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The Effectiveness of Student Success Courses on Students Enrolled in a Remedial Reading Course

Emily Walters
Eastern Illinois University
This research is a product of the graduate program in College Student Affairs at Eastern Illinois University. Find out more about the program.

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The Effectiveness of Student Success Courses on Students Enrolled in a Remedial Reading Course

(TITLE)

BY

Emily Walters

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

Masters in College Student Affairs

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY

CHARLESTON, ILLINOIS

2014

YEAR

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE

DATE

THEESIS COMMITTEE MEMBER DATE

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ABSTRACT

This study examined the impact of strategies for success courses on success of students in remedial education at a rural community college. Participants included 594 students ages 17 to 51 ($M = 20.03$, $SD = 4.25$) that were enrolled in one of two remedial reading courses while concurrently enrolled in strategies for success course. A quantitative study was used to determine if students completed more terms and achieved a higher cumulative GPA, if they were enrolled in strategies for success compared to their peers that were not enrolled in a strategies for success course. Results showed that students enrolled in approximately the same number of terms regardless of being enrolled in the success course. However, students in a middle level remedial course showed students achieved a higher GPA if they were concurrently enrolled in strategies for success. A recommendation for administrators, advisors, and faculty is to pair strategies for success courses with remedial education.

Key words: Remedial education, strategies for success, community colleges, retention
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The Effectiveness of Student Success Courses on the Success of Students

Enrolled in a Remedial Reading Course

Emily Walters

Eastern Illinois University
CHAPTER I

Introduction

President Barack Obama predicted, “In the coming years, jobs requiring at least an associate’s degree are projected to grow twice as fast as jobs requiring no college experience” (The White House, n.d). As part of the President’s agenda for higher education, two goals were put forth to be achieved by the year 2020. The first goal is to educate an additional five million Americans, providing them opportunities to earn a degree, certificate or other credentials. Secondly, President Obama campaigns to move America back to the leading country of college graduates among the nations’ population (The White House, n.d).

In 2011, the American Association of Community Colleges (AACC) announced the 21st-Century Initiative as a response to Obama’s agenda. Supported by the Bill and Melinda Gates Foundation, Kresge Foundation, American College Testing Incorporation, and the Educational Testing Service, the AACC established its own plan of action to achieve the goals of the president (AACC, 2012). The 21st-Century Initiative looks at redesigning community colleges to ensure accessibility to more Americans. With the push to educate more Americans, preparing students for college-level academics becomes a concern for administrators and faculty.

A growing number of students entering community colleges are not prepared for collegiate academics. Studies have shown that nearly half of all Americans are below skill level for college courses in three main areas: reading, math and English (Bettinger & Long, 2005; Horn, McCoy, Campbell & Brock, 2009). In order to accomplish the
initiative set forth by President Obama, community colleges will need to find ways to help students become successful in all areas of their college career.

American College Testing, Inc. (ACT Inc.) defines “college readiness” as the ability of students to have a 50% chance of achieving a B or higher or having a 75% chance of achieving a C or higher (ACT, Inc., 2013). However, Bailey, Jeong, and Cho (2010) argued “college readiness” cannot be accurately defined, because many students who are considered remedial, academically, do not actually enroll in remedial courses. Regardless of how “college readiness” is defined, the fact remains that more and more students are not meeting institutional standards for collegiate academics. From 1995-2000, the need for remedial courses has increased by seven percent (Parsad & Lewis, 2003). Studies have shown that approximately 50% of students enrolled in a community college will register for at least one developmental course (Bailey et al., 2009; Bettinger & Long, 2005; Horn et al., 2009).

In order for community colleges to rise to the challenge of the AACC’s 21st-Century Initiative, administrators will need to focus on an intervention plan to encourage student success. A possible intervention for students enrolled in remedial courses is to provide them with strategies during their first semester of college to be successful. Student success courses encourage students to develop “positive attitudes about learning and confidence in their abilities” (Stovall, 2000, p. 47). Implemented correctly, students will learn about services provided by the institution, become integrated in the social community of the institution, develop positive relationships with faculty, improve study skills, and learn techniques in test taking (Stovall, 1999).
Purpose of the Study

The purpose of this study was to determine the impact of student success courses on the success of students who place into remedial reading courses based on college assessment testing. The study compared the grade point average (GPA) and number of continuous terms of students who enrolled in remedial reading courses and student success courses versus their peers who were enrolled in remedial reading courses but not in student success courses.

Research Questions

A quantitative approach was utilized to determine the impact of student success courses on students enrolled in two levels of remedial reading courses. The following research questions have been proposed:

RQ1. Do students who enroll remedial reading courses and enroll in a student success course complete more terms than students who place into a remedial reading course and do not enroll in a student success course?

RQ2. Do students who enroll remedial reading courses and enroll in a student success course have a higher cumulative GPA than students who place into a remedial reading course and do not enroll in a student success course?

Hypotheses

The following hypotheses have been formulated:

1. Students enrolled in remedial reading courses will enroll in more terms if they also are enrolled in a student success course.

2. Students enrolled in remedial reading will have a higher cumulative GPA if they enroll in a student success course.
Significance of the Study

With the increase of students in need of remedial courses and a shift of those courses to community colleges from four-year universities, administrators need to develop a plan of action for student success (Bettinger & Long, 2005; Horn et al., 2009). Exploring a possible intervention, this study may be used to determine if students enrolled in remedial reading courses have a greater level of achievement if they are concurrently enrolled in a student success course.

Results from this study may be used by community college administrators to determine if student success courses should be required for students who place into remedial reading courses. Academic advisors at the community college will be able to use this study to encourage borderline remedial students to enroll in a student success course in order to increase continuous enrollment and higher grade point averages. Faculty members will be able to use this research to assist in developing an effective student success course and assessing the remedial curriculum to benefit students’ achievement and continued persistence to graduation.

Limitations of the Study

Research was limited to degree-seeking students enrolled in two levels of remedial reading and also enrolled in a student success course during the first term of their first year. Additional research may be needed to determine the impact of student success courses for students enrolled in English or math remedial courses. Further research may also consider students enrolling in student success courses during a later semester.
Furthermore, this study was limited by exploring only remedial reading courses. Due to the impact reading plays on multiple disciplines throughout one’s college career, it is the only remedial course on which this study focused (Pyne, 2012). Further research may investigate the impact of English and math remedial course work.

Definition of Terms

**Degree-seeking students.** For the purpose of this study, a “degree-seeking student” is one who intends to complete a degree or certificate from the institution in which he or she enrolls (Stovall, 1999).

**Persistence.** For the purpose of this study, “persistence” is a student’s continual enrollment at the institution in which he or she plans to achieve a degree (Stovall, 1999).

**Remedial reading course.** For the purpose of this study, a “remedial reading course” is intended to meet the needs of students deficient in college level reading abilities (Bettinger & Long, 2009). The level of remedial reading a student is placed at is determined by a placement test such as the ACT, COMPASS or Accuplacer test and may differ among institutions (see chart in Appendix).

**Student success course.** For the purpose of this study, a “student success course” is defined as a course used to improve the success of students in college and equip them with skills that will continue through their career. Skills learned in these courses include use of college resources, test taking skills, note-taking, how to handle stress and life management (Stovall, 1999).

**Student success nonparticipants.** For the purpose of this study, student success nonparticipants are defined as first year first semester students enrolled in a remedial reading course, but not enrolled in a student success course (Stovall, 1999).
Student success participants. For the purpose of this study, student success participants are defined as first year first semester students enrolled in a remedial reading course and a student success course (Stovall, 1999).

UI Client/Datatel. For the purpose of this study, UI Client/Datatel is defined as the database used by the research site to store and access student files. Information stored in UI Client/Datatel and used by the researcher includes, demographic data, academic records, student schedules and class rosters.

Summary

With President Obama’s push to educate more Americans by the year 2020, community colleges need to find ways to not only increase enrollment, but also increase retention. Chapter one discusses the increased number of underprepared students entering two-year colleges and how success courses could potentially benefit those placing into remedial classes. This study addressed the issue of students enrolled in remedial courses and determined if there is a significant advantage to concurrently enrolling in a success course. Additionally, it furthers the literature for student services professionals to develop ways to increase student retention and persistence.
CHAPTER II

Review of Literature

This review of the literature explores the role community colleges have taken through the years, their impact on higher education, as well as the challenges two-year institutions face. Furthermore, it will examine literature on the increase of remedial education and student dropout rates. Finally, this research will review the impact success courses have on student achievement.

History and Role of the Community College

In the forward to George Vaughan’s book The Community College Story, George Boggs, President and CEO of the American Association of Community Colleges (AACC), claimed the mission of the community college is to “continue to offer open, affordable access to higher education, regardless of the vagaries of the economy” (Vaughan, 2006, p. VII). This mission provides the basis for understanding the unique policies adopted by two-year colleges, how the roles of the faculty differs from a four-year institution and describes the students attending community colleges.

Since the establishment of Joliet Junior College in 1901, having grown as an extension from the local high school, community colleges have provided more students access to higher education (Levinson, 2005). The unique policy of open enrollment provides opportunity for anyone to enter higher education regardless of economic status or academic ability (Goldrick-Rab, 2010; Vaughan, 2006). Although open enrollment was not always the policy of community colleges, events of the 1960’s and 1970’s led to The Higher Education Act of 1965 creating opportunities for virtually anyone to enroll in higher education (Vaughan, 2006).
The role of the faculty also differs between two-year colleges and four-year universities. One of the largest differences was the number of full-time and part-time instructors employed by community colleges. According to the National Center for Educational Statistics (NCES, 2004), community colleges employed about 114,000 full-time instructors and 206,000 part-time instructors in 2004. By employing a larger number of part-time instructors, community colleges kept tuition rates low, while providing a wide variety of courses that may not be offered at four-year institutions (Vaughan, 2006). Vaughan gives the example of a student wanting to obtain a real estate license; many institutions were not able to afford a full-time faculty member for such a specific course. However, by hiring a part-time faculty member, students were provided with more options for program choices, as well as, more affordable options.

Students attending a two-year institution are very diverse. These students had a wide range of demographics; including age, ethnicity, and economic status, attended school full or part-time and are unemployed, underemployed or recent high school graduates (Vaughan, 2006). Students entering higher education came with varying goals and expectations of their final outcomes (Goldrick-Rab, 2010). Some students were trying to achieve a vocational skill to immediately enter the workforce while others are looked to transfer to four-year institutions. Another characteristic of community colleges students was that many of them were the first in their families to enroll in higher education. According to Levinson (2005), first-generation students comprised half of the students entering community college.

With nearly half of undergraduate students choosing to attend two-year institutions to start their higher education career, it is important to recognize the growing
role of community colleges (AACC, 2005). By offering students low-tuition, a variety of course options, and flexibility to meet their unique needs, community college have opened the doors for many people that would have never considered higher education (AACC, 2014).

**Challenges for Community Colleges**

In recent years community colleges have begun to face challenges they have never experienced before; including, but not limited to, the lack of funding, use of part-time faculty and the increased number of students in remedial education (Goldrick-Rab, 2010; Levinson, 2005).

Due to the economic crisis of recent years, community colleges have seen a decline in federal, state and local funding (Crookston & Hooks, 2012). From 1981-2001, state appropriated funds declined from 48.5% to 39.7% for community colleges (Roessler, 2006). This decline and dependence on state funding affected the decisions made by administration regarding resource distribution among departments, as well as, the quality and quantity of professional development for faculty members (Goldrick-Rab, 2010).

The number of part-time faculty used by community colleges has fluctuated over the years, but as recent as 2003, 63% of instructors were part-time (Cohen & Brawer, 2008). According to Cohen and Brawer (2008), community colleges chose to use part-time faculty for a number of reasons some of which included, low cost, special capabilities and ease of dismissal and reemployment. Using part-time faculty has been beneficial for community colleges, but a challenge for remediation. According to Goldrick-Rab (2010), faculty members are less inclined to spend time outside of teaching
for professional development since they are not compensated for this further education, in contrast to faculty members at four-year institutions.

The increasing number of students enrolled in remedial courses has led some to believe that community colleges have become “dumping grounds for educationally challenged” students (Levinson, 2005 p. 110). Not only has this given community colleges a poor image, but it also created a budgeting challenge. In many cases, the funding for remedial courses comes through the academic budget or a special state or federal budget established to assist students that had a disadvantage in terms of their educational preparation (Cohen & Brawer, 2008). Another challenge faced by community colleges with an increase in remedial students, is helping students understand the implications of remedial course work. A study by Deil-Amen and Rosenbaum (2002) showed nearly 70% of students enrolled in remedial courses were still unaware that their courses would not transfer to a four-year institution even after their first year enrollment. If students do not understand the importance of completing remedial course work, it is possible they have not taken it seriously; therefore the student are at risk for drop-out.

**Determining Remedial Placement**

In preparation for higher education, students have typically taken some kind of assessment or placement test to determine their level of academic abilities. Multiple placement tests were used and they varied from state to state and differed among individual institutions. The most common nationally recognized assessment tests are the American College Test (ACT) and Scholastic Aptitude Test (SAT) given to high school students or the Computerized Adaptive Placement Assessment and Support Systems test
(COMPASS) and Accuplacer test used by higher education institutions (Bettinger & Long, 2005; Horn et al., 2009).

Regardless of the placement test used by an institution, a growing number of students enter higher education underprepared for collegiate academics. Students who attend community college typically expect to spend a year or less in remedial course, as a study by Goldrick-Rab (2010) shows 90% placed below college level. A study at a Midwestern rural community college showed the number of students testing into remedial reading increased 18% from 2006-2011 (Breer, 2013). Further research showed that over half of students at community colleges were enrolled in at least one remedial course (Goldrick-Rab, 2010; Horn et al., 2009).

According to a study conducted by California Department of Education in conjunction with California State University, the Early Assessment Program (EAP) was established (Tierney & Garcia, 2008). As part of this study, 78% of 11th grade students in the selected area took the EAP exam. Of these students, 83% had not acquired the English skills needed for success in college-level English courses. The EAP’s goal was to identify underprepared students early in their high school career and provide them with courses that would expedite their readiness for collegiate academics. Unfortunately for students in this program, many of the courses were filled so the students were unable to take them, conflicted with other needed courses, or were classes the students would have needed to take during their senior year anyway.

While most states use placement testing as way of determining if a student needs remedial math, reading or English, some states are discontinuing placement tests. Recently, the Florida legislature passed a bill, SB 1720, allowing high school graduates to
by-pass placement testing at two-year institutions and enroll in courses of their choice making remedial course work optional (Fain, 2013). However, adult students, regardless of high school graduation, were still required to take the placement test to determine if remedial work was required. Similarly, schools in Long Beach, California were using a different method of determining remediation (Fensterwald, 2013). The local community college piloted a program allowing students to place into remedial or college level courses based on grades from high school transcripts. Results from this pilot program showed a dramatic increase in students passing college level course work. Although discontinuing placement testing was a recent endeavor among community colleges, it needs further research to determine effectiveness.

**Contributing Factors to Student Dropout Rates**

A recent study indicated the dropout rate for students attending a four-year university was 25%, but for community colleges, the dropout rate rose to 50% of students (Tuckman, 2011). Students drop out, of two-year and four-year institutions, for reasons such as the lack of integration, insufficient financial means, and commitments outside of school (Stovall, 1999; Tinto, 1998). Furthermore, the placement in remedial courses has proven to have negative effects on student persistence (Bettinger & Long, 2004).

A study of the Ohio college system explored the relationship between English and math remedial courses on student persistence (Bettinger & Long, 2009). In this study, students in remedial English had a dropout rate 9.3% higher than students not in remedial reading. The study also discovered that students in remedial English were less likely to complete a four-year degree within the six years that the research was conducted.
Another study by Burley, Butner and Cejda (2001) examined the dropout patterns of students in community colleges in Texas, of which 63,770 first time college students participated. Approximately 32% of these students placed into developmental courses. Results of this study showed 80% of the students that left college within the first term of their first year began with a learning deficit.

**Remedial Courses**

In most community colleges across the nation, institutions have adopted an “open-door” policy for admission (Horn et al., 2009). Due to the nature of this policy, nearly half of the students who enter a two-year institution are not prepared for college-level work and therefore, are placed into remedial courses (Bettinger & Long, 2005; Horn et al., 2009). Remedial courses can often have a negative effect on degree/certificate completion. At one Illinois community college, statistics showed 42% to 45% of all students completing a degree or certificate within three years. However, for students who tested into college-level reading, math and English courses, the completion rate increased by ten to twenty percent (Breer, 2013).

Remedial courses in higher education have been developed to assist students who were not ready for college-level academics. In some states, including Arizona, Florida, Montana, South Carolina, and Virginia, remedial courses were restricted from four-year institutions (Bettinger & Long, 2005). Many other states encouraged students to use community colleges for remedial courses. Bettinger and Long (2005) attributed the shift of remedial courses to community colleges to two main factors. The first was differing philosophies of administrators and faculty in teaching remedial courses at a four-year institution; many believed that community college or high school would be a better place
to prepare students for higher learning at a university. The second factor Bettinger and Long (2005) looked at was the additional financial burden involved in remedial reading at a four-year institution. On average, full-time faculty earns nearly $20,000 more a year at a four-year university than full-time faculty at a community college. Therefore, it is less expensive to hire additional faculty at the community college to teach remedial courses than hiring additional faculty at the university.

Although studies have shown enrollment in remedial courses had a negative impact on students’ completion of a degree program, other studies have shown different results. If students are able to complete their remedial courses, they had a better chance of success in completing two- and four-year degrees. Feely (2011) studied students at four-year institutions who took credits remedial courses at a community college prior to transferring to a four-year institution. She found that students who took remedial courses before transfer had a higher GPA than students who transferred from a community college without remedial courses. Feely (2011) recommended that students who border on remediation should be advised to take remedial courses and should be encouraged to use a tutoring center and/or study tables to assist in achieving higher success.

**Student Success Courses**

"In an effort to help students overcome the challenge to persist, earn a degree, and/or transfer," college student affairs professionals should consider the impact of student success courses on students in remedial courses (Crisp & Taggart, 2013, p.115). Studies have revealed students enrolled in student success courses during their first year of higher education had a higher GPA, were more connected to the institution and had
greater persistence to graduation (Stovall, 1999; Stovall, 2000; Tinto, 1993; Tuckman, 2011).

Stovall (1999) studied the impact of students enrolled in a student success course at a midsized, rural, Midwestern community college in Illinois. Students were divided into those who participated in a student success course ($N = 97$) and those who did not participate in a student success course ($N = 2,183$). The entire population of students in both groups was limited to first-year, first-term students. This study indicated that there was a positive relationship between students enrolled in a student success course when compared to those who were not in terms of persistence.

Watson and Rycraft (2010) studied the effects of an enhancement program for graduate students entering college on probationary status. The program was piloted for students who border the qualifications for admission. During the first ten weeks of the graduate program, probationary students were required to attend the enhancement program. Topics of study included how to use the library, expectations of the graduate school, how to manage stress, basics of American Psychological Association (APA) publication style, and how to use the advising system. The study found a higher percentage of success for minority students entering the graduate program on a probationary period who completed the orientation program than with Caucasian students entering the program on a probationary period who completed the orientation program.

A study by Abreu-Ellis, Ellis, and Hayes (2009) explored the academic preparedness of students with learning disabilities compared to the preparedness of students without learning disabilities. The Learning Study Strategies Inventory (LASSI) was distributed to 45 students registered with the disabilities office at one university. The
LASSI evaluated students’ strengths and weaknesses in ten categories including, anxiety, attitude, concentration, information processing, motivation, selecting main ideas, self-testing, study aids, test strategies, and time management (Abreu-Ellis et al., 2009). Results of this inventory showed students with disabilities tested lower in most categories except for study aids. The researchers suggested this was related to the aids used by special education teachers in secondary schools to assist students with learning disabilities. From this study, one may conclude that encouraging students to enroll in a success course, where they would learn study skills, would benefit their academic achievement and persistence.

The National Survey of Student Engagement (NSSE) was also used to determine if students who were more connected to their institution achieved higher GPAs than those who were not connected (Brown & Burdsal, 2012). The NSSE was administered to 3,839 students from Wichita State University. Results of this study showed only a slight influence of student involvement on GPA. However, the study did show a significant correlation between campus relationships and GPA.

**Summary**

A review of the literature shows an increasing number of students entering community college underprepared for collegiate level academics. As a result of students not being academically prepared for college, an increasing number are testing into remedial courses. Due to the negative effect enrollment in remedial courses has on student success, dropout rates have continued to grow. If community colleges are going to achieve the goal of five million additional college graduates by 2020, mentioned in Chapter I, extreme intervention will need to be implemented by community colleges.
The next chapter explains how this research was conducted in order to find a possible solution to help struggling students be successful in their collegiate career, as well as in their field of work.
CHAPTER III

Methods

Design of the Study

This quantitative study explored the impact of student success courses on students that placed into remedial reading courses at one community college. Reading was the subject chosen, because it corresponds more closely with other disciplines across the college curriculum and multiple degree programs than other remedial programs such as English and math (Horn et al., 2009). Additionally, the participating research site observed an increased number of students testing into remedial reading courses from approximately 20% in fall of 2005 to more than 30% in fall of 2010 (Breer, 2013).

Research Site

The institution was an accredited midsized, Midwestern community college in a rural community. Approximately 8,200 students were enrolled across the district with an average age of 26. The district covered nearly 4,000 square miles, with a population of 203,000 people living within district lines at the time this study took place. The community college has one main campus and three satellite campuses across the district and includes 31 participating dual credit high schools and 16 Department of Correction facilities. The public college offers programs for direct employment, transfer baccalaureate degrees, adult education and special job training programs (Anonymous, n.d.).

Description of Courses

For this study, students enrolled in one or more of three different courses at one community college. The three courses were Essentials in Reading (RDG 009), Reading
and Study Skills (RDG 050), and Strategies for Success (SFS 101). Essentials in Reading is a middle level remedial course, worth two and half credit hours and covers basic reading skills and strategies. At this college, the course is required for students that have an ACT score between 12 and 16 or a COMPASS score between 51 and 66 (see chart in Appendix). Reading and Study Skills (RDG 050) is the highest level remedial reading course, worth two and half credit hours and covers reading strategies along with basic study skills. This course is required for students that have an ACT score between 17 and 21 or a COMPASS score between 67 and 82 (see chart in Appendix). The two remedial reading courses in this study are non-transferrable courses, but are required to be taken in the first semester if a student places into one of them. The courses must be completed with at least C or better to proceed to the next course. The third course used in this study, Strategies for Success (SFS 101), is worth two credit hours and is transferrable to four-year institutions. The course provides students with information on how to be successful in their college and career path. The curriculum includes college resources, time management skills, test taking strategies, career goals, and life management skills. Strategies for Success is an elective for most students, but can be required for students that are on academic probation as part of the institutions early alert program.

Participants

Participants were students in their first year, first semester during the 2010 and 2011 fall semesters who were enrolled in a remedial reading course, either Essentials in Reading (RDG 009), or Reading and Study Skills (RDG 050). Of the 594 participants, 130 students were enrolled in RDG 009 and 338 were enrolled in RDG 050. Additionally, 54 students were enrolled in RDG 009 while taking Strategies for Success (SFS 101).
during the same terms and 72 students were enrolled in RDG 050 with SFS101 concurrently.

Students who were only enrolled in a remedial reading class but withdrew before the end of the semester were not included in the study. Of the students that withdrew prior to completing their first term, 27 were enrolled in RDG009 only and 85 were enrolled in RDG050 only. Similarly, students enrolled in a remedial reading course and SFS 101, but withdrew from both classes prior to the end of the semester were not included in the study. Six students were enrolled in RDG009 and SFS101, and nine were enrolled in RDG050 and SFS 101.

**Instruments**

UI Client/Datatel is used by the institution to maintain and store students’ academic, demographic, and institutional records. Data was collected and stored in a Microsoft Excel document for analysis. The data was input into the Statistical Package for Social Sciences (SPSS®) to run analysis on the collected data.

**Data Collection**

Data was obtained for this study via UI Client/Datatel, the institution’s student database. UI Client/Datatel was used to obtain student course enrollment, grade point average, and number of completed terms. Students were given ID numbers separate from their school ID number in order to maintain confidentiality and stored on a USB drive along with research data. Any confidential information that could be traced back to a specific student was stored on a password protected virtual machine. Research was conducted following the Family Educational Rights and Privacy Act of 1974 (FERPA) standards. Under FERPA regulations school officials with "legitimate educational
interest” are allowed to use student data without consent provided every effort is made to conserve confidentiality (FERPA, n.d).

Data Analysis

A quantitative approach was used to conduct this study. Data was collected from UI Client/Datatel and stored in an Excel document on a password protected virtual machine. The Statistical Package for Social Sciences (SPSS®) was used to compare the GPA of remedial students in success courses versus those that were not enrolled in success courses. The hypotheses were analyzed using independent t-tests to determine if enrollment in a student success course impacted students’ GPA and continuous enrollment.

Treatment of Data

Data was collected from UI Client/Datatel organized in a Microsoft Excel document which was stored on a password protected virtual machine. Separate identification numbers were given to participants in order to protect confidentiality. Once collected, data will remain on the virtual machine and deleted after three years, as per Institutional Review Board (IRB) policy.

Summary

This quantitative study evaluated the impact of enrollment in student success courses have on the achievement of students concurrently enrolled in remedial reading courses at a rural community college. Data was collected using student records already stored in the institution’s database and analyzed using SPSS®. The data will be stored on a USB drive for three years before being destroyed in order to adhere to IRB standards.
CHAPTER IV

Results

Introduction

This study was designed to determine if students enrolled in a remedial reading course completed more terms and had a higher cumulative grade point average if they were concurrently enrolled in a student success course. Independent t-tests were used to evaluate the two research questions for this study which have been restated in this chapter. For this study, enrollment in a strategies for success course was used as the independent variable in order to analyze the impact of these courses on the achievement of students in remedial reading courses.

Students was only enrolled in a remedial reading course, but withdrew before the end of the semester were not included in this study. Additionally, students that were enrolled in both a success and remedial reading course and withdrew from both courses prior to the end of the semester were not included in the study. In total, 127 students were excluded from the study because they had withdrawn from the course used in this study. Students who were enrolled in both a success course and a remedial reading course, but only withdrew from one of the courses were included in the study.

Descriptive Data

Participants included in the study consisted of 594 students enrolled in their first year, first term at a midsized community college. Demographically, participants were 54% female and 46% male. Table 1 shows the percentage of male and female participants enrolled per subgroup. Students were between the ages of 17 and 51 (M = 20.03, SD = 4.25).
Looking at the total number of students enrolled, a higher percentage of students enrolled in remedial reading were between the ages of 17 and 20, (81.6%) than would be suggested by the total of students enrolled in that age group for the Fall 2010 (37.6%) or Fall 2011 (33.9%) cohorts. Table 2 and table 3, see below, show the percentage of students, by age group, in remedial courses versus those in all courses during the Fall 2010 and Fall 2011 cohorts.

Table 3

*Campus Population by Age*

<table>
<thead>
<tr>
<th></th>
<th>17-20</th>
<th>21-24</th>
<th>25-30</th>
<th>31-39</th>
<th>40-55</th>
<th>Over 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2010 Cohort</td>
<td>37.6%</td>
<td>15.2%</td>
<td>15.5%</td>
<td>15.1%</td>
<td>12.5%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Fall 2011 Cohort</td>
<td>33.9%</td>
<td>16.1%</td>
<td>15.8%</td>
<td>16.0%</td>
<td>13.7%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Regarding race/ethnicity of the participants, 87.2% were Caucasian, 9.8% were African American, 1.7% Hispanic, and 0.8% were Asian, 0.3% were Non-Resident, and
0.2% were American Indian. Table 4 shows the percentage of participants by race/ethnicity. This is comparable to the overall population of students enrolled. During the Fall 2010 semester, the total number of students enrolled consisted of 92% Caucasian, 5.4% African American, 2.2% Hispanic, 0.6% Asian, and 0.3% American Indian. The Fall 2011 cohort consisted of 90.7% Caucasian, 5.6% African American, 1.5% Hispanic, 0.7% Non-Resident, 0.6% Asian, and 0.4% American Indian.

Table 4

<table>
<thead>
<tr>
<th>Sub-Group</th>
<th>N</th>
<th>Asian</th>
<th>American Indian</th>
<th>African American</th>
<th>Hispanic</th>
<th>Caucasian</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDG 009-only</td>
<td>13</td>
<td>0.0%</td>
<td>0.0%</td>
<td>7.7%</td>
<td>1.5%</td>
<td>89.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>RDG 009/SFS 101</td>
<td>54</td>
<td>0.0%</td>
<td>0.0%</td>
<td>20.4%</td>
<td>0.0%</td>
<td>79.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>RDG 050</td>
<td>8</td>
<td>0.6%</td>
<td>0.0%</td>
<td>7.1%</td>
<td>2.1%</td>
<td>89.9%</td>
<td>0.3%</td>
</tr>
<tr>
<td>RDG 050/SFS 101</td>
<td>72</td>
<td>1.4%</td>
<td>1.4%</td>
<td>18.1%</td>
<td>1.4%</td>
<td>76.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>0.8%</td>
<td>0.2%</td>
<td>9.8%</td>
<td>1.7%</td>
<td>87.2%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Students enrolled in two levels of remedial reading courses from Fall 2010 and Fall 2011 were evaluated to determine if enrollment in a success course affected their cumulative GPA and retention. The middle level and highest level of remedial reading, RDG 009 and RDG 050, respectively, were chosen based on the number of students enrolled. The lowest remedial reading course had a minimal number of students enrolled and therefore was not used in this study. Letter grades were used to evaluate the students' level of knowledge for the semester. Table 5 shows what letter grade participants received for the individual classes.
THE EFFECTIVENESS OF STUDENT SUCCESS COURSES

Table 5

*Participants by Course Grades*

<table>
<thead>
<tr>
<th>Sub-Group</th>
<th>N</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDG 009- only</td>
<td>130</td>
<td>35</td>
<td>30</td>
<td>32</td>
<td>9</td>
<td>24</td>
<td>27*</td>
</tr>
<tr>
<td>RDG 009/SFS 101</td>
<td>54</td>
<td>12</td>
<td>14</td>
<td>10</td>
<td>2</td>
<td>12</td>
<td>6*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
<td>14</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>RDG 050</td>
<td>338</td>
<td>90</td>
<td>85</td>
<td>76</td>
<td>23</td>
<td>64</td>
<td>85*</td>
</tr>
<tr>
<td>RDG 050/SFS 101</td>
<td>72</td>
<td>13</td>
<td>21</td>
<td>10</td>
<td>5</td>
<td>13</td>
<td>9*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
<td>14</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>594</td>
<td>194</td>
<td>176</td>
<td>139</td>
<td>48</td>
<td>138</td>
<td>152</td>
</tr>
</tbody>
</table>

*Students enrolled in RDG 009/SFS 101, but dropped both classes were not used in the study. Students enrolled in RDG 050/SFS 101, but dropped both classes were not used in the study.*

**Students enrolled in RDG 009 only and RDG 050 only, but dropped the class were not used in the study.

Research Question One

Do students who place into remedial reading courses and enroll in a student success course complete more terms than students who place into a remedial reading course and do not enroll in a student success course?

The first research question was intended to determine if students completed more terms if they were concurrently enrolled in a student success course than students who were only enrolled in a remedial reading course. The hypothesis was remedial reading students in their first term would be more likely to continue enrolling in courses until certificate completion if they were concurrently enrolled in the strategies for success course. To test this hypothesis an independent \( t \)-test was used. Tests were run separately for the middle level RDG 009 and high level RDG 050 courses.
Results for RDG 009

Students enrolled in the sub-group RDG 009 consisted of 67 females and 63 males between the ages of 17 and 33 ($M = 19.11$, $SD = 1.97$). Out of this population, 89.2% were Caucasian, 7.7% African American, 1.5% Asian, and 1.5% Hispanic.

Participants in the sub-group RDG 009/SFS 101 consisted of 38 females and 16 males ranging from ages 18 to 48 ($M = 20.72$, $SD = 5.51$). In this sub-group, 79.6% were Caucasian students, 20.4% were African American students.

An independent $t$-test was conducted to determine if students enrolled in more terms when they were enrolled in the success course and a remedial reading course at the same time during their first term of college. Overall, the test showed that students in remedial reading courses, concurrently enrolled in success courses during their first term ($M = 3.24$, $SD = 2.21$) completed about the same number of terms as students that were not enrolled in success courses during their first term ($M = 3.25$, $SD = 2.13$). The similarity was not significant $t(182) = .038$, $p = .97$, $d = -.005$, which is counter to the research hypothesis. Levene’s test indicated equal variance for both groups ($F = .02$, $p = .88$). Table 6 shows the average number of completed terms of students in a success course versus students not enrolled in a success course.

Table 6

<table>
<thead>
<tr>
<th>Completion of Terms</th>
<th>SFS Without Success Course</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>130</td>
<td>3.25</td>
<td>2.125</td>
<td>0.186</td>
</tr>
<tr>
<td>With Success Course</td>
<td></td>
<td>54</td>
<td>3.24</td>
<td>2.206</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Results for RDG 050

For students enrolled in the sub-group RDG 050, 177 were female and 161 were male between the ages of 19 and 51 ($M = 22.89, SD = 6.39$). The population consisted of 89.9% Caucasian students, 7.1% African American students, 2.1% Hispanic students, 0.6% Asian students, and 0.3% Non-Resident students. Participants in the sub-group RDG 050/SFS 101 consisted of 39 females and 33 males ranging from ages 18 to 42 ($M = 20.97, SD = 4.43$). The population consisted of 76.4% Caucasian students, 18.1% African American students, 1.4% American Indian, 1.4% Asian students, 1.4% Hispanic students, and 1.4% Non-Resident.

Overall, the $t$-test showed that students in success courses ($M = 3.58, SD = 2.28$) completed about the same number of terms as students not enrolled in success courses ($M = 3.77, SD = 2.11$). The independent $t$-test was not significant $t(408) = .67, p = .5, d = -.09$, which is counter to the research hypothesis. Levene's test indicated an equal variance for both groups ($F = 1.61, p = 0.21$). Table 7 explains the average number of completed terms for students enrolled a success course compared to students that were not enrolled in a success term for RDG 050.

Table 7

<table>
<thead>
<tr>
<th>Completion of Terms</th>
<th>SFS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Student Success</td>
<td>338</td>
<td>3.77</td>
<td>2.107</td>
<td></td>
<td>0.115</td>
</tr>
<tr>
<td>With Student Success</td>
<td>72</td>
<td>3.58</td>
<td>2.275</td>
<td></td>
<td>0.268</td>
</tr>
</tbody>
</table>
Research Question Two

Do students who enroll in remedial reading courses and enroll in a student success course have a higher cumulative GPA than students who place into a remedial reading course and do not enroll in a student success course?

The second research question was used to determine if students concurrently enrolled in the strategies for success course had a higher cumulative GPA, during their first term, than students without the strategies for success course. The hypothesis was that students enrolled in both a remedial reading course and the strategies for course would have a higher cumulative GPA than students who only enrolled in a remedial reading course. To test this hypothesis an independent t-tests was used. Tests were run separately for RDG 009 and RDG 050. The same population that was described for research question one was used for research question two.

Results for RDG 009

The results of the independent t-test showed that students in success courses ($M = 1.97, SD = 1.36$) had a higher cumulative GPA than students that were not enrolled in success courses ($M = 1.57, SD = 1.15$). The t-test confirmed the hypothesis was significant $t(85.85) = -1.91, p = .06, d = .35$; which shows a small effect size. Levene’s test indicated unequal variances for both groups ($F = 4.10, p = .04$), so the degrees of freedom were adjusted from 182 to 85.85. Table 8 depicts the average first term cumulative GPA of students in success courses compared to those that were not enrolled.
Table 8

*Average Cumulative GPA of Students in RDG 009*

<table>
<thead>
<tr>
<th>SFS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Success Course</td>
<td>130</td>
<td>1.574462</td>
<td>1.1495015</td>
<td>0.1008179</td>
</tr>
<tr>
<td>With Success Course</td>
<td>54</td>
<td>1.978148</td>
<td>1.3632509</td>
<td>0.185515</td>
</tr>
</tbody>
</table>

**Results for RDG 050**

The independent *t*-test showed that students in success courses (*M* = 2.10, *SD* = 1.24) had a similar cumulative GPA to students that were not enrolled in the strategies for success course (*M* = 2.13, *SD* = 1.1), which was counter to the original hypothesis. The *t*-test was not significant, *t*(95.99) = .16, *p* = .88, *d* = -.03. Levene’s test showed unequal variances for both groups (*F* = 5, *p* = .03), so the degrees of freedom were adjusted from 408 to 95.99. Table 9 shows the cumulative GPA for students enrolled in the strategies for success course was not significantly different from students that were not enrolled in the strategies for success course.

Table 9

*Average Cumulative GPA of Students in RDG 050*

<table>
<thead>
<tr>
<th>SFS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Student Success</td>
<td>338</td>
<td>2.127186</td>
<td>1.094261</td>
<td>0.05952</td>
</tr>
<tr>
<td>With Student Success</td>
<td>72</td>
<td>2.102556</td>
<td>1.2392791</td>
<td>0.1460504</td>
</tr>
</tbody>
</table>
Summary

A quantitative study was created to determine if remedial reading students enrolled in a success course, during their first term, were more successful and more likely to be retained than remedial reading students who were not enrolled in a success course. Independent *t*-tests were used to determine if students received a higher cumulative GPA during their first term and completed more terms as a result of the success course.

Two remedial courses were evaluated separately; a middle level class (RDG 009) and a higher level class (RDG 050) along with the strategies for success course (SFS 101) in order to determine if strategies for success had more of an impact on the middle or higher level reading course. Participants enrolled in these courses ranged from 17 to 51 (*M* = 20.03, *SD* = 4.25) with most of them falling in the 17-20 age category (81.6%). Of the 594 participants that enrolled in one or more of the courses, 127 withdrew from either the remedial reading course or both the remedial reading and strategies for success course. These students were not included in the study.

Results for research question one showed that students completed about the same number of terms regardless of being concurrently enrolled in the strategies for success course. This was true for both the middle level reading course (RDG 009) the higher level reading course (RDG 050). Research question two showed that students who tested into the middle reading class, RDG 009, had a higher cumulative GPA if they were concurrently enrolled in the strategies for success course versus those that were not in the strategies for success course. However, strategies for success had little impact on the higher level reading course RDG 050. Chapter V will discuss the results of this study in comparison to prior studies.
CHAPTER V

Discussion

This study was created in order to provide additional literature for administrators, advisors, and student affairs professionals to assist students that test into remedial courses. The purpose was to examine if remedial reading students who take a success course during their first term achieve a higher cumulative GPA and complete more terms. Prior research confirms a difference between participants in a strategies for success course (Stovall, 1999), as this study showed a small effect on the GPA of students enrolled in the middle level reading course, RDG 009. Two research questions were used as part of this study and have been restated within this chapter.

The study used existing data from the Fall 2010 and Fall 2011 cohorts in order to determine if students enrolled in a remedial course completed more terms while simultaneously taking a strategies for success course during their first term. Secondly, the study compared the average first term cumulative GPA of remedial students enrolled in a strategies for success course to the average first term cumulative GPA of remedial reading students not enrolled in a strategies for success course.

Research Question One

Do students who place into remedial reading courses and enroll in a student success course complete more terms than students who place into a remedial reading course and do not enroll in a student success course?

For this study, students completed about the same number of terms regardless of being enrolled in a strategies for success course. The middle level class showed students completed 3.24 terms with strategies for success and 3.25 without strategies for success. The higher level reading course showed students completed more terms than the middle
level, but still about the same when compared to those enrolled in strategies (3.58 terms) versus those who were not enrolled in strategies (3.77 terms). This could be due to the nature of community colleges. Most community colleges have both technical and transferrable programs and students are entering the college with varying goals (Goldrick-Rab, 2010). For some technical programs the number of terms required for a certificate can vary from one to four terms, while typical transfer programs are four terms. Since this study shows most students are completing, on average, more than three terms, it appears that most students are completing enough terms to earn their degree or certificate, assuming they have not changed their major or taken classes that do not pertain to their degree.

Additionally, this study shows that if students test into a higher level reading course, they are able to complete more terms than if they test into the middle level course. Feely (2011) and Bettinger and Long (2004) both studied the effects of remedial course enrollment to have a negative effect on students continuation in higher education. However, the fewer remedial courses students have to take, the higher their chances of completing. This study showed that students in the higher level reading course completed more terms (3.68) than students in the middle level reading course (3.25).

Research Question Two

Do students who place into remedial reading courses and enroll in a student success course have a higher cumulative GPA than students who place into a remedial reading course and do not enroll in a student success course?

Previous studies, mentioned in Chapter II, concluded that students in a success course would achieve a higher cumulative GPA than students not enrolled in a success
course (Stovall, 1999; Tinto, 1993; Tuckman, 2011). Therefore, this researcher made the hypothesis that remedial reading students enrolled in success course would achieve a higher cumulative GPA than students not enrolled in a success course. While testing two levels of remedial reading, the success course did not seem to make a difference for students in the higher level remedial reading course, RDG 050. It did however make a difference for students in the middle reading level, RDG 009.

The impact of enrollment in a strategies for success course on the success of students enrolled in the two remedial reading courses may have differed due to the curriculum presented in each reading course. The curriculum of the higher level reading course incorporates some of the study skills and strategies that are part of the curriculum for strategies for success. Since students are already receiving some of the same information in the higher level reading course (RDG 050) there is little to no effect on GPA from taking strategies for success.

Enrollment in strategies for success did have an effect on the cumulative GPA of students enrolled in the middle level reading course. The curriculum for the middle level reading course does not incorporate the study skills as much as those in the higher level. The focus is more on basic reading skills in the middle level course. Therefore students were able to benefit more by taking a separate course that focuses on those study skills, time management, testing taking skills, and provides them knowledge of college resources and career planning.

**Recommendations for Higher Education**

Based on the results of this study, strategies for success courses had a significant effect on students’ cumulative GPA in the middle level remedial reading course. As a
result, a few recommendations could be made for administrators, advisors, and faculty members in higher education. For example, making strategies for success courses mandatory for students in remedial education, pairing sections of courses together to provide optimal success, and creating a strategies for success course specifically for remedial students are a few possible recommendations.

Mandatory success courses for students in remedial reading and/or other remedial courses would benefit students' retention. Students who take a strategies for success course as an elective typically take the course because they think it will be good for them and are proactive in their studies, whereas students who would actually benefit from the course choose not take it since it is not mandatory (C. Spier, personal communication, 2014). Jefferson College in Hillsboro, Missouri, requires students to complete a first year experience requirement by enrolling in one of three different success courses (Jefferson College Catalog, 2014). These courses vary in credit hours from one to three credits and are required for students during their first year of college. Another community college, St. Louis Community College, provides a freshmen orientation for students the week prior to classes (J. Massey, personal communication, 2014). During the first part of this three hour time period, students learn as a group about college resources, study tips, and learning strategies. The second half of the time is spent in small groups where they learn about online courses and how to navigate the program used by the campus to read lectures, submit homework, and take tests for the online course.

Administrators, advisors, and faculty may also consider pairing remedial reading courses with a strategies for success course in order to increase student retention rates. Requiring students to take the same section of strategies for success with the same section
of remedial reading will allow students to take the skills they learned in one course and apply them immediately to the other course. Instructors of each class could collaborate in order to create assignments that will allow students to utilize their skills and observe the importance of these skills.

Another recommendation would be to adapt curriculum specific to students in remedial education. As mentioned in Chapter II, students are often unaware of the impact remedial courses have on their college career in regards to finances, completion, and transferring remedial courses to four-year institutions (Deil-Amen and Rosenbaum, 2002). By adding a curriculum that is specific to students in remedial education, faculty may be able to encourage student success and retention. Additional sections of strategies for success courses could be added to the curriculum and tailored for specific degree programs or for students planning to transfer to four-year institutions. Although funding could be an issue, the benefits of tailoring these programs would allow students to gain skills that will help them be successful throughout their college experience and into their chosen career field.

**Future Research**

After completing this study, there are more questions to be asked and further research to be studied. For example, results from this study showed 81.6% of the participants were between the ages of 17 and 20. This seemed to be a relatively high number considering there were only 37.6% of 17-20 year olds in the total college population of the Fall 2010 cohort and 33.9% of 17-20 year olds in the total population of the Fall 2011 cohort. Further research could determine why so many students are entering college from high school with a less than adequate reading level.
On the opposite end, further research could be done among non-traditional students to determine if they are able to achieve a higher level of academic standards if they are enrolled in a strategies for success course. At the cooperating research institution, 72.7% of students were considered non-traditional during the Fall of 2010 and 67.8% of those enrolled in the Fall of 2011 (Breer, 2012).

Additional studies could also be done in other remedial subjects, such as English and math. Reading was chosen for this study because of the increase of students placing into the remedial course and the impact reading has on other disciplines. However, students placing into math and English are also of great concern. Research could also be done for students who place into more than one remedial course. Previous studies have shown that students placing into multiple remedial courses are less likely to complete a degree (Feely, 2011). If a strategies for success course can be proven to help students in multiple remedial courses, perhaps by taking the course, more students would complete their degree.

Finally, future research could be done to evaluate the curriculum in a strategies for success course. There are many different ways that a strategies for success course could be created. Research could determine if it is better to make the course mandatory or an elective for students. The length of the course could also affect the impact it has on the students. For example, is it better to have the course for an entire 16 week semester, as an eight week course, or as a one day orientation prior to the beginning of school? All of these factors may determine the benefits students receive from a strategies for success or orientation course.
Limitations of Study

Research from this study was limited to first term students at one community college. Results from other colleges may vary based on the demographics of students, curriculum and length of the strategies for success course, as well as the curriculum for the remedial reading programs at a particular community college. Results may also vary if students enroll in a strategies for success course during a later term.

Further limitations of this study include the fact that only remedial reading courses were considered. If other subjects, such as remedial English or math were factored into the study, results may have differed. Students enrolled in multiple remedial courses were also not considered for this study and may affect the results.

Finally, this study limited consideration of the cumulative GPA of students to their first term. If the study tracked the GPA of students throughout their college career or used their final cumulative GPA, the results may have differed. Additionally, if the study had tracked the major or goal for completion of the participants, the results may have shown different results.

Conclusion

The results of this study can be used to determine one way for students in remedial education to achieve a higher first semester cumulative grade point average. Encouraging, or even requiring, students who place into a remedial reading course to enroll in a strategies for success course during their first term of higher education will benefit students' success. Although this study did not prove students enrolled in a success course completed more terms, it does show that these students completed about the same number of terms as the students who were not enrolled in a success course.
Overall, this data provides support of encouraging students to enroll in a strategies for success course if they place into a remedial reading course. Administrators, advisors, and faculty will be able to review their policies and determine if it is feasible to make strategies for success courses required for students in remedial education.
References


THE EFFECTIVENESS OF STUDENT SUCCESS COURSES


Lake Land College (n.d.). Retrieved October 31, 2013, from Lake Land College website:
http://www.lakeland.cc.il.us/


## Appendix

### INTERPRETING TEST SCORES

#### READING REQUIREMENTS

<table>
<thead>
<tr>
<th>ACT SCORE</th>
<th>CPT SCORE (Accuplacer)</th>
<th>COMPASS SCORE</th>
<th>REQUIRED COURSE</th>
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<tr>
<td>0-11</td>
<td>0-39</td>
<td>0-50</td>
<td>RDG 007</td>
</tr>
<tr>
<td>12-16</td>
<td>40-54</td>
<td>51-66</td>
<td>RDG 009</td>
</tr>
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<td>17-20</td>
<td>55-75</td>
<td>67-82</td>
<td>RDG 050</td>
</tr>
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<td>21 +</td>
<td>76 +</td>
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#### ENGLISH REQUIREMENTS

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</tr>
</thead>
<tbody>
<tr>
<td>0-11</td>
<td>0-37</td>
<td>0-26</td>
<td>ENG 005</td>
</tr>
<tr>
<td>12-18</td>
<td>38-60</td>
<td>27-67</td>
<td>ENG 007</td>
</tr>
<tr>
<td>19 +</td>
<td>61-120</td>
<td>68-80 with E- write 2-7</td>
<td>ENG 120</td>
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#### MATH REQUIREMENTS

<table>
<thead>
<tr>
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<th>COMPASS SCORE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>Arithmetic 0-43</td>
<td>Pre-Algebra</td>
<td>MAT 001 (Arithmetic Review experiences)</td>
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<td>15-18</td>
<td>Arithmetic 44-120</td>
<td>Pre-Algebra</td>
<td>MAT 005, 008 (Elementary Algebra or courses with arithmetic prerequisite)</td>
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<td></td>
<td>Elementary Algebra 0-35</td>
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<td></td>
<td>College Level 0-21</td>
<td>Algebra</td>
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</tr>
<tr>
<td>19-21</td>
<td>Elementary Algebra 36-92</td>
<td>Algebra</td>
<td>MAT 006, 009, 090 (Intermediate Algebra or courses with elementary algebra prerequisite)</td>
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<td></td>
<td>College Level 22-44</td>
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<tr>
<td>21-26</td>
<td>Algebra 50-100</td>
<td></td>
<td>MAT 116,125</td>
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<td></td>
<td>College Algebra 0-55</td>
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<tr>
<td>22-26</td>
<td>Elementary Algebra 93-120</td>
<td>Algebra</td>
<td>MAT 116,118,125,130,140 (College Algebra or courses with intermediate algebra prerequisite)</td>
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<td></td>
<td>College Level 45-69</td>
<td>College Algebra</td>
<td>0-55</td>
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<td>25-26</td>
<td>College Algebra 56-100</td>
<td>Trigonometry</td>
<td>MAT 132, 210, 211 (Business Calculus or courses with college algebra prerequisite)</td>
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<td>Trigonometry 0-50</td>
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<td>27 +</td>
<td>College Level 70-120</td>
<td>Trigonometry</td>
<td>MAT 241 (Calculus I or courses with college algebra and trigonometry prerequisites)</td>
</tr>
</tbody>
</table>

Lake Land College

Revised February 21, 2014
April 24, 2014

Emily Walters
Counseling and Student Development

Thank you for submitting the research protocol titled, “The Effectiveness of Student Success Courses on Students Enrolled in a Remedial Reading Course” for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 4/23/2014, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 14-076. You are approved to proceed with your study.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiuirb@www.eiu.edu

Thank you for your cooperation, and the best of success with your research.

Richard Cavanaugh, Chairperson
Institutional Review Board
Telephone: 217-581-6205
Email: recavanaugh@eiu.edu
Lake Land College

Research Request Form

<table>
<thead>
<tr>
<th>Name</th>
<th>Emily Walters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Learning Assistance Center Specialist</td>
</tr>
<tr>
<td>Institution / Affiliation</td>
<td>Lake Land College/ Eastern Illinois University</td>
</tr>
<tr>
<td>Address</td>
<td>644 Woodlawn Ave</td>
</tr>
<tr>
<td>City, State, Zip Code</td>
<td>Mattoon, IL 61938</td>
</tr>
<tr>
<td>Telephone Number</td>
<td>217-234-5301</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:ewalters@lakeland.cc.il.us">ewalters@lakeland.cc.il.us</a></td>
</tr>
<tr>
<td>Fax</td>
<td>217-234-5390</td>
</tr>
</tbody>
</table>

Research Proposal

On a separate attachment, please provide a detailed description of the research project you would like to complete at Lake Land College. Please be sure to include information about how the data will be used and how you will ensure confidentiality and anonymity. In addition, please submit copies of all research instruments (including approval from institution outside of LLC) to be used during the project.

Signature - Researcher

The undersigned acknowledges that he/she agrees to abide by all Lake Land College policies and procedures.

Emily Walters

Name

Date

Signature - Research Supervisor

Name

Date

Signature - LLC Vice President for Academic Services

Name

Date
# Research Request Form

**Researcher**

<table>
<thead>
<tr>
<th>Name</th>
<th>Emily Walters</th>
</tr>
</thead>
</table>

**Title**

Learning Assistance Center Specialist

**Institution / Affiliation**

Lake Land College / Eastern Illinois University

**Address**

644 Woodlawn Ave

**City, State, Zip Code**

Mattoon, IL 61938

**Telephone Number**

217-234-5301

**Email**

awalters@lakeland.cc.il.us

**Fax**

217-234-5390

---

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**Signature - Researcher**

Emily Walters  
9/2/2014

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**Signature - Research Supervisor**

[Signature]  
9/2/2014

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**Signature - LLC Vice President for Academic Services**

[Signature]  
9/3/2014

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