was that each college or university design programs most fitting the needs of their students. Tinto did, however, suggest that there are some common principles of retention strategies that could be employed by different kinds of institutions. Tinto provided six categorical principles of institutional action that he postulated should be adhered to by all institutions of higher education. Several of these principles have influenced the formation of Midwest Community College’s First-Year College Experience course.

According to Tinto (1987), the first principle of institutional actions was, “Institutions should ensure that new students enter with or have the opportunity to acquire the skills needed for academic success” (p. 138). Tinto explained that while an institution cannot make guarantees of academic success for all students, the impetus is on the institution to give all students an opportunity to complete their program of study. Tinto asserted that retention programs should not be viewed as a simple institutional necessity, but rather as an obligation to help students develop the skills and intellect needed to succeed in the institution.

Tinto (1987) continued expounding on principles of institutional action by establishing the need for personal connections in the second principle: “Institutions should reach out to make personal contact with students beyond the formal domains of academic life” (p. 138). Here Tinto explained the importance of providing occasions for

building a sense of community and caring through setting up, promoting, and engaging in activities and interventions outside of the classroom. Tinto suggested that wide-ranging personal contact between students and members throughout the institution would make a difference for the students by giving them a personal network of support.

Related to the second principle, the third principle of institutional action called for broad-based best practices: “Institutional retention actions should be systematic in character” (Tinto, 1987, p. 139). This third principle suggested that the whole student experience should be taken into account, the idea being that every department can have an influence on whether a student stays in college or leaves; therefore, all departments should participate in retention efforts.

The fourth principle of institutional action directly influenced the structure of MWCC’s FYCE. The fourth principle addressed the timing of intervention when Tinto(1987) stated, “Institutions should start as early as possible to retain students” (p. 139). Tinto argued that institutions need to help students with academic and social problems early on in their academic career. Addressing students’ problems too late could lead to attrition from college and abandonment of their programs of study.

While principle of institutional action five may seem obvious, Tinto (1987) knew too well that students are sometimes not the main priority in higher education. Tinto addressed the need to prioritize students by stating principle five: “The primary commitment of institutions should be to their students” (p. 140). According to Tinto, the commitment to students should underlie all actions of every program in institutions of higher education. Tinto called institutions of higher education toward a “deeply embedded commitment to serve the students they admit” (p. 140).

Tinto (1987) provided overarching perspective with the sixth and final principle of institutional action by stating, “Education, not retention, should be the goal of institutional retention programs” (p. 140). Here Tinto provided the essence of the purpose of retention programs and why these programs need to focus on helping students reach their educational goals. Tinto further stated that, “Programs should be designed to provide each and every person with continued opportunity to grow, both socially and intellectually, while in college” (p.140), and he directed attention to the character and quality of students, not retention for the sake of having higher enrollment numbers.

Tinto (1987) provided guidelines for institutional effectiveness in reaching the first-year student, whereas Conley (2010) provided a detailed profile of the attributes of a college-ready student. After decades of research in college readiness, Conley provided a theoretical framework describing the attributes of a college-ready student by describing four key dimensions of college and career readiness. Conley listed the dimensions of college and career readiness as key cognitive strategies, key content knowledge, academic behaviors, and contextual skills and awareness, also known as college knowledge.

Key cognitive strategies are the basic study and learning skills that students need to employ in order to succeed in college (Conley, 2010). More specifically, the key cognitive strategies are the tools students should have developed in high school for the acquisition, retention, synthesis, and application of knowledge. When high school students do not develop these key cognitive strategies, those students may then lack the ability to succeed in the college setting. Unfortunately, secondary institutions often neglect training students in key cognitive strategies. Conley pointed out, “the

development of key cognitive strategies in high school is often overshadowed by instructional focus on decontextualized content and facts necessary to pass exit examinations or simply to keep students busy and classrooms quiet” (p. 32). Because high school students are too often busied with tasks that do not require application of knowledge, students lack opportunities in practicing and developing key cognitive strategies.

Key content knowledge, a companion to key cognitive strategies, is the second dimension of college readiness. When invoking key content knowledge, Conley (2010) referred to the need of fundamental course mastery at the secondary level as an essential requirement for post-secondary success. Key content knowledge included the ability to analyze texts from a variety of curricula, the ability to access information, the ability to write well, the understanding and application of algebraic concepts, the ability to engage in scientific inquiry, and an awareness of the foundational constructs of the social sciences. Without a strong base of knowledge, students seeking to enter colleges may be placed into developmental courses at the community college, blocked from access to traditional colleges, or they may become unsuccessful in first-year general education coursework.

Conley (2010) continued to reveal the four dimensions of college readiness with a discussion of academic behaviors. The behaviors Conley referred to are self-monitoring, self-control, and self-awareness. These categories pertain, in part, to metacognition, the students’ ability to think about how to process different kinds of information. Self-monitoring relates to a student’s sense of mastery, or lack thereof, of key concepts. With excellent self-monitoring abilities, students should be able to assess their strengths and

weaknesses with respect to any academic subject matter and self-advocate, seeking out support for areas of academic deficiency. Conley contended that students transitioning to college often lack the types of academic behaviors that lead to success.

Conley's (2010) fourth dimension of a college-ready student is commonly referred to as college knowledge. College knowledge concerns high school students' awareness of college life and context. According to Conley, the standards, norms, practices, and expectations of college often overwhelm first-year college students. Not knowing procedures and not understanding the resources available leads to many students dropping their college pursuits early in their academic careers. For students transitioning from high school to college, support may be needed to help students persist into and through the culture of higher education. Without some form of assistance, postsecondary institutions incur high rates of student academic failure and attrition.

Contributing considerably to the theories and research surrounding the preparation of first-year college students, Barefoot (2000) served in the leadership of the University of South Carolina's National Resource Center for the First-year Experience (FYE). Barefoot provided increasingly specific prescriptive measures and desired attributes for all first-year experience programs. Barefoot provided several key methods of helping students persist in college, and several of these methods apply directly to forming high quality first-year experience courses.

Barefoot (2000) recommended an increase in student-to-student interaction. Central to Barefoot's pedagogical approach to FYE courses is intentionality in generating formative peer groups. Barefoot gleaned insight from Astin (1993), who contended that "The student's peer group is the single most potent source of influence on growth and

development during the undergraduate years (p. 398). Both Barefoot and Astin demonstrated a similar ethic of social and intellectual membership as earlier described by Tinto (1987).

Furthering the argument for social and intellectual integration (Tinto, 1987) of first-year college students, Barefoot (2000) was also a proponent of an increase in faculty-to-student interaction. A central concern for Barefoot was that FYE programs often failed to involve faculty meaningfully, that instead FYE programs were, “housed in marginal facilities and managed by entry-level employees, never becoming a central, sustainable part of the institution’s fabric” (p. 17). Barefoot postulated that faculty were the “ultimate determinants of legitimacy in the academy” (p. 17), and therefore the success of FYE programs is largely predicated upon the investment of the faculty therein. Barefoot cited successes in first-year experience courses taught by faculty at the University of North Carolina at Chapel Hill, where first-year seminars were taught entirely by tenured faculty. The hope of the university faculty was that the discourse of the university would improve meaningfully because of the intentional pairing of students with influential members of faculty.

Reiterating the integration concepts of Tinto (1996) and Conley’s (2010) third dimension of a college-ready student, metacognition, Barefoot (2000) called upon institutions to assist students who lack the proper level of academic preparation for college. Barefoot asserted that “students must possess the requisite academic skills to do college work in order to engage in ongoing academic conversation and to feel validated as a member of the academy” (p. 17). Barefoot called on institutions to shore up and offer a unique infrastructure for developmental students. Some of Barefoot’s suggestions were

“learning skills centers, full blown study skills courses, workshops, summer ‘bridge’ programs, and even programs that extend into the high school” (p. 17). Again, Barefoot echoed Tinto’s (1987) charge to reach out to first-year students as early as possible.

Barefoot (2000) saw dire problems with first-year experience programs. While FYE seminars and courses were popular, and “over 70 percent of U.S. colleges and universities offered special first-year seminars” (p. 15), Barefoot showed concern that FYE programs were often viewed by the institution as costly add-ons. Barefoot warned against FYE programs loosely connected with the values of the institution. Barefoot called for greater levels of assessment and transparency for FYE programs by institutions. Regarding assessment, Barefoot perceived that institutions “rarely published or disseminated” (p. 13) objective data pertaining to their FYE programs. Clearly, Barefoot saw a gap in the research of FYE programs by stating, “And, currently, only a small fraction of first-year programs are put to any sort of objective test to determine whether they have achieved intended or unintended outcomes” (p. 13). Barefoot challenged those involved with FYE programs to discuss publicly what works, and to share tested tools of assessment. Barefoot argued that institutions need to look at more than student retention; they also needed to focus on metrics that indicate whether student learning is taking place.

Purdie (2008) explained that John Gardner formed the first FYE program at the University of South Carolina in the late 1970’s. According to Purdie, Gardner also “founded the National Resource Center on First Year Experience, and is now widely recognized as one of the foremost experts on the first year of college” (p. 6). According

to Purdie, Students taking Gardner's course, called University 101, were more likely to persist in college from first year to second year than students not taking the course.

According to Gardner (as cited in Purdie, 2008), FYE courses have been the most among the most scrutinized college course taught, and the evidence gathered regarding FYE effectiveness on first-year student success is clear. Furthermore, as cited by Purdie, similar to Barefoot (2000), Gardner valued assessing more than student persistence. According to Purdie, Gardner preferred that FYE assessment be based in student learning and success. Gardner furthered the case for focusing on student success metrics by stating, "Few colleges and universities have systematically studied the period of student experience in which the institution realizes its highest rates of failure and attrition" (Alexander & Gardner, 2009, p. 19). The following section of this literature review provides set of tested programs that would meet standards of assessment of Alexander and Gardner and Barefoot (2000).

Retention and Readiness Interventions

Schacter (2008) examined several successful models of approaching developmental education. One such model was examined at Grand Rapids Community College (GRCC), where 1085 of approximately 5000 first-year students were placed into at least one developmental class, and of the 1085 developmental students, 753 were taking two or more developmental classes. At GRCC, the focus on developmental education was on more than teaching students basic skills. The students in the developmental classes were also taught goal-setting and help-seeking as equally important to learning the curricular material. The focus on setting goals and seeking help reflects the core values of first-year experience coursework. These courses became

commonly referred to as First-Year Experience (FYE) courses. FYE courses repeatedly demonstrated positive impact on student learning with improvements in both retention and academic achievement (Barefoot, 2000).

Schacter (2008) continued sharing effective approaches to developmental coursework by reporting on Eastern Kentucky University's (EKU) program called First Step. At the time of Schacter's research, EKU saw 37% of their incoming freshmen needing developmental education in at least one subject. To help their students get a head start in college, a program called First Step to College Success was offered in the summer. The month-long program provided instruction in subjects where students had the greatest weaknesses. Students in the First Step program had evening study tables as well as mentoring. First Step students received additional assistance with financial aid in the fall. First Step students also received additional advising and tutoring in the fall semester.

Barefoot and Gardner (2005) examined Lehman College of the City University of New York's Coordinated Freshmen Program (CFP). In 1991, Lehman College reached an alarming rate of student dropout, where the college had lost 50% of its new students within a year's time. To address this student attrition, faculty developed the CFP. Lehman's CFP was school-year-long program built on curriculum from both academic and student service activities. Barefoot and Gardner reported that the CFP "was conceptualized as a cohesive, connected, and integrated curricular and cocurricular learning experience that would ensure student passage from basic skills to sophomore-year readiness and would have a positive effect on learning, satisfaction, and retention" (p. 223). What set Lehman's program apart from other FYE models was its year-long,

two-term design. Barefoot and Gardner suggested that including interventions for new college students in the first and second terms carried retention benefits greater than the typical one-term model.

Barefoot and Gardner (2005) reported that in 2002-2003, approximately 800 students participated in the CFP, which involved learning communities for coursework in several academic disciplines and cohorts also engaged in a freshman seminar. The learning community coursework and the freshman seminars were taught by over 125 faculty, administrators, and support staff from throughout the college. The learning communities were linked according to students' areas of concentration: "liberal arts, biology, pre-med, economics, accounting, nursing, health care, and teacher education" (p. 224).

Barefoot and Gardner (2005) furthered their report on Lehman's CFP by sharing details about Lehman's freshman seminar. The freshman seminar was taught by both student services professionals and faculty. The CFP at Lehman College had the following attributes:

Freshman seminar provides a vehicle for addressing the various issues that relate to the transition from the high school to college, the challenges of student adjustment, multiple opportunities for cocurricular participation, problem solving, and consideration of the goals of a liberal arts education. (p. 224)

This model reflects well what the Center for Community College Student Engagement (CCSE) considered a "promising practice" (Center for Community College Student Engagement, 2012, p. 8). Promising practices, according to CCSE, meet students' needs

from the individual student's first interaction with the college, to the completion of the student's first academic term, and on through the student's collegiate experience.

Center for Community College Student Engagement (2012) stated that first-year experience programs should, by design, impart a sense of community within the larger perimeter of the institution. Relationships and strong connections with peers as well as faculty and staff featured as important priorities for FYE programs, according to Center for Community College Student Engagement. Center for Community College Student Engagement reported that out of 166 Community College Institutional Survey respondents, 44 (27%) of the institutions required all first-time students to engage in a FYE program. The curricular features of the FYE of the colleges requiring the course of their students were "time-management skills, information about and/or use of the college's academic support network, and information about and/or use of the college's personal/support services" (p. 14).

The Center for Community College Student Engagement (2012) described a successful FYE program at The College of the Sequoias in California as "serving first-generation, low-income Hispanic students" (p. 25). The College of the Sequoia's FYE program featured academic counseling, peer mentoring, learning communities, and augmented instruction. Augmented instruction included the additional requirement of two hours of math facilitated by faculty or tutor in addition to the students' existing math courses. The Students in The College of the Sequoia's FYE program experienced increases in success rates in their developmental English classes, with a 63% success rate in 2010 compared to a 57% success rate in the fall of 2009. The College of the Sequoias also saw an increase in retention rates for their FYE students in developmental English.

The retention rate improved from 90% in the fall of 2009 to 93% in the fall of 2010, and the 2010 success rate was compared to an 87% retention rate for students in developmental English with no exposure to a FYE program.

Closely related to FYE programs are student success courses. The Center for Community College Student Engagement (2012) explained the makeup of student success courses as involving coursework that should help students gain knowledge and general skills needed for success in college. The Center for Community College Student Engagement reported that of 238 Community College Institutional Survey respondents that hosted student success courses, 36 (15%) required all first-time students to take the course. The key features of student success skills course were cited by the Center for Community College Student Engagement as “study skills, time-management skills, and note-taking skills” (p. 15).

With many existing FYE and student success skills already in existence, Ellison (2010) leaned heavily on the concepts of Tinto (1987) to determine the best practices in forming curriculum for first-year experience coursework. Ellison was particularly driven by Tinto’s claim that “the character of one’s experience in that year does much to shape subsequent persistence” (Tinto, p.14). Ellison recognized that much of the research about FYE courses had been done in four-year colleges and universities and that community colleges had been slow to catch on to the benefits of FYE. Because of the emphasis on four-year institutions, much of the teaching material, like textbooks and curriculum guides, were more relevant to the university setting rather than the community college. Ellison designed a research plan to investigate what curricular choices would be the most desired by community college faculty and students. Ellison’s concern was that lack of

clear understanding of what community college students and faculty might perceive as valuable in FYE would lead to a program that failed to effectively retain first-year students. Ellison's principal research question was, "What topics should be included in the curriculum of a first-year experience course at a community college to make the course most useful to entering students?" (p. 6).

Ellison (2010) investigated several secondary research questions, the first of which was designed to determine what differences in perception of needed curriculum exist between first-year and second-year students. Ellison also researched how students and faculty differ in their perceptions of the importance of topics for a first-year experience course. Continuing the study, Ellison investigated whether an already existing first-year experience course could frame the perceptions of students and faculty regarding topics that should be included in a first-year experience course. Ellison also investigated the potential differences in perceptions of the curriculum between traditionally-aged and non-traditionally-aged students.

Ellison (2010) engaged in a qualitative research design to examine the perception of faculty and students regarding the curricular makeup of FYE courses. Ellison's research involved a multiple case study design, which allowed for the study of four different community colleges with the ability to compare perceptions held by constituents at the respective community colleges. Of the four community colleges in the study, two required FYE coursework and two did not.

For the purpose of Ellison's (2010) study, each participating community college was separated into five focus groups: "first-year traditionally-aged students, first-year non-traditionally-aged students, second-year traditionally-aged students, second-year

non-traditionally-aged students, and full-time and part-time faculty” (p. 39). Ellison prepared sets of questions with a standard format for each group.

Ellison’s (2010) results showed several categories that the focus groups perceived as important to FYE curriculum. The first of these categories discussed in Ellison’s results was, “Differences between high school and college” (p. 56). Ellison reported that all of the focus groups acknowledged secondary to post-secondary transitioning as an important subject to address in FYE, and Ellison found that traditionally-aged students perceived transitioning issues as relevant.

The next category that Ellison’s (2010) focus groups perceived as important to FYE curriculum was the “history and purpose of higher education” (p. 58). Ellison reported that “students nor faculty in the focus groups commented on the importance to first-year student success of knowing the history of higher education, but they all commented in some way about the importance of understanding the purpose of higher education” (p. 58). According to Ellison, the focus groups perceived a need for FYE students to have an understanding of the basic expectations of their respective institution of higher education. All of the student focus groups were asked if they had felt prepared for their college experience, and many shared they did not feel prepared, mostly because they did not know what to expect prior to enrollment.

Ellison (2010) found that the focus groups also perceived information about cocurricular activities as an important component of FYE coursework. However, according to Ellison, there were both positive and negative responses to the idea of cocurricular involvement. Some students found that campus activities allowed for personal growth, socialization, and civic involvement. Other students were concerned

about the time commitment necessary for cocurricular activities and preferred to operate independently of college sanctioned clubs or groups.

Ellison (2010) reported that all student and faculty focus groups felt that “college services” (p. 62) were an essential part of FYE curriculum. Students who shared that they had been unprepared for college agreed that more knowledge of the institution’s services would have been helpful in acclimating to higher education. The services student focus groups perceived as most essential were library services, financial aid, and tutoring services. The faculty focus groups perceived a need for students to know where to go for assistance when needed. Many faculty members shared scenarios of students coming to them with questions about financial aid. Faculty felt that a great deal of class time was being lost in attempting to help students navigate other areas of the college. According to Ellison, “For faculty, it is also a case not just of students receiving the information, but of understanding what it means” (p. 64).

Ellison (2010) shared that the need for students to know the services afforded to them by their respective institutions led to the focus groups valuing instruction about “college personnel” (p. 65) and “knowledge of campus” (p. 66). The discussion focus groups had about college personnel revealed that student groups perceived understanding faculty expectations as essential to success. Other students in the focus groups felt it was important to know their academic advisors. The student groups perceived advising as beneficial for student scheduling and transfer purposes.

Ellison (2010) shared that the focus groups identified academic skill development components that they perceived as important to the FYE curriculum. The academic skill development components identified and prioritized by the focus groups were: note-

taking, learning comprehension, reading comprehension, study skills and strategies, differences in learning styles, research skills, writing skills, and critical thinking skills. Two other major categories discussed by the focus groups were life management as well as academic and career planning.

Ellison (2010) provided a wealth of research that can easily be utilized to guide the curricular planning of the FYE course at a community college. Because Ellison researched both traditional and non-traditionally-aged students, and because Ellison also researched faculty perceptions, this study yielded comprehensive results. Ellison summarized the potential impact of the research by stating, “Hopefully, by examining the perceptions of faculty and students, an FYE curriculum will be developed that can assist with retaining students and helping them to persist to achieving the goals they have set for themselves” (p. 121).

Model First Year Experience Programs

Kaplan (2000) observed a substantial exodus of freshman college students from St. John’s University in New York. Kaplan suspected the attrition of freshmen was as a result of transition and adjustment problems, financial concerns, academic unpreparedness, or an inability of students to integrate socially. Kaplan perceived that the loss of students was negatively affecting the institution in that the mission of the university was not being met, and the loss of students meant the negation of expensive recruiting efforts and the loss of tuition dollars. Kaplan contended that the loss of revenue caused pressure in the Enrollment Management Department, which could be compelled to recruit an even less prepared group of freshmen to make up for the prior year's attrition.

Kaplan (2000) reported that St. John's University in Minnesota hired an enrollment management consultant to analyze the university's student retention efforts and to provide a strategic plan. After a thorough environmental scan of the university's marketing, recruitment, and retention practices, the consultant recommended the development of "a more cooperative and coordinated approach to improving retention" (p. 11). Fundamentally, the university administration recognized the need to improve retention by addressing the needs of St. John's unprepared freshmen students.

Kaplan (2000) reported that to meet the needs of unprepared students, St. John's University opened the Office of Retention and Support Services. The purpose of the office was to provide a bridge for freshmen who were having trouble with social and academic adjustments to college. One of the student retention interventions launched by the St. John's Office of Retention and Support Services was a College Experience 101 (CE 101). The intent of CE 101 was to help struggling students with the acquisition of study skills and to teach students about valuable university resources designed to aid them academically, personally, and socially. The university granted one credit hour to students completing the course.

Kaplan (2000) shared that the pilot CE 101 consisted of 11 sections of the course with 225 students enrolled. After two years of running CE 101, the institution made the course mandatory. The enrollment in CE 101 jumped to 375 students in 25 sections. The growth required that administrators and student support staff also teach sections of CE 101.

Kaplan (2000) conducted research to study the effectiveness of CE 101 at St. John's University. Kaplan was curious about the CE 101's effect on "retention, academic

success, and academic performance of at-risk new students” (p. 18). Kaplan hypothesized that students taking first-year experience courses would demonstrate greater retention and greater academic success. Kaplan’s research purpose was to provide the university with valuable information about the quality of their main intervention for unprepared college students.

Kaplan (2000) examined six research questions, the first of which investigated if students participating in a College Experience 101 course would experience high rates of retention. Kaplan also researched whether participation in a CE 101 course would lead to fewer students on academic probation at the beginning of their sophomore year. Kaplan continued his study by contrasting participants in CE 101 to non-participants to determine if the course improved academic performance for CE 101 students. Kaplan also contrasted student performance of those who took CE 101 voluntarily as opposed to those students who had no choice but to take the course.

Kaplan (2000) utilized an ex post facto research design as it was Kaplan’s intent to examine the differences between comparison peer groups of those who experienced the CE 101 intervention to those who did not participate in the CE 101. Kaplan employed sampling measures to ensure CE 101 participants were similar to non-participants. The population for the study was 420 CE 101 participants determined as academically at-risk and 372 students who did not participate in CE 101.

Kaplan’s (2000) results demonstrated that the CE 101 course had a positive impact on one-semester, fall-to-spring, retention, yet there was no statistically significant difference on long-term, fall-to-fall, retention. Kaplan further found that participation in CE 101 appeared to have some favorable effect on academic success in having fewer

students beginning their sophomore year on academic probation, but not to a level of statistical significance. In the analysis of whether CE 101 helped students achieve academically successful grade levels, Kaplan found that participants had a higher GPA than non-participants. Kaplan also found that students who voluntarily took CE 101 were more likely to experience long-term retention as opposed to non-participants.

Kaplan's (2000) most statistically significant finding was that in order for the CE 101 course to have a positive effect on student retention and academic success, the student would have had to succeed in the CE 101 course. According to Kaplan:

Those who enrolled in the course but achieved grades of 'C+' or lower did not do as well in other courses on average. However, students who earned a 'B' or higher in the College Experience 101 course did better in other courses on average as compared with those students not taking the course. (p. 113)

Kaplan's study was important because it showed that a first-year experience course can have a direct impact on students' grade performance if the student successfully completes the course. Kaplan's study has further importance because the results from Kaplan's study show CE 101 had a direct impact on one-semester, fall-to-spring, retention.

Bement (2010) investigated the effectiveness of a first-year experience course on student grades in developmental mathematics and English courses. Bement intended to determine if students at a small community college taking the college's first-year experience course actually applied the skills from the FYE to their other college courses. Bement's primary concern was that students lacked the skill of transferring knowledge from the FYE course and applying that knowledge to courses like mathematics and English. Bement's research goal was twofold: to determine the effectiveness of an FYE

program based on pretests and posttests, and to investigate whether there was a transfer of FYE learning resulting in students attaining passing grades in English and mathematics.

Bement (2010) utilized a quasi-experimental design, consisting of an experimental group of 14 students enrolled in FYE and a control group of 14 students who chose not to enroll in FYE. Bement acknowledged the small sample size as a limitation of the study by stating, “The community college used in this study has a low enrollment of students, which affected the sample size of the participants in this study” (p. 48).

Despite the sample-size limitation, Bement (2010) expected to show evidence that the FYE course provided students with skills that could be transferred to help them succeed in English and mathematics. Nonetheless, while the results showed gains from pretest to posttest, the results also demonstrated that the FYE students did not attain better grades in English and math than the non-FYE students. Bement suggested that FYE students were not able to transfer FYE skills into the English or Mathematics classrooms.

Benment (2010) further acknowledged limitations to the study by stating, “The results may not be generalized to the population. Secondly, the dependent variable does not show if transfer of learning is evident because it may not be a reliable measurement of the transfer of learning” (p. 44). While Bement did not demonstrate the FYE course as successful in helping students attain better grades in mathematics and English, the research successfully demonstrated where there may be a gap in the FYE curriculum. It

may be the case that more implicit instruction is needed on the transfer and application of FYE knowledge to the English and mathematics classroom.

Similar research findings were reported by Purdie and Rosser (2011), who used institutional research to assess first-year college student interventions. Purdie and Rosser examined three transitional support programs at a large Midwest institution of higher education. The three interventions were a Living-Learning Community, a Freshmen Interest Group, and a First-Year Experience course. The FYE will be the subject of this portion of the review. The FYE course studied by Purdie and Rosser was a two-credit course instructed by support staff, upper-division student peers, and some faculty members. The course emphasized learning strategies, career exploration, money management, and diversity.

Purdie and Rosser (2011) acknowledged that student retention could not be viewed as the endgame in higher education but that student success and learning would be a more noble goal. Nevertheless, the researchers were driven by reports that almost half of a new freshmen class would not persist to their second year of studies at the institution where they began their undergraduate work (Pascarella & Terenzini, 2005 as cited in Purdie and Rosser). Purdie and Rosser justified their analysis of student retention by stating, “While retention is certainly not the highest goal, if students do not persist past their first year, they will be far less likely to realize the other goals of higher education” (p. 36).

Purdie and Rosser (2011) examined two research questions. Their first research question was designed to ask if first-year students who participated in the large Midwestern institution’s first-year experience interventions, including the FYE course,

were more likely to succeed academically compared to first-year students who experienced no intervention. Purdie and Rosser's second question was designed to compare the rates of retention of first-year students who experienced interventions, including the FYE course, to first-year students who experienced no intervention. The data for Purdie and Rosser's FYE course study were gathered from 858 students who enrolled at the large Midwestern university in the fall semesters of 2003, 2004, and 2005.

Purdie and Rosser (2011) found that the FYE class had no effect on students' first semester GPA, nor did participating have an effect on student retention. It could be that the researchers would have seen greater GPA impact from the FYE course in the semester following FYE enrollment rather than examining the immediate impact on the fall semester's GPAs. Students in the semester following an FYE course would have had more time to internalize and apply the course curriculum. Purdie and Rosser appeared to support this notion by stating, "First semester GPA was not simply the best predictor of retention in this study" (p. 74).

Purdie and Rosser (2011) suggested that students' preexisting environmental characteristics could have a potent effect on their success. Purdie and Rosser further suggested that the FYE students' peer group may have interfered with the value of the intervention. Because the FYE course was demonstrated to have no positive effect on first-year students GPA or retention, Purdie and Rosser suggested a thorough review of the program at their institution.

Green (2010) conducted research in order to determine the effectiveness, or lack thereof, of student retention strategy, which was a college study skills and orientation course. According to Green, learning strategy seminars were offered "within the first

semester of the freshman year [as] a study skill seminar to teach strategies that will expedite the college classroom transition” (p. 5). The seminars were created to answer faculty’s concerns about the quality of preparedness of their freshman students. Some of the faculty’s concerns involved their observation of students who could not achieve passing grades in general education courses in science and social sciences. The faculty also noticed students’ inability to add new knowledge to preexisting knowledge. Another problem recognized by the faculty was their students’ apparent inability to prepare adequately for important exams.

Green (2012) found that the college’s Office of Institutional Research had the ability to track students’ grade point averages (GPAs) as related to learning strategy seminars, yet Green found that no one at the college had synthesized the data or conducted a study. For this reason, Green set out to “report the impact of a learning strategies seminar on student academic success and persistence as indicated by first-semester, second-semester and third-semester grade point averages and fall-to-fall retention and persistence rates” (p.7). Green analyzed both the potential effect of the learning seminars on GPA and the potential effect of the learning seminars on student persistence after each of three semesters during the school year.

Green (2010) cooperated with the college’s Office of Institutional Research to gather information using the college’s database to track students who had participated in the learning strategy seminar. Green conceded that there might have been some threat to the validity of the study because only a small number of students relative to the college’s total enrollment had participated in the learning strategy seminar, leading to a small amount of data.

Green's (2010) results lacked a clear determination. There existed no definable correlations between students' involvement in learning strategy seminars and higher GPA or better retention. Green believed that this lack of correlation between students' involvement in learning strategy seminars and higher GPA or better retention was because of the relatively small number of students enrolled in the seminars.

While inconclusive, Green's (2010) research provided a research model that will be useful to the current study of FYE programs. Green's utilization of the college's Office of Institutional Research and the college's student data management software to assess archival results provided the advantage of maintaining student autonomy while yielding relevant statistical information.

Abts (2012) conducted research to test the efficacy of online offerings of college success courses. Abts observed that online students required a special skill set to navigate both the online learning environment and succeed in the online coursework. Abts summarized a central research concern by stating, "While online community college courses may appear attractive to students because of the low cost, increased accessibility, and flexibility, online community college courses . . . can present an added barrier to college success" (pp. 5-6).

Abts (2012) shared that the College Success Skills (CSS) courses taught at Rio Salado in Arizona were taken by approximately 150 students per semester. The CSS courses were taught in the online environment and were not required for most students, though students with repeated failures in coursework were strongly encouraged to enroll in CSS courses. Part of the Abts' concern was that many students were not taking CSS courses in their first term, thus diminishing the value of the courses. Abts sought to

understand the impact of Rio Salado's success courses, and hypothesized that, "If students perceive that these courses effectively teach success strategies, degree-seeking students at Rio Salado College will start online classes with the requisite study skills, time management techniques, and motivational strategies" (p. 11).

The primary research question Abts (2012) sought to answer was, "What are students' perceptions of their acquisition of college success strategies in Rio Salado's online college success courses?" (p. 12). To gather data, Abts utilized a pretest and posttest questionnaire that measured the students' perceptions of the competencies taught in Rio Salado's CSS courses. The purpose of the survey was to determine whether students perceived that CSS courses contributed to their college readiness. The prospective respondents were gathered by way of a convenience sample of students who gave permission to use their pretest and posttest assignments. Abts reported that 91 students participated in the pretest and posttest.

Abts (2012) found that 87 (96%) of the participants perceived that the CSS coursework would be helpful in improving their academic skills. Abts further found that 74 of the students (82%) reported that they found the course interesting, and 71 of the participants (79%) perceived that the CSS courses would help improve their job prospects. According to Abts,

Overall the students reported that they had better study skills after the course than before it. Particularly, learning strategies, test anxiety, self-efficacy, effort regulation (self-management), control of learning beliefs, study skills and time and study environment stand out as showing substantial improvement for the students. (p. 72)

Abts (2012) provided important research demonstrating that students perceived the online CSS coursework as effective at helping them become college-ready. Abts suggested that, because the courses were perceived as beneficial, there could be great merit in making CSS coursework mandatory, thereby positively affecting the college's success rates.

Academic Planning

The Center for Community College Student Engagement (2012) indicated that 91% of Community College Survey of Student Engagement (CCSSE) respondents (376,899 of 414,646) reported that academic planning and advising was an integral service to aid in student success. Nevertheless, Survey of Entering Student Engagement (SENSE) data showed that only 38% (27, 936 of 73,406) students felt that advisors aided them in the process of goal-setting or academic planning. An even smaller number of SENSE respondents felt that advisors were effective in helping community college students balance school commitments with other external obligations. The Center for Community College Student Engagement reported that only 26% (19,085 of 73,488) students indicated that advisors helped them decide how many courses to take in their first term.

The Center for Community College Student Engagement (2012) suggested that advising should go beyond helping students with course selection: "Community College students need advising that helps them set and maintain long-term goals. This type of advising and planning centers on creating a clear path from where students are now to their ultimate educational goals" (p. 11). The Center for Community College Student Engagement further called for regular advising to help students adapt their academic

plans as goals and circumstances for community college students can often change. The Center for Community College Student Engagement bolstered the importance of academic advising and planning by stating, “The academic plan keeps students focused because it shows how each course brings them closer to a key milestone and, ultimately, to the certificate or degree they seek” (p. 11).

(Williams, et al. 2009) reported on South Orange County Community College District’s advising tool called My Academic Plan (MAP). The purpose of the MAP project was to provide students with comprehensive information to inform their scheduling practices. Williams et al. shared that each student received personal information and guidance based on the student’s individual goals, prerequisite attainment, and academic history. Williams et al. reported that MAP is software thoroughly integrated with the community college district’s student information system and a statewide articulation database. Statewide integration allowed students to experience an effective planning mechanism, semester-by-semester, to their point of transfer to an upper-division college or university. According to Williams et al, after two years of students using MAP, “Preliminary research indicates that students who use MAP have a higher success rate in classes than students who do not” (p. 940).

In a similar vein, The Center for Community College Student Engagement (2012) reported on the GPS (Goals + Plans = Success) program, from Century College in Minnesota. This program was designed to help students make intelligent academic scheduling choices. The GPS website provided students with resources pertaining to career pathways, financial literacy, personal development, and academic planning.

Century College's GPS program was promoted in Century's New Student Seminar and in the college's developmental reading courses.

The Center for Community College Student Engagement (2012) reported that as a result of the GPS intervention, fall-to-fall retention increased from 60% to 64% of all first-time entering students. The fall-to-spring retention rates were even stronger with 81% student retention as opposed to 72% prior to the GPS intervention.

Conclusion

This review of the literature provided information about the great need of those entering the workforce to gain at least some higher education and provided reminders of how many college students are required to take developmental coursework. Seminal theoretical literature was reviewed to provide the impetus and framework for first-year experience coursework. Studies about the importance of academic planning and advising were provided to demonstrate how these services aid in student success. Models of first-year experience programs and other similar student retention and success interventions were analyzed. Both successful programs and programs that demonstrated a need for improvement were analyzed in order to demonstrate where further research and fine tuning are needed in student retention and success strategies like the first-year college experience coursework.

CHAPTER III

METHODOLOGY

Introduction

The previous chapter reviewed the placement of community college students into developmental courses and how first year experience courses have been implemented to address the needs of underprepared students. This chapter provides a thorough description of the methodology utilized for the current study, including an explanation of how the research questions were addressed. This chapter presents the research design, population sample, method of data collection, and limitations of the research.

Research Design

This study assessed the potential effects of Midwest Community College's (MWCC) First Year College Experience (FYCE) course on students in developmental courses. The literature review highlighted a gap in research, where previous research focused on first year experience course effect on fall-to-spring and fall-to-fall retention. Not enough emphasis has been placed on evaluating the potential effects of first year experience courses on students' academic success in terms of Grade Point Average (GPA) and overall grade performance (Alexander & Gardner 2009; Barefoot, 2000; Purdie & Rosser, 2011; Tinto, 1987). The current study also examined a comparison of student success data from MWCC's older College Success Skills (CSS) course to FYCE, which was designed, in part, to address perceived shortfalls in CSS.

This study was done using quantitative, post-test only, quasi-experimental design. This is a quantitative study because only GPA and other grade-related data were collected from preexisting sets of students. This is a quasi-experimental design because the independent variable, the FYCE course, was, in a sense, manipulated. The core design of this research was to examine differences between students who took FYCE to those who did not take FYCE and to compare FYCE students with CSS students.

This research employed a stratified random sampling technique because the researcher wanted to divide the groups along the line of characteristics of importance for this research. The further rationale behind using stratified sampling was to assure that similar demographics of students were being compared between the FYCE, non-FYCE, and CSS groups (Gay et al., 2009). This kind of sampling is also advantageous because it allows for a more descriptive analysis of the combined population of students (Garson, 2009).

The FYCE course was designed to help students who are required to take developmental coursework attain college success. College success, for the purpose of the current study, was represented by the individual student persisting, meaning continuing with college studies, with a minimum of 2.0 GPA and passing all classes with a grade of C or better in the semester subsequent to completing FYCE (Green, 2010).

The first research question in this study was, to what extent did developmental students who completed the First Year College Experience course achieve collegiate success? This question was designed to investigate whether or not FYCE completers gained skills and attitudes necessary for college success. The researcher collected student grade and GPA data from the Spring 2013 semester. The purpose of collecting data from

the Spring 2013 semester was to determine whether FYCE students were able to transfer the knowledge and skills from FYCE in the previous semester (Bement, 2010).

The second research question in this study was, to what extent did developmental students who did not complete the First Year College Experience course achieve collegiate success? This question was designed to investigate if students who did not enroll in or complete FYCE achieved collegiate success. If the non-FYCE students did not achieve collegiate success at the same rate as FYCE completers, then FYCE may be considered as a likely factor in collegiate success. If the non-FYCE students performed equally well or better than the FYCE completers, then questions would be raised as to whether FYCE was a likely factor in helping students achieve collegiate success.

The third research question in this study was, what are the differences in the collegiate success developmental students achieved who completed the First year College Experience course compared to those who completed the earlier College Success Skills course? This question was designed to help determine whether FYCE was an improvement over CSS. If students completing FYCE had higher rates of success over CSS completers, then FYCE could be considered as an improvement when compared to CSS. If students completing CSS had collegiate success rates as good as or better than FYCE students, then it would be considered that FYCE was not an improvement over the older course.

Population

In Fall 2011, MWCC had 555 incoming freshmen take the COMPASS placement test. Based on the Fall 2011 COMPASS results at MWCC, 92.9% (n=516) of the new students were required to take one or more developmental classes in the 2011-2012

school year. In terms of the subsequent developmental course placement, 45% ($n=250$) needed reading, 47.9% ($n=266$) needed developmental writing and 90.9% ($n=505$) needed developmental mathematics. Data generated from the MWCC's Office of Institutional Research (OIR) for the 2011- 2012 school year showed that only 7.6% ($n=42$) of entering freshman required no developmental coursework (Kankakee Community College, 2011).

The population consisted of archival data samples of developmental students who took the FYCE course. In the Fall 2012, semester, 87 students completed the FYCE course. Of those completers, 67% ($n=58$) reenrolled at MWCC in Spring 2013. For the purposes of this study, the 58 students who completed FYCE and who reenrolled at MWCC in Spring 2013 were referred to as Group A. The Group A student data were compared to data derived from a demographically similar group of 119 students, Group B, who had not taken the FYCE course or its predecessor course, CSS. The Group B data for the students who did not take the FYCE course were selected through stratified sampling. The researcher also collected archival data from 49 students who took the College Success Skills course, Group C, to compare with the Fall 2012 cohort of FYCE students, Group A. The Group C data were selected through stratified sampling. The combined groups of student data, representing those who did and who did not take the FYCE and those who did and did not take CSS provided the sample size of 226 for this research.

Data Collection

The archival data for the research questions in the current study were collected from the Office of Institutional Research (OIR) at MWCC and was compiled using the

Datatel Colleague Database System, the college's data-tracking program that stores and sorts institutional data on each enrolled student. This study examined gender, ethnicity, and age in order to determine if groups were equivalent on these variables, thus adding confidence that differences found between groups was more likely due to completion of the FYCE course.

Analytical Methods

The first research question for this study was, to what extent did developmental students who completed the First Year College Experience course achieve collegiate success? This question used a quasi-experimental design because this study involved a preexisting group of students who enrolled in FYCE. Descriptive presentation graphs, measures of central tendency, and measures of variability were used in this study to examine the effects of FYCE with respect to gender, ethnicity, and age. This study was, in part, designed to determine if groups are equivalent among these levels to give more confidence that differences found between groups were likely due to FYCE. The independent variable was taking the FYCE course, and the current study was a between-subjects design. The dependent variables assessed by the researcher were the GPA and grade data of the gender, ethnic, and age groups.

The second research question for this study was, to what extent did developmental students who did not complete the First Year College Experience course achieve collegiate success? This question used a quasi-experimental design because this study involves a preexisting group of students who did not enroll in FYCE. Descriptive presentation graphs, measures of central tendency, and measures of variability were used in this study to examine the effects of not taking FYCE with respect to gender, ethnicity,

and age. This study was, in part, designed to determine if groups were equivalent among these levels to give more confidence that differences found between groups was likely due to not taking FYCE. The independent variable was not taking the FYCE course, and the current study was a between-subject design. The dependent variables assessed by the researcher were the GPA and grade data of the gender, ethnic, and age groups.

The third research question for this study was, what are the differences in the collegiate success developmental students achieved who completed the First year College Experience course compared to those who completed the College Success Skills course? This question used a quasi-experimental design because this study involves a preexisting group of students who enrolled in FYCE and a preexisting group of students who took College Success Skills (CSS). Student data derived from those who took FYCE were compared with archival data from students who had similar course schedules who were also students of similar age, ethnic, and gender demographics, but who took the CSS course. The two levels of independent variables were students taking either the FYCE or CSS courses, and the current study was a between-subject design. The dependent variables assessed by the researcher were the GPA and grade data of the two groups.

Independent samples *t*-tests for were used to compare performance in the categories of GPA and grades of those students who took FYCE and those who took CSS because this question calls for examination between groups of one or more variables, and the question calls for the examination of two groups. Descriptive presentation graphs, measures of central tendency, and measures of variability were also used in this study to examine the effects of taking FYCE or CSS with respect to gender, ethnicity, and age. This study was, in part, designed to determine if groups were equivalent among these

levels to give more confidence that differences found between groups were likely due to taking FYCE as opposed to CSS. The data from all research questions were tabulated and examined using SPSS.

Limitations

All quasi-experimental research is somewhat hampered by various limitations. Though this research faced some limitations, a better understanding of the impact of FYCE coursework on developmental students can still be attained and appreciated. The limitations of this research are spelled out in the following paragraphs.

Beginning in fall, 2011, MWCC began addressing the lack of preparedness exhibited by incoming freshmen by devising several retention and success interventions detailed in the first chapter of the current study. Any increase in FYCE students' success rates may be attributed to any number of other student success initiatives underway at MWCC. The current study does not analyze the potential impact of the many other student success strategies that may have affected FYCE students. Future studies may be done utilizing multiple regression techniques to determine which of MWCC's student success initiatives had the most pronounced impact.

A considerable limitation was related to the number of students who did not pass the FYCE course with the grade of C or better. In Fall 2012, 20 FYCE students received the grade of F, and 10 students received the grade of D. This means that out of 85 students who completed FYCE in Fall 2012, 35% did not receive the grade of C or higher. As mentioned in the review of the literature, Kaplan (2000) found it statistically significant that in order for first year experience courses to have a positive effect on student academic success, the student would have had to succeed in the first year

experience course. The researcher recognized that those not passing FYCE with the grade of C or better could potentially skew the collegiate success data in the current study. To address this issue, the researcher conducted data analyses both with and then without the group of students who completed FYCE with grades lower than a C.

Another possible limitation for this study is the recent development of the FYCE course. During regular department meetings, FYCE faculty members have shared some of their perceived shortcomings of the course. Some of the primary weaknesses identified by faculty were the textbook selection, student difficulties with the online web-based features of the course, and differences between faculty approaches to their respective FYCE sections. Because of all of these variables, the FYCE curriculum and pedagogical approaches may need more time to mature and develop to gain a better understanding of the effects of the course on student success.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

The previous chapter provided a thorough explanation of the methodology used in the current study and described how the research questions were answered. The current chapter will focus on the findings, conclusions, and implications of the study, as well as recommendations for future research.

The current study assessed the potential effects of Midwest Community College's (MWCC) First Year College Experience (FYCE) course on students in developmental courses. The current study also compared student success data from MWCC's older College Success Skills (CSS) course to FYCE, which was designed, in part, to amend perceived shortfalls in the CSS course. The current study was guided by the following research questions:

1. To what extent did developmental students who completed the First Year College Experience course achieve collegiate success?
2. To what extent did developmental students who did not complete the First Year College Experience course achieve collegiate success?
3. What are the differences in the collegiate success developmental students achieved who completed the First year College Experience course compared to those who completed the College Success Skills course?

Findings

Research Question One

The first research question in the current study was, *To what extent did developmental students who completed the First Year College Experience course achieve collegiate success?* As mentioned previously, for the purposes of the current study, collegiate success was represented by the individual student persisting, meaning continuing with college studies, with a minimum of 2.0 GPA and passing all classes with a grade of C or better in the semester subsequent to taking FYCE. GPA and grades were used to reflect Tinto's (1987) aforementioned assertion that students' education, not retention, should be the goal of student success programs. Collecting student GPA and grade information in the semester subsequent to FYCE was done to follow the suggestion of Purdie and Rosser (2011), who found that students in the semester following FYE courses would have had time to internalize and apply FYE concepts. Purdie and Rosser further suggested that first semester GPA was not the best predictor for FYE student success. Descriptive presentation statistics, measures of central tendency, and measures of variability were used for this research question to examine the effects of FYCE with respect to gender, ethnicity, and age.

Group A.

For the purpose of simplifying the different groups in the current study, FYCE completers will be referred to as Group A. Out of the 87 students who enrolled in FYCE in Fall 2012, 58 re-enrolled at MWCC in Spring 2013, which is a 67% retention rate. As demonstrated in table 1, after the end of the Spring 2013 semester, the mean GPA for

Group A was 2.1607, with a standard deviation of .90652 and a variance of .822, meeting the collegiate success standard as defined in the current study.

GPA.

Table 1

Group A-Spring 2013 GPA

I	Range	Minimum	Maximum	<i>M</i>	<i>SD</i>	Variance
58	3.62	0.00	3.62	2.1607	.90652	.822

Regarding whether Group A students received the grade of C or better in the semester following FYCE, 24 students (41.4%) did have grades of C or higher, and 34 students (58.6%) did not have grades of C or higher, demonstrating that more than half of Group A did not get Cs or higher in Spring 2013, as seen in table 2.

Table 2

Group A-Spring 2013 C or higher

Yes/No	Frequency	Percent
Yes	24	41.4
No	34	58.6

Ethnicity.

The ethnic groups represented were White, Black, and Hispanic. Table 3 depicts the GPA performance of groups, specifically a mean, median, range, standard deviation, and the variance of GPAs for each of the represented ethnic groups.

Table 3

Group A-GPA Ethnicity

Ethnicity	<i>n</i>	<i>M</i>	<i>Mdn</i>	Range	<i>SD</i>	Variance
White	24	2.5251	2.4710	2.36	.59839	.358
Black	27	1.7770	1.8750	3.38	1.00841	1.017
Hispanic	7	2.3910	2.7500	2.38	.87881	.772
Total	58	2.1607	2.3305	3.62	.90652	.822

Table 3 indicates that out of 58 students in Group A, 24 were identified as White, 27 were identified as Black, and seven were identified as Hispanic. White Group A students had a Spring 2013 mean GPA of 2.5251; Black Group A students had a Spring 2013 mean GPA of 1.777; and Hispanic Group A students had a Spring 2013 mean GPA of 2.391.

To determine whether each ethnic group would show the same GPA performance in the semester after taking FYCE, an analysis of variance was conducted.

Table 4

Group A-Comparison of GPA According to Ethnicity

Ethnicity	Ethnicity	Mean Difference	SE	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
White	Black	.74809*	.23717	.007	.1768	1.3194
	Hispanic	.13413	.36315	.928	-.7406	1.0089
Black	White	-.74809*	.23717	.007	-1.3194	-.1768
	Hispanic	-.61396	.35857	.210	-1.4777	.2497
Hispanic	White	-.13413	.36315	.928	-1.0089	.7406
	Black	.61396	.35857	.210	-.2497	1.4777

* $p < .05$

Table 4 depicts that when comparing GPAs of the ethnicities represented in Group A, a statistically significant difference in performance existed: $F(2, 55) = 5.270, p < .05, .05, \eta^2 = .16081$. As shown in Table 4, White students ($n = 24, M = 2.5251, SD = .59839$) and Hispanic students ($n = 7, M = 2.3910, SD = .87881$) attained statistically significant higher GPAs than the Black students ($n = 27, M = 1.7770, SD = 1.00841$).

Gender.

Group A had 17 males and 41 females. Table 5 depicts the GPA performance the male group and the female group in the Spring 2013.

Table 5

Group A-Gender

Gender	<i>n</i>	<i>M</i>	<i>SD</i>
Male	17	2.2486	1.001710
Female	41	2.1242	0.874655

To determine whether Group A males and females would show the same GPA performance after taking FYCE, an independent-samples *t*-test was conducted. Conducting an independent-samples *t*-test demonstrated that the GPA difference between the genders was not statistically significant. Males ($n = 17, M = 2.095, SD = 0.136779$) and females ($n = 41, M = 2.095, SD = 0.136779$), did not exhibit statistically significant differences in GPA performance in the Spring 2013 semester after completing FYCE: $t(56) = .473, p > .05, d = .1474$.

Age.

Group A had 49 students aged 25 or younger and nine students aged 26 or older.

Table 6 presents the GPA performance of these age groups in Spring 2013.

Table 6

Group A-Age

Age	<i>n</i>	<i>M</i>	<i>SD</i>
≤ 25	49	2.095	0.136779
≥ 26	9	2.515	0.144379

To determine whether both age groups would show the same GPA performance after taking FYCE, an independent-samples *t*-test was conducted. Conducting an independent-samples *t*-test demonstrated that the GPA difference between the age groups was statistically significant. Those age 25 or younger ($n = 49, M = 2.095, SD = 0.136779$) had statistically significant lower GPAs than those age 26 or older ($n = 9, M = 2.515, SD = 0.144379$): $t(56) = -1.283, p < .05, d = -.1687$.

Research Question Two

The second research question in the current study was, *To what extent did developmental students who did not complete the First Year College Experience course achieve collegiate success?* In Spring 2013, a cohort of 119 non-FYCE students was identified through the process of stratified sampling as a comparison group for the current study. For the purpose of simplifying the different groups in the current study, non-FYCE students will be referred to as Group B. Group B students had the opportunity to take FYCE in Fall 2013, but they opted out of the course, as FYCE was not then a required course at MWCC. In Spring 2013, the mean GPA for Group B was 1.9978 with a standard deviation of 1.05729 and a variance of 1.118, falling slightly below the 2.0 GPA metric for college success.

Group B.

In reference to question two, the current study examined GPA and grade performance in the same manner that was used for Group A. Additionally, in the same manner as group A, Group B was analyzed according to gender, ethnicity, and age in order to determine if groups were equivalent on these variables, thus adding confidence to the notion that differences found among groups was more likely due to Group A completing the FYCE course.

GPA.

Table 7

Group B Spring 2013 GPA

<i>n</i>	Range	Minimum	Maximum	<i>M</i>	<i>SD</i>	Variance
119	4.62	.00	4.00	1.9978	1.05729	1.118

Regarding whether Group B students received the grade of C or better in the Spring 2013 semester, Table 8 depicts that 47 students (39.5%) did have grades of C or higher, and 72 students (60.5%) did not have grades of C or higher, demonstrating that more than half of Group B did not get Cs or higher in Spring 2013.

Table 8

Group B Spring 2013 C or higher

Yes/No	Frequency	Percent
Yes	47	39.5
No	72	60.5

Ethnicity.

The ethnic groups represented were White, Black, and Hispanic. Table 9 depicts the GPA performance of groups, specifically a mean, median, range, standard deviation, and the variance of GPAs for each of the represented ethnic groups.

Table 9

Group B-Ethnicity

Ethnicity	<i>n</i>	<i>M</i>	Median	Range	<i>SD</i>	Variance
White	82	2.1250	2.4710	4.00	.98158	.964
Black	30	1.7352	1.8750	4.00	1.1501	1.323
Hispanic	7	1.6329	2.7500	3.09	1.3645	1.862
Total	119	1.9978	2.3305	4.00	1.05729	1.118

Table 9 indicates that out of 119 students in Group B, 82 were identified as White, 30 were identified as Black, and 7 were identified as Hispanic. White Group B students had a Spring 2013 mean GPA of 2.1250; Black Group B students had a Spring 2013 mean GPA of 1.7352; and Hispanic Group B students had a Spring 2013 mean GPA of 1.6329.

To determine whether each ethnic group would show the same GPA performance, an analysis of variance was conducted. Conducting an analysis of variance demonstrated that the GPA for group B did not vary according to ethnicity. Table 10 depicts that White students ($n = 82$, $M = 2.1250$, $SD = .98158$), Hispanic students ($n = 7$, $M = 1.6329$, $SD = 1.36458$) and Black students ($n = 30$, $M = 1.7352$, $SD = 1.15017$) exhibited similar GPA performance: $F(2, 116) = 1.96770$, $p > .05$, $\eta^2 = .0328$.

Table 10

Group B-Comparison of GPA According to Ethnicity

Ethnicity	Ethnicity	Mean Difference	SE	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
White	Black	.38976	.22377	.194	-.1415	.9210
	Hispanic	.49211	.41295	.461	-.4883	1.4725
Black	White	-.38976	.22377	.194	-.9210	.1415
	Hispanic	.10234	.44020	.971	-.9428	1.4725
Hispanic	White	-.49211	.41295	.461	-1.4725	.4883
	Black	-.10234	.44020	.971	-1.1475	.9428

Gender.

Group B had 66 males and 53 females. Table 11 depicts the GPA performance for both the male group and the female group in Spring 2013.

Table 11

Group B-Gender

Gender	<i>n</i>	<i>M</i>	<i>SD</i>
Male	66	1.9818	1.11471
Female	53	2.0176	.16542

To determine whether Group B males and females would show the same GPA performance, an independent-samples *t*-test was conducted. Conducting an independent-samples *t*-test demonstrated that the GPA difference between the males ($n = 66$, $M = 1.9818$, $SD = .93192$) and females ($n = 53$, $M = 2.0176$, $SD = 1.20431$) was statistically significant, suggesting a statistically significant difference in GPA performance between the genders in Group B: $t(117) = -.182$, $p < .05$, $d = .0062$.

Age.

Group B had 105 students aged 25 or younger and 14 students aged 26 or older.

Table 12 presents the GPA performance of these age groups in Spring 2013.

Table 12

Group B-Age

Age	<i>n</i>	<i>M</i>	<i>SD</i>
≤ 25	105	1.9218	.10298
≥ 26	14	2.5676	.24520

To determine whether both age groups would show the same GPA performance, an independent-samples *t*-test was conducted. Conducting an independent-samples *t*-test demonstrated that the GPA difference between the age groups was statistically significant. Those age 25 or younger ($n = 105$, $M = 1.9218$, $SD = .10298$) had statistically significant lower GPAs than those age 26 or older ($n = 14$, $M = 2.5676$, $SD = .24520$), $t(117) = -2.293$, $p < .05$, $d = -.2125$.

Research Question Three

The third research question in the current study was, *What are the differences in the collegiate success developmental students achieved who completed the First Year*

College Experience course compared to those who completed the *College Success Skills* course? A cohort of 49 students who took the CSS course in Fall 2011 and who re-enrolled at MWCC in Spring 2012 was selected through stratified sampling as a comparison group for the current study. For the purpose of simplifying the different groups in the current study, CSS students will be referred to as Group C. Table 13 depicts that in Spring 2012, the mean cumulative GPA for Group C was 2.1681 with a standard deviation of .88641 and a variance of .786.

Group C.

In reference to question three, the current study examined GPA and grade performance in the same manner that was used for Groups A and B. Additionally, in the same manner as Groups A and B, Group C was analyzed according to gender, ethnicity, and age in order to determine if groups were equivalent on these variables, thus adding confidence to the notion that differences found among groups was more likely due to Group A completing the FYCE course.

GPA.

Table 13

Group C-Spring 2012 GPA

<i>n</i>	Range	Minimum	Maximum	<i>M</i>	<i>SD</i>	Variance
49	3.77	0.00	3.86	2.1681	.88641	.786

Table 14 depicts that 22 students (43.1%) did have grades of C or higher, and 27 students (52.9%) did not have grades of C or higher, demonstrating that more than half of Group C did not get Cs or higher in Spring 2013.

Table 14

Group C-Spring 2012 C or higher

Yes/No	Frequency	Percent
Yes	22	43.1
No	27	52.9

Ethnicity.

The ethnic groups represented were White, Black, and Hispanic. Table 15 depicts the GPA performance of groups, specifically a mean, median, range, standard deviation, and the variance of GPAs for each of the represented ethnic groups.

Table 15

Group C-GPA Ethnicity

Ethnicity	<i>n</i>	<i>M</i>	Median	Range	<i>SD</i>	Variance
White	22	2.4107	2.5350	3.08	.88216	.778
Black	16	1.8805	1.9500	2.71	.78479	.616
Hispanic	11	2.1010	2.3480	3.16	.97294	.947
Total	49	2.1681	2.3480	3.77	.88641	.786

Table 15 depicts that out of 49 students in Group C, 22 were identified as White, 16 were identified as Black, and 11 were identified as Hispanic. White Group C students had a Spring 2012 mean GPA of 2.4107; Black Group C students had a Spring 2012 mean GPA of 1.8805; and Hispanic Group B students had a Spring 2013 mean GPA of 2.1010.

To determine whether each ethnic group would show the same GPA performance, an analysis of variance was conducted. Conducting an analysis of variance demonstrated that there were no statistically significant differences in GPA performance in Group C:

$F(2, 46) = 1.751, p > .05, \eta^2 = .0707$. Table 16 depicted that White students ($n = 22, M =$

2.4107, $SD = .88216$), Hispanic students ($n = 11$, $M = 2.1010$, $SD = .97294$), and Black students ($n = 16$, $M = 1.8805$, $SD = .78479$) in Group C attained statistically similar GPAs.

Table 16

Group C-Comparison of GPA According to Ethnicity

Ethnicity	Ethnicity	Mean Difference	SE	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
White	Black	.53023	.28679	.165	-.1643	1.2248
	Hispanic	.30973	.32233	.605	-.4709	1.0903
Black	White	-.53023	.28679	.165	-1.2248	.1643
	Hispanic	-.22050	.34188	.796	-1.0485	.6075
Hispanic	White	-.30973	.32233	.605	-1.0903	.4709
	Black	-.22050	.34188	.976971	-.6075	1.0485

Gender.

Group C had 19 males and 30 females. Table 17 depicts the GPA performance the male group and the female group in Spring 2012.

Table 17

Group C Gender

Gender	<i>n</i>	<i>M</i>	<i>SD</i>
Male	66	1.9818	1.11471
Female	53	2.0176	.16542

To determine whether Group C males and females would show the same GPA performance, an independent-samples *t*-test was conducted. Conducting an independent-samples *t*-test demonstrated that males ($n = 66$, $M = 1.9818$, $SD = 1.11471$) and females

($n = 53$, $M = 2.0176$, $SD = .16542$), did not exhibit statistically significant differences in GPA performance in the Spring 2012 semester after completing CSS: $t(47) = -2.117$, $p > .05$, $d = .6207$, suggesting that there was no statistically significant difference between the genders in Group C.

Age.

Group C had 30 students aged 25 or younger and 19 students aged 26 or older.

Table 18 depicts GPA performance of these age groups in Spring 2012.

Table 18

Group C-Age

Age	n	M	SD
≤ 25	30	2.0312	.16673
≥ 26	19	2.3842	.18794

To determine whether both age groups would show the same GPA performance, an independent-samples t -test was conducted. Conducting an independent-samples t -test demonstrated that the GPA difference between the age groups was not statistically significant. Those age 25 or younger ($n = 30$, $M = 2.0312$, $SD = .16673$) did not exhibit statistically significant different GPAs than those age 26 or older ($n = 19$, $M = 2.3842$, $SD = .18794$), $t(47) = -1.370$, $p > .05$, $d = -.4012$.

FYCE Compared to CSS.

To answer the third research question, *What are the differences in the collegiate success developmental students achieved who completed the First Year College Experience course compared to those who completed the College Success Skills course?* an independent-samples t -test was conducted.

Table 19 depicts that Group A and Group C did not have any statistically significant differences in mean GPA in the semester following either CSS or FYCE. To determine whether Group A performed the same as Group C with respect GPA, an independent-samples *t*-test was conducted. Conducting an independent-samples *t*-test confirmed that the GPA difference between the groups was not statistically significant. Group C ($n = 49, M = 2.1681, SD = .88641$) did not exhibit statistically significant different GPAs than Group A ($n = 58, M = 2.1607, SD = .90652$), $t(105) = -.042, p > .05, d = .008$.

Table 19

Groups A and C

Groups	<i>n</i>	<i>M</i>	<i>SD</i>
FYCE	58	2.1607	.11903
CSS	49	2.1681	.12663

Conclusions

Research Question One

The first research question in the current study examined the extent to which students completing FYCE achieved student success. Frequencies, descriptive statistics, analysis of variance, and an independent-samples *t*-test were conducted to answer the first research question. In examining the first measure for college success, achieving a GPA of 2.0 or higher, Group A was shown to be successful, with a mean GPA of 2.1067. In examining the second measure for college success, attaining grades of C higher in the semester subsequent to taking FYCE, the results were negative, with 21 students (41.4%) achieving Cs or higher and 34 students (58.6%) not achieving Cs or higher.

In reference to question one, the current study examined gender, ethnicity, and age in order to determine if groups were equivalent on these variables, thus adding confidence to the notion that differences found among groups was more likely due to completion of the FYCE course. With regard to ethnicity, White and Hispanic students attained statistically significant higher GPAs than the Black students. With regard to gender, there were no statistically significant differences. With regard to age, those who were 25 or younger achieved statistically significant lower GPAs than those who were 26 or older. In summary, White and Hispanic students who took FYCE in Fall 2013 had statistically significant higher GPAs than Black students. Students age 26 and over achieved statistically significant higher GPAs than students age 25 and under.

Research Question Two

The second research question examined to what extent students who did not complete the First Year College Experience course achieved collegiate success. Frequencies, descriptive statistics, analysis of variance, and an independent-samples *t*-test were conducted to answer the second research question. In examining the first measure for college success, achieving a GPA of 2.0 or higher, Group B was shown not to be successful, with a mean GPA of 1.9978. In examining the second measure for college success, attaining grades of C higher in the Spring 2013, the results were negative with 47 students (39.5%) achieving Cs or higher and 72 students (60.5%) not achieving Cs or higher.

In reference to question two, the current study examined gender, ethnicity, and age in order to determine if groups were equivalent on these variables, thus adding confidence to the notion that differences found between groups were more likely due to

Group A completing the FYCE course and Group B not enrolling in and completing the course. There were no statistically significant differences among the ethnicities in Group B. However, the GPA differences between the genders were statistically significant, with females outperforming males. In reference to age, those who were 25 or younger had statistically significant lower GPAs than those who were 26 or older. While the reason for females outperforming males is inconclusive, Byrd and Macdonald (2005) suggested that nontraditional students may have advantages in the areas of self-motivation, self-advocacy, and study habits.

Research Question Three

The third research question in the current study examined whether there were performance differences between FYCE completers and CSS completers. Frequencies, descriptive statistics, analysis of variance, and an independent-samples *t*-test were conducted to answer the third research question. In examining the first measure for college success, achieving a GPA of 2.0 or higher, Group C was shown to be successful, with a mean GPA of 2.1681. In examining the second measure for college success, attaining grades of C higher in Spring 2013, the results were negative, with 22 students (43.1%) achieving Cs or higher and 27 students (52.9%) not achieving Cs or higher.

In reference to question three, the current study examined gender, ethnicity, and age in order to determine if groups were equivalent on these variables, thus adding confidence to the notion that differences found among groups was more likely due to completion of the CSS course. There were no statistically significant differences among the ethnicities, genders, or age groups in Group C.

The third research question was *What are the differences in the collegiate success developmental students achieved who completed the First Year College Experience course compared to those who completed the College Success Skills course?* Group A did not exhibit statistically significant different GPA performance than Group C.

Comparison Conclusions

To compare the GPA performance of Groups A, B, and C, the researcher conducted an analysis of variance. Table 20 depicts a comparison of means of the three groups.

Table 20

FYCE, Non-FYCE, CSS Compared

Groups ABC	Groups ABC	Mean Difference	SE	Sig.
FYCE	non-FYCE	.16293	.15778	.661
	CSS	-.00737	.19117	1.000
non-FYCE	FYCE	-.16293	.15778	.661
	CSS	-.17030	.16723	.671
CSS	FYCE	.00737	.19117	1.000
	non-FYCE	.17030	.16723	.671

When comparing GPAs of Groups, A, B, and C there were no statistically significant differences in performance: $F(2, 223) = .803, p > .05, .05, \eta^2 = .0072$.

Kaplan (2000) ascertained that first year experience (FYE) students need to pass their FYE course in order to transfer the FYE knowledge. Kaplan further asserted that FYE students not receiving successful grades in FYE would not be able to transfer the knowledge base imparted in the FYE course. Drawing from Kaplan, this researcher viewed those who received the grades of D or F in FYCE or CSS as outliers. Group A

was found to have 11 students who received Ds or Fs in their First Year College Experience course. Group C was found to have 11 students who received Ds or Fs in their College Success Skills course. The justification for viewing low performing FYCE students as outliers rests in Kaplan’s assertion that students not receiving a successful grade in a first year experience course would not have an ability to benefit from the course. Removing students who received Ds and Fs from the dataset allowed an analysis of those students who were likely able to transfer the knowledge they gained from FYCE to the Spring 2013 semester. Table 21 depicts the results after the outliers from Groups A and C were removed from the dataset.

Table 21

FYCE, Non-FYCE, CSS—Ds & Fs Removed

Groups ABC	Groups ABC	Mean Difference	SE	Sig.
FYCE	non-FYCE	.45533*	.16075	.015
	CSS	.03959	.20356	.996
non-FYCE	FYCE	-.45533*	.16075	.015
	CSS	-.41574	.17386	.052
CSS	FYCE	-.03959	.20356	.996
	non-FYCE	.41574	.17386	.052

* $p < .05$

When comparing GPAs of Groups, A, B, and C after removing students who had Ds or Fs in FYCE and CSS from Groups A and C, there was a statistically significant difference in performance: $F(2, 201) = .547, p < .05, .05, \eta^2 = .005$. Those from Group A ($n = 47, M = 2.4531, SD = .66178$) had statistically significant higher GPAs than Group B ($n = 119, M = 1.9978, SD = 1.05729$). There was no statistically significant

differences in GPA performance between Group A and Group C ($n = 49$, $M = 2.4135$, $SD = .78760$), even with the Ds and Fs removed.

Implications and Recommendations for Future Study

When comparing the FYCE group to the non-FYCE group, the findings demonstrated that students who earned the grade of C or better in FYCE and CSS were more successful in the ensuing semester. However, it is important to recognize that students who did not pass their FYCE or CSS course with the grade of C or better tended not to succeed in the ensuing semester. The implications of this dynamic are the focus of the following research recommendations.

The First Year College Experience course was not shown to be a statistically significant improvement over the CSS course. Students in both Group A and Group C demonstrated similar successful GPA performance. This lack of difference in performance between Groups A and C may be as a result of CSS having been a mature course, whereas FYCE is still relatively new. More differences may be seen between FYCE and CSS in the future with further adjustments to the FYCE course curriculum and textbook material. Notably, both Group A and Group C were demonstrated to exhibit statistically significant higher GPA performance than Group B. This may indicate that the groups completing CSS or FYCE with a successful grade benefitted from their respective first year experience courses.

White and Hispanic FYCE completers had higher Spring GPAs than Black students. It may be the case that MWCC's lack of ethnic diversity is a barrier for some minority FYCE students. In Fall 2012, all of the FYCE instructors were White. It may benefit MWCC to seek out minority instructors to teach FYCE courses with the hope of

bringing cultural and ethnic diversity that may help minority students succeed. As mentioned earlier, Barefoot (2000) believed that the success of FYE programs depended on broad, college-wide investment. Incidentally, in Spring 2013, the president of MWCC, who is Hispanic, taught a section of FYCE.

Completers of FYCE who were 26 years of age or older achieved higher Spring GPAs than younger students. Interestingly, this dynamic held true with the non-FYCE group as well. Future research should explore why MWCC's older students appear to be outperforming the younger students. As mentioned earlier in the review of the literature, Byrd and Macdonald (2005) found that nontraditional students often come to the community college with strengths in areas like self-advocacy, time management, and goal focus. Older students may have developed life skills that help them do well in first year experience courses. MWCC FYCE instructors and administrators may wish to leverage the academic strength of the older students by setting up student-to-student mentoring or occasions where the successful older students tutor the younger students.

The current study did not incorporate student feedback about their experience in FYCE. Future research should be conducted to ascertain students' perceptions of the course. By eliciting student feedback, MWCC faculty and administration may learn about students' insights about the curriculum, structure, and materials used to support the course.

Future research should examine the demographic data of the students who do not pass their FYCE course. It is possible that there are commonalities among students who do not pass FYCE. By building an understanding about the students who do not pass

FYCE, MWCC faculty and administration may consider amending parts of the course to help all FYCE students succeed.

Boylan and Bonham (2007) found that pairing developmental courses with college success classes shows positive effects for students enrolled in developmental education. However, FYCE is a relatively new and dynamic course at MWCC, so further assessment is needed. For example, one year after the course started, faculty changed the textbook used for FYCE. The book that was used in Fall 2012 was geared toward four-year colleges; however, faculty switched to a textbook that specifically addressed issues germane to students in two-year colleges. Additionally, FYCE instructors are evolving in their pedagogical approaches in teaching FYCE. It is possible that new approaches and materials will lead to higher rates of success. Future research should duplicate some of the features of this current study to determine if student outcomes improve as MWCC faculty attempt to improve the course. Because courses like FYCE are continually changing and growing, Boylan and Bonham suggested department leaders and faculty members should continually evaluate their own programs and look for ways to improve their service to students.

As mentioned in the review of the literature, Barefoot (2000) called for greater levels of assessment and transparency for FYE programs by institutions. Regarding assessment, Barefoot perceived that institutions rarely provided objective data pertaining to their FYE programs. Clearly, Barefoot saw a gap in the research of FYE programs by identifying the need for more comprehensive FYE course evaluations, including the utilization of more definitive student success metrics. Barefoot challenged those involved

with FYE programs to discuss publicly what works, and to share tested tools of assessment.

Barefoot (2000), Purdie (2008) and Alexander & Gardner (2009) argued that institutions need to look at more than student retention; they also needed to focus on metrics that indicate whether student learning is taking place. The current study was conducted in an effort to advance FYE study further by providing analysis of student learning data, namely GPAs and grade performance in the semester following FYCE. Similar to Barefoot (2000), According to Gardner (as cited in Purdie, 2008), Gardner valued assessing more than student persistence. According to Purdie, Gardner preferred that FYE assessment be based in student learning and success. Alexander and Gardner (2009) furthered contended that few institutions of higher education had effectively systematically assessed first year experience programs.

As mentioned earlier, Tinto (1987) observed no single student retention strategy that would work in all institutions and with all students. Because of the many missions and visions of diverse institutions of higher education, Tinto implored each college or university to design programs most suited for the needs of their respective students. Moreover, Tinto (1987) and Goudas and Boylan (2012), called on community colleges to address the needs of all students, regardless of their levels of academic preparedness. Boylan (2002) suggested that community colleges have the responsibility to provide developmental students a chance at acquiring equal footing with those not requiring remediation.

MWCC is community college with the mission statement, *Enhancing the quality of life through learning*. MWCC is also an institution of higher learning that is committed

to continuous quality improvement. Student-success oriented courses like FYCE are important to MWCC, yet it is critical that all courses are continually assessed and monitored. MWCC students make a tremendous investment in the college, and it is imperative that the college honor that investment by offering courses that demonstrably lead to student success.

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