

THE IMPACT OF A FIRST YEAR DEVELOPMENT COURSE ON STUDENT SUCCESS IN
A COMMUNITY COLLEGE: AN EMPIRICAL INVESTIGATION

A Dissertation

by

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Submitted in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF EDUCATION

in

EDUCATIONAL LEADERSHIP

Texas A&M University-Corpus Christi
Corpus Christi, Texas

August 2013

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August 2013

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This dissertation meets the standards for scope and quality of
Texas A&M University-Corpus Christi and is hereby approved.

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ABSTRACT

This study focused on the impact of a Student Development Course (SDEV 0170), a part of an overall First Year Experience program at the college of interest, on the achievement and retention of participants. It examined the effect of the relationship of achievement (GPA) and retention (enrollment in a subsequent semester) to (a) the successful completion of the SDEV course, (b) the instructional method (face-to-face and online), (c) gender, and (d) ethnicity.

This study included 1557 participants enrolled in the SDEV 0170 course: 1508 participants in the face-to-face course and 48 participants in the on-line course. The group was comprised of 47% males and 53% females with an ethnic breakdown of 2% Asian, 6% Black, 61 % Hispanic, and 24% White with the remaining 7% unreported.

This study found that successful completion of the SDEV course was statistically significant with both achievement and retention. The impact of instruction method of the SDEV course was not statistically significant with either achievement or retention. The impact of successful completion of the SDEV course and gender had mixed results with achievement; however, the successful completion of the SDEV course and gender was not statistically significant with retention. The impact of successful completion of the SDEV course and ethnicity was statistically significant with both achievement and retention.

Retaining current students, as opposed to recruiting new ones, is generally considered an economically sensible strategy. Beyond the financial considerations, institutions of higher education, especially community colleges with their open enrollment policies, have an implicit commitment to provide students with academic and social development in addition to supporting their transition to college. There is a need for the

identification of programs that have demonstrated effectiveness in enhancing academic success and retention, which can be applied to similar populations at other institutions.

DEDICATION

This dissertation is dedicated to the loving memory of Nohemi Garza, whose devotion to family, her desire that I continue my education, and her eternal smile are always a source of inspiration.

ACKNOWLEDGEMENTS

I have been fortunate to have a supportive family during this educational journey. Without such support, this dissertation would not have been possible. I would like to thank my family for their unwavering support and the sacrifices they made for me during this process. Specifically, without the support of my wife, Kathleen Arceo Garza, and my two children, Diana and Daniel Garza, I would have never finished this program. I also want to thank my loving parents instilling in me the desire for higher education and for their constant encouragement.

I would like to acknowledge and thank the professors that served on my dissertation committee. First, I wish to thank my dissertation chair, Dr. Randall Bowden, who guided me along the way. Without his wisdom, moral support, and advice this would have been an overwhelming task. I will always be grateful for his time and for providing me with the confidence to complete this program and ultimately this dissertation. Dr. Randal Bowden's dedication to all of his students is remarkable.

I want to thank Dr. Lynn Hemmer, Dr. Faye Bruun, and Dr. Charles Etheridge for taking the time to serve on my dissertation committee. I am honored to have them on my committee. I appreciate their thoughtful insight and belief in my abilities. I value all of their suggestions and I especially value the emotional support they have given me along the way.

In addition to my dissertation committee, I wish to thank my Academic Vice-President, Dr. Jimmie Bruce, for his strong leadership and for his flexibility over the last couple of years; none of this would have been possible without him. Finally, I wish to give my appreciation to all of my colleagues in the Social Sciences Department especially Amy Burton for her steadfast support and Dr. Don Lucas for his assistance with the many statistical questions I had. Their friendship, support, and encouragement along the way will never be forgotten.

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Chapter 1: Introduction to the Study

Many colleges and universities have created transitional programs for students attending their campuses. Programs such as Freshman Interest Groups, First Year Experience programs, and others that are welcoming new students to institutions of higher education have grown significantly over the last 10 years. First-year students, regardless of their racial/ethnic background, have trouble adjusting to college life. This can be seen in that the largest proportions of students who drop out of college do so during their first year (Fike & Fike, 2008; Tinto, 2005). The most critical time for the first-year student is during the first six weeks of the semester. Upcraft, Gardner, Barefoot, & Associates (2005) claim that it is especially important for first-year students to establish friendships during the first month of enrollment as these newly formed relationships help to retain first-year college students (Roman, Taylor & Hahs-Vaughn, 2010).

The inability of the first-year student to adapt to the college environment often results in withdrawal from school and/or lower academic performance than expected (Fike & Fike, 2008; Schofield, & Dismore, 2010; Tinto, 2005). The college of interest in this study is a public two-year institution with an enrollment of more than 15,000 students. The college is part of a district in a large central Texas metropolitan area. It is accredited by the Commission on Colleges of the Southern Association of Colleges to award degrees in Associates of Arts, Science, Applied Science, and Certificate of Completion. In an effort to assist students with the transition from high school or the workplace to college, the institution where this study was conducted utilized a comprehensive approach to the first-year student experience. The First Year Experience Program (FYE) is a structured program

designed to increase academic success. Welcome Week is part of the FYE program, and it is designed to get students engaged and oriented to the college during their first semester. Faculty and staff are posted at stations around campus to distribute maps, refreshments and fun freebies, direct students to their classes, and answer questions about the college. The college also believes that advising is a fundamental part of the learning experience. It helps students understand curricula requirements and variety of elements that make up a rich and successful college education. First year students are advised in cohorts and enrolled in the SDEV 0170 course. In addition to helping students build a relationship with their advisor - students will see their advisor each week in class. This formal connection between advising and the classroom allows faculty to approach advising as a form of teaching and students to approach it as a form of learning. The SDEV 0170 course is for the new student transitioning to college. The course includes, but is not limited to the following topics: college resources, time management, note taking, degree plans and transfer strategies, campus culture, career exploration, and college policies and procedures. Familiarity with these topics contributes to students' personal and academic success.

Background and Setting

Virtually every institution of higher education in the United States is faced with the issue of student retention (Lau, 2003; Pitkethly & Prosser, 2001; Reason, 2009). In the early 1980s, as institutions of higher education experienced declining enrollments, colleges, and universities were forced to investigate new ways of retaining students. Retaining current students, as opposed to recruiting new ones, is generally considered an economically sensible strategy. More recently, increasing numbers of students have been

applying to colleges and universities in the United States (Pittman & Richmond, 2008). Yet, attrition rates have remained largely unchanged over the last 30 years (DeBerard, Spielmans, & Julka, 2004). An estimated one third of college students do not complete a degree, and most of them leave within their first year of college (Pittman & Richmond, 2008). According to Schrader and Brown (2008), one in four college freshmen do not return to four-year universities. Lower graduation rates due to attrition are costly to colleges and universities which lose large amounts of money when enrollment is reduced (DeBerard, Spielmans, & Julka, 2004; Porter & Swing, 2006; Tinto, 2005). Beyond the financial considerations, institutions of higher education, especially community colleges with their open enrollment policies, have made an implicit commitment to students to provide them with intellectual and social development (Cuseo, 2003; Pascarella & Terenzini 2005; Tinto, 2005).

Pascarella and Terenzini (2005) stated that first time in college students make statistically significant gains in factual knowledge in addition to a range of general cognitive and intellectual skills. They stated that students change on a broad range of value, attitudinal, psychosocial, and moral dimensions. Students who do not make the transition to college lose the benefits that a college education can provide in terms of cognitive, psychosocial, occupational, and economic growth (Astin, 1993; Terenzini, et al., 1996).

Tinto (2000) noted students leave an institution for a variety of reasons. These departing students do not necessarily view their leaving as a negative. In fact, many of them view leaving as a positive step toward achieving their goals. For example, some

students decide to leave college in order to explore another aspect of their personal development through travel, work experience, military experience, or volunteer opportunities. Other students decide to transfer because another institution is better able to serve their needs (Pascarella & Terenzini, 2005). However, the institution usually views a student's leaving as a negative event. Each institution must analyze the reasons for early departure of its students and then decide which programs or courses of action would best serve its students (Pike, Hansen & Lin, 2010; Pitkethly & Prosser, 2001). The research on student retention is centered on persistence or departure models (Pascarella & Terenzini, 2005; Reason, & Terenzini, Domingo, 2006; Tinto 1997). These models examine the question of why students voluntarily leave an institution of higher education. Tinto (1997), who is extensively cited in the literature on retention, developed a theory of student departure. Tinto outlined structural conditions that lead to student departure. He also identifies a construct of student integration with the institution as key to retention. Tinto (1997) theorizes that what motivates individuals to leave higher education before graduating is a result of the interactions between a student and his/her educational environment.

According to Tinto (2000), retention begins with the assimilation of students into the academic and social communities of an institution. Academic integration is described as a combination of academic achievement and perception in academic activities. Social integration is described as involvement with college peers and faculty. Successful integration of students into both of these communities is vital to student success. Students

who are well integrated into these communities are more committed to an institution and to graduating from the institution, thereby resulting in student retention (Tinto, 1997).

In an effort to increase student retention, institutions of higher education have introduced a number of retention strategies, one of which is the first-year experience program. The program is designed to enhance academic and social integration among first-year college students. Pascarella and Terenzini (2005) studied the relationship between integration and commitment and found that academic integration was related to institutional commitment and commitment to graduate. However, social integration only affected institutional commitment but not commitment to graduate.

Institutions of higher education with open enrollment policies, such as community colleges, have an obligation to help students succeed. Tinto (1990) suggested that effective retention programs must have three elements: community, commitment, and institutional obligation. Effective programs include elements that integrate students into academic and social communities. This allows the student to gain skill and knowledge about the institution. These skills will in turn allow the student to be a competent member of the institution (Schrader & Brown, 2008; Tinto, 1990). Retention programs must provide students with the opportunity to obtain the necessary skills and knowledge about the institution at the beginning of the academic year (Schrader & Brown, 2008; Tinto, 1990). In an effort to increase student success at the institution of interest to this study as a part of its overall FYE program offers the SDEV 0170 course as an attempt to provide the first time in college student with the necessary academic and social integration.

Orientation and other First Year Experience (FYE) programs are designed to support first time in college students and have been around since the early 20th century (Gordon, 1989; 1994). The contemporary approach of a FYE program can be traced to the University of South Carolina. Upcraft and Gardner (1989) documented the “grass roots movement” (p. xiv) that began in an effort to improve the first year of college for students with the intent of increasing retention. A major component of this movement has been to establish FYE programs designed to assist students with the transition into higher education. Barefoot (2000) indicated that most FYE programs in the United States share the following objectives: (a) increasing student-to-student interaction; (b) increasing faculty-to-student interaction, especially out of class; (c) increasing student involvement and time on campus; (d) linking the curriculum and the co-curriculum; (e) increasing academic expectations and levels of academic engagement; and (f) assisting students who have insufficient academic preparation for college.

As part of the colleges’ FYE program, the SDEV 0170 course is offered as a one-semester hour course required for all first-time-in-college students and those transferring from other institutions who have earned less than 12 academic semester hours. The course does not fulfill a degree requirement, but is included in a student’s cumulative GPA except when determining GPA for honors recognition. Some institutions will accept SDEV 0170 as transfer credit to fulfill the requirements of their freshman seminar or an equivalent course at that institution.

The course was first offered at the college of interest in the spring of 2000 with 4 sections and 64 students. The course grew rapidly during the ensuing semesters. In the fall

of 2001, the college offered 35 sections and enrolled more than 700 students. The enrollment for fall of 2008 was approximately 1,900 students in 74 sections. The enrollment has continued to grow with an enrollment for the fall 2011 of approximately 2,150 students in 86 sections.

The course is offered in two formats. Students may enroll in a class that meets for 75 minutes once per week over an 11-week term in the fall and spring semesters, or they may enroll in an online format where students have direct access to the professor as well as the course content over a period of 11 weeks. The course employs techniques to assist students in their college education. It focuses on both life skills and study skills and includes such topics as familiarization with college regulations, communication and study skills, goal setting, priority management, reading for comprehension, note-taking, test-taking, creativity, establishing relationships, and the power of a positive attitude. The course seeks to provide the students with skills necessary to assume responsibility for individual learning.

Statement of the Problem

Although FYE programs have achieved varying degrees of success, Upcraft, Gardner, Barefoot, & Associates (2005) noted that overall the dropout rate, as reported by the American College Testing Program, has held steady at around 33% over several years. Perhaps this rate would be even higher without the intervention FYE programs provide. However, Barefoot (2000) indicated that because many FYE programs are simply “add-ons” (p. 15) that have “a single champion rather than broad-based institutional support” (p. 17) they might not be as effective at retaining students as they could be. She argued the

need for more faculty to become involved in students' first year experiences in general and FYE programs in particular.

Hunter and Linder (2005) noted that first year seminars aim to assist students in their academic and social development in addition to their transition to college. First year programs also aim to help the university or college meet persistence and graduation goals (Hunter & Linder, 2005). In a national survey of regionally accredited universities and colleges with undergraduate student bodies, 85% of the institutions that responded reported having some type of first year seminar program (Gardner, Barefoot, & Swing, (2001).

Many programs assist under-prepared and at-risk students. For example, Jones and Becker (2002) identified the need for programs that teach decision-making skills, encourage self-advocacy, provide rigorous curriculum advising, and provide services that support students during their first year. These are skills often taught in freshman seminars. Ender and Wilkie (2000) included remedial courses such as basic reading, writing, and math skills in their course offerings for at-risk students. There is a need for the identification of programs that have demonstrated success in enhancing student persistence and that can be applied to similar populations at other institutions. Successful first-year experience programs are supported by an outcome assessment process that is strongly connected to the FYE program goals (Smith & Wertlieb, 2005). Assessment results can provide guidance for improvement and program justification. Gardner, Barefoot, and others have observed that FYE seminars and other programs that service large numbers of first-year students are frequently asked to justify their existence (Swing, 2001). However, assessment of FYE programs is somewhat limited to student satisfaction surveys and

correlation analyses of program participation and one-year enrollment attrition (Swing, 2001). Often these studies were not properly designed and therefore offered limited information (Ewell 2001: Smith & Wertlieb, 2005). With budget deficits and increasing accountability demands from state legislatures and accrediting agencies (Leveille, 2005), it is reasonable to assume that so too will the need to justify the effectiveness of FYE programs.

During the early 1980s, John N. Gardner established the first year experience concept at the University of South Carolina. Gardner also established the National Resource Center for the First Year Experience and Students in Transition (Gardner, Barefoot, & Swing, 2001) during the mid-eighties. The National Resource Center provides a wealth of research on issues pertaining to students transitioning into, and out of college, and a number of other resources about first-year seminar programs. The National Resource Center has conducted research on first year seminars, nationally and tri-annually since 1988. Hence, researchers looking for benchmark and recent data regarding first year seminar programs commonly reference the center.

The concern regarding students' first year of college in relation to their overall success goes back more than 150 years (Levine, 1988). First-year seminars are one type of program that has been implemented in many colleges and universities that seek to influence both achievement and retention. Examining whether a first-year program has an impact on variables that are believed to impact students' achievement and retention is an important area of study. This study examined the effect of a development course on retention and academic achievement of students who participated in an SDEV 0170 face-to-face class

and those who participated in an SDEV 0170 online course. The importance of assessing FYE programs has been given more attention in recent years. Selecting the best method or tool for assessing a given program requires the institution to ask the questions of why, what, who, when, where, and how (Cuseo, 2001). The answers to these six questions will help an institution conduct a meaningful assessment of its first year program.

Purpose of the Study

The purpose of this study was to examine the effect of a development course on retention and academic achievement. Specifically, this study focused on the Student Development Course (SDEV) offered at a Community College in central Texas. The course, SDEV 0170 employs techniques to assist students in gaining the most from their college education. It focuses on both life skills and study skills and includes such topics as familiarity with college regulations, communication and study skills, goal setting, priority management, reading for comprehension, note-taking, test-taking, creativity, establishing relationships, and the power of a positive attitude. This course is intended to provide the student with skills necessary to assume responsibility for individual learning.

This study examined the possible effect of the Student Development Course SDEV 0170 on retention and academic achievement. It also examined instructional method (face-to-face and online) and two demographic characteristics (gender and ethnicity) as to their relationship to student retention and student achievement. The study used pre-existing data from the Community College District student information database. The results of this study can be used to help determine if there is justification for using the resources required to offer the FYE program and more specifically the SDEV course. The results of this study

might be useful in identifying possible areas of improvement for the SDEV course and the overall FYE program.

Research Questions

Bedford and Durkee (1989) concluded that overall awareness of an institution and its resources, as well as involvement in both academic and social aspects of college life appear to be major components of student retention. Researchers working to investigate the issue of college persistence and achievement speak to various direct or intervening variables that appear to be related to staying in college (Reason, 2009). Tinto presented a theoretical model that describes the process of interactions between the individual and the institution that explains student retention. He suggested that student retention and the process of student departure consist of distinct stages. While retention programs differ from campus to campus, successful programs are similar in a number of ways (Tinto, 1990).

This study examined whether the SDEV 0170 course has any relationship with retention and academic achievement of first time in college students. Schofield and Dismore (2010) reported that grades earned in a first-year course were better predictors of both college academic achievements and persistence than high school rank and SAT scores. The theoretical framework, discussed later in this chapter, served as the foundation of this study in that the FYE course is based upon Tinto's theory of student departure as well as Astin's student involvement theory.

The following research questions guided this study:

RQ1: What is the impact of the SDEV 0170 course on achievement of first time in college students at the college?

RQ2: What is the impact of the SDEV 0170 course on retention of first time in college students at the college?

RQ3: What is the difference between 11 week and online courses of SDEV 0170 course on achievement of first time in college students at the college?

RQ4: What is the difference between 11 week and online courses of SDEV 0170 course on retention of first time in college students at the college?

RQ5: How does achievement differ between students who enrolled in the SDEV 0170 course according to gender?

RQ6: How does retention differ between students who enrolled in the SDEV 0170 course according to gender?

RQ7: How does achievement differ between students who enrolled in the SDEV 0170 course according to ethnicity?

RQ8: How does retention differ between students who enrolled in the SDEV 0170 course according to ethnicity?

Theoretical Framework

Student retention is the area of research concerned with determining the factors that shape student persistence in institutions of higher education. The term retention describes the institution's ability to keep a student enrolled and the term persistence describes the student's ability to stay enrolled at the institution. There are two theories that serve as a

foundation for this study: (a) Tinto's Student Integration Model (1975); and (b) Astin's Involvement Model (1993).

The types of activities in which students engage while attending college are as important to overall success as is the choice of college. The research on college student development shows that the amount of time and energy a student devotes to academically focused activities is the single best predictor of their learning and personal development (Astin, 1993; Pascarella & Terenzini, 2005; Schofield & Dismore, 2010). Institutions that are better able to engage their students in the variety of activities that add to valued outcomes of higher education can retain students at a higher rate compared with other colleges and universities where students are less engaged. FYE programs are among institutional practices that are known to lead to high levels of student engagement (Astin & Associates, 1998; Chickering & Reisser, 1993; Chism, Baker, Hansesn & Williams 2008, Pascarella & Terenzini, 2005).

Tinto (1975) introduced a theoretical model of student retention that addressed the complex relationship between students and the institutional environment. Tinto's theory of student departure is unique in its longitudinal approach. It asserts that a student's decision to remain or depart from an institution results from a series of interactions between that student and members of the college environment. Tinto (1975) identified student integration into the academic and social environments of the campus community as the critical piece of the retention puzzle. That is to say, that integration occurs through experiences between the student and other members of the institution. The level of student

integration predicts whether the student will either persist until graduation or voluntarily depart prior to obtaining a degree.

Many researchers have validated Tinto's student integration model (Horn & Nevill, 2006; O'Gara, Karp, & Hughes, 2008; Pascarella & Chapman, 1983; Pascarella & Terenzini, 1979, 1983; Roman, Taylor & Hahs-Vaughn 2010). This body of research confirms the connection between student integration and student retention. Student interaction with faculty and the perceived levels of faculty concern for students are acknowledged as the strongest contributors in a student's decision to return or leave the institution (Pascarella & Terenzini, 2005). Tinto's conceptual framework of student integration concentrates on variables within an institutional setting that have a longitudinal influence on academic engagement. Poor attendance and the lack of academic success are early signs that a student is disengaging from school. Expanding on Tinto's model of disengagement, Bean and Metzner (1985) identified other variables to explain why older, nontraditional college students decide not to re-enroll in college. Variables such as family and work may force students to leave school by putting too much pressure on their time and resources. Models of engagement offer powerful explanations for academic progress and student persistence to graduation.

Tinto's (1975) student integration model states that before they matriculate in higher education, students will develop attributes that are shaped by their upbringing. At the same time, they develop academic skills, social skills, and other abilities. In turn, these skills and abilities influence the goals and commitments of students' regarding college, the workforce, and their place in society. While a student is enrolled in college, he or she will

encounter formal and informal college experiences that influence the student's level of integration into the college. According to Tinto, the level of integration influences the student's development of goals and commitments, which results in a decision to either re-enroll in or leave college. Therefore, the match between student characteristic and institution shapes students' goals and commitment, which in turn influence persistence and retention (Swail, Redd, & Perna, 2003).

Astin's Theory of Involvement (1993) is that the more students are involved in both the academic and social aspects of the collegiate experience, the better their academic achievement. Therefore, faculty interaction both inside and outside the classroom and high quality college programs and policies reflective of institutional commitment to student learning are positively related to student growth. Astin's Theory of Involvement unlike traditional pedagogical approaches focuses on the motivation and behavior of the student. Therefore, all institutional policies and practices can be judged by the degree of involvement they foster in students.

Astin's theory is based on five assumptions. First, involvement requires the investment of psychological and physical energy in "objects" of one sort or another (such as tasks, people, or activities), whether specific or general. Second, involvement is a continuous concept; different students will invest varying amounts of energy in different objects. Third, involvement has both quantitative and qualitative features. Fourth, the amount of learning or development is directly proportional to the quality and quantity of involvement. Fifth, educational effectiveness of any policy or practice is related to its capacity to induce student involvement (Astin, 1993).

According to (Astin, 1993), students learn by becoming involved. Astin's theory of student involvement is grounded in psychoanalysis and classical learning theory. The student involvement theory focuses on the student's commitment to his/her educational goals. Astin described involvement as the quantity and quality of the physical and psychological energy a student devotes to their academic experience. Astin suggested that educators focus their efforts on what the student does in the classroom and on campus. Involvement occurs along a continuum. The degree of student success in college is directly proportional to the quality and quantity of student involvement with the institution (Astin, 1993); Palmer O'Kane & Owens, 2009). The more interaction between students and faculty the more likely it is that the student will have a positive experience (Astin, 1993); Palmer O'Kane & Owens, 2009). Astin showed that students who get involved with college staff and activities tend to have higher retention rates than students who limit their involvement only to classroom learning.

Significance of the Study

Upcraft, Gardner, Barefoot, & Associates (2005) noted first-year programs that are designed to increase student success have become a prominent feature in higher education. The increase of programs aimed at first-year students is due to studies showing that participation in first-year programs is significantly related to students' academic success (Chism, Baker, Hansen & Williams, 2008). Pike, Hansen, and Lin (2010) examined the effects on first-semester grades of students participating in learning communities and found that membership in learning communities was positively associated with higher grade point averages. FYE programs are considered an essential part of ensuring the success of first

time in college students (Hendel, 2007) In an effort to encourage more colleges and universities to think about FYE programs, Reason, Terenzini, and Domingo (2007) presented research supporting the importance and impact the first year of college has on a student's overall success.

The costs and other institutional investments make assessment of first year programs and seminars a necessity in higher education and receive attention from a number of stakeholders (Upcraft, Gardner, Barefoot, & Associates, 2005). No assessment has been done to determine if the SDEV 0170 course has had an impact on student retention at the college of interest, and stakeholders can ask how successful the SDEV 0170 course has been. While there are many questions surrounding the assessment of the SDEV 0170 course, this study focused on retention and academic achievement of first time in college students. The purpose of this study was to assess the college's SDEV 0170 course to examine whether its implementation has any relationship to retention rates and academic achievement of first time in college students. It assessed the fall 2010 cohort of first time in college students in order to examine the fall to spring retention as well as the fall-to-fall retention. Furthermore, this was the first semester that the SDEV 0170 course was offered both face to face as well as online. The study will provide data that will help the college of interest develop a FYE program that is more meaningful, purposeful, and relevant to the organization's mission and commitment to support its students' educational goals.

The FYE program, along with the SDEV 0170 course, may provide a suitable environment for facilitating interventions to improve students' retention and achievement. The SDEV0170 course assists students in identifying campus resources, establishing

relationships with other students and with faculty members, and assessing and improving their academic and life management skills (Palmer O’Kane & Owens, 2009; Smith & Wertlieb, 2005). Students who have enrolled in a student success course generally earn higher grade point averages, complete a larger number of first-term credit hours, and increase their persistence and graduation rates (Palmer, O’Kane & Owens, 2009; Smith & Wertlieb, 2005). While another component of FYE program evaluation is assessing the students’ needs, this study focused on the general outcome variables of retention and academic achievement. Often programs and services for first-year students are developed but seldom are these programs and services assessed.

Limitations and Delimitations

This study was conducted at a single, Hispanic Serving, public community college in Texas, so the results may not be generalized to other different community colleges. This study was limited students enrolled in the required SDEV 0170 course; students choose face-to-face and on-line instruction. The course is taught by staff not faculty at the college of interest. This study only involved the use of student data at the college of interest; it was assumed that the archived data has been recorded correctly.

This study was delimited to first time in college students with less than 12 academic hours who were enrolled in a required SDEV 0170 course. The study evaluated the effects of the SDEV 0170 course on student retention and academic success over four consecutive semesters. This study did not consider students who may have transferred elsewhere and completed their education at other institutions.

Definition of Terms

The following operational definitions are offered to facilitate understanding and provide clarity in this study. Definitions have two components: construct and operational. Construct definitions are definitions from the literature. Operational definitions are those that explain how the terms were used in this study.

Retention is defined as continually enrolled from the fall semester to the next spring or one spring semester to the next fall for the purpose of the study.

Grade point average (G.P.A) is calculated by multiplying the semester-hour value of the course by the point value of the grade received, then all of the grade points from all courses and divide by the total semester hours attempted. The college of interest uses the following four-point scale 0 = F; 1 = D; 2 = C; 3 = B; and 4 = A.

General Terms.

Academic Integration. The process of student assimilation into the formal (i.e., classroom and laboratories) and informal educational system (Tinto, 2000).

Attrition or Departure. The act of leaving an institution of higher education without accomplishing a degree or certificate (Summers, 2003).

First Time in College. This study defines students who have earned less than twelve academic semester hours and enrolled at the campus as first time in college (FTIC) student. This includes transfer students.

Community College. A two-year public institution accredited to award Certificate and Associate's degrees as its highest degrees (Garrison, & Vaughan, 2007).

Withdrawal. The departure of a student from an institution of higher education such as college or university before having completed a certificate or degree program (Garrison & Vaughan, 2007).

Independent Variables.

SDEV 0170. A course offered as an attempt to provide the first time in college student with the necessary academic and social integration. Interventions should be tailored to the institution and evaluated to make sure they are meeting the unique needs of the institution and its students (Fike & Fike, 2008).

11-week Course. A traditional format designed with the advisor and students meeting each week over an 11-week semester. The class sessions last for approximately one hour. In traditional classroom instruction, the learning pedagogy is instructor-centric and the majority of students are traditional college age, between the ages of 19 and 24 (Garrison & Vaughan, 2007).

Online Course. A course provided in the on-line platform format where students have direct access to the professor as well as the course content. The course was conducted over a period of 11 weeks. Internet courses are comprised of digital content with asynchronous delivery, which allows learners to complete work at their own pace, and location rather than being at a physical location at a specific time (Altmyer & Yang, 2010).

Gender. Students proclaim their gender status on the Apply Texas form when applying for admission to the college as one of two categories: (a) *male*, or (b) *female*.

Ethnicity. The Texas Higher Education Coordinating Board identifies nine categories that are used for the Integrated Postsecondary Education Data System (IPEDS).

The current race/ethnicity categories for reporting data to IPEDS are used in this study and are outlined below:

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American. A person having origins in any of the black racial groups of Africa.

Hispanic or Latino. A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Dependent Variables.

Academic Achievement. A Grade Point Average (G.P.A.) of C or better, measured at the end of the semester. G.P.A is calculated by multiplying the semester-hour value of the course by the point value of the grade received, then all of the grade points from all courses and divide by the total semester hours attempted based on a 4-point scale.

Retention. In this study is defined as students enrolled in a given fall semester who re-enroll the next Spring semester, or the students enrolled in a given Spring semester who re-enroll the next Fall semester (Jardine & Krause, 2005). This study tracked students from the fall semester of 2010 to the spring semester of 2011 and then from the spring semester of 2011 to the fall semester of 2011, and finally the spring of 2012.

Summary

Chapter one identified the problem of student retention and the need to evaluate first-year experience programs. The second chapter of this study provides a review of the literature that focus on college student persistence and the first-year experience course. Chapter three discusses the methodology, the design of the study, the study group and data collection and analysis methods. Chapter four presents the results of the study, and Chapter five provides conclusions and recommendations for future practice, and research.

Chapter 2: Literature Review

The purpose of this study is to provide additional information about the effectiveness of first-year experience (FYE) programs in relation to student retention and student achievement. Specifically, this study will focused on the Student Development Course offered at a Community College in central Texas. The following sections synthesize the literature related to FYE programs and retention and academic success of first time in college students. This literature review was compiled using the ERIC/ASHE Educational Index, Google Scholar, Proust, Wilson Web, and EBSCOhost and explored the challenges of working with first time in college students and FYE programs. This review of literature is organized into the following sections: introduction, student persistence, student retention, models of student persistence and retention, first year experience programs, and non-traditional college students.

Introduction

The current trend in higher education matriculation reflects the expanding U.S. college-age population. Enrollment in U.S. institutions of higher education rose from 14.5 million students in fall 1993 to 18.5 million in fall 2007. Of the 18.5 million students enrolled in higher education, over 7 million or about 38% were enrolled in community colleges (U.S. Department of Education, 2008).

Because of increases in the population of 18-year-olds, the number of high school graduates is expected to increase through 2017. The number of high school graduates is projected to increase 6% between 2005 and 2018 to 3.3 million graduates (U.S. Department of Education, 2008).

According to Census Bureau projections, the number of individuals ages 20–24 is expected to grow from 21.8 million in 2010 to 28.2 million by 2050. From 2010 to 2050, Asians are projected to increase from 4% to 6% and Hispanics are projected to increase from 18% to 37% of the individuals ages 20–24. During this same period, blacks are projected to decrease from 15% to 12% and whites are projected to decrease from 60% to 40% of the individuals ages 20–24 (U.S. Department of Education, 2008).

Because of these demographic changes, postsecondary enrollment is expected to increase 13% to 20.1 million students in 2017 (U.S. Department of Education, 2008). Increased enrollment in higher education is projected to come mainly from minority groups, particularly Hispanics. Enrollment of all racial/ethnic groups is projected to increase, but the percentage of whites is projected to decrease from 65% in 2006 to 61% in 2017.

The American Community College is a democratic institution that represents equality in education (Henrikson, 1995). College-going rates of women are generally considered a mark of success on the path toward gender equity (King 2010). Unlike the traditional four-year university, the community college opens its doors to all who wish to pursue educational goals. Within the walls of the community college, it is imperative that leaders, support staff, and instructors do all they can to recruit, retain or transfer students to four-year institutions (O'Banion, 1994). Student support services must be comprehensive and flexible in order to reach students of different ages, family circumstances, and ethnic backgrounds (Shaw, Valadez, & Rhodes, 1999).

The community college is the primary starting point for minorities in higher education (Edman & Brazil, 2009). For many students of color, the community college is their only means of gaining an education and improving their lot in life. As such, the community college must address the specific needs of minority students to assure that they are competitive to continue their higher education or enter the workforce (Rendón & Valadez, 1993).

In the 1890s, William Rainey Harper, president of the University of Chicago, recognized the need to help inadequately prepared students in universities across the country (Medsker, 1960). With the backing of Joliet High School, Harper founded the first junior college in the United States, Joliet Junior College (Sexton, 1946).

In the early 1900s and throughout the 20th Century, the junior college movement acted as the catalyst for substantial changes in higher education. Congress supported the growth and vitality of community colleges by passing progressive legislation. For example, the Ballard Act of 1910 offered state and county financial resources to support junior colleges. Throughout its recent history, the junior college movement has been supported by many commissions and organizations. The American Association of Junior Colleges was established in 1921. This organization produced minimum standards for junior colleges and monitored their curricula. In 1947, the Truman Commission coined the term “community colleges” and concluded that more were needed as higher education favored the elite (Henriksen, 1995). The commission’s report emphasized access, affordability, and quality of education. In 1957, Florida became the first state to establish a state coordinating board, which devised a long-range plan for the expansion of community

colleges in the sunshine state. The final plan was the first statewide effort on record and provided a model for other states to follow (Witt, Watenbarger, Gollattscheck, & Suppiger, 1994).

Historical events also had a significant impact on the community college movement. The Great Depression contributed to the expansion of community college as a solution to the unemployment crisis. The G.I. Bill of 1944 provided WWII veterans with tuition and financial aid to assist them in re-entering the workforce in a productive capacity. The Civil Rights movement and Baby Boom era also contributed to the growth and diversity in community colleges. In the 1990s, a movement began to develop student-centered institutions and offer learning experiences (O'Banion, 1999). Such a philosophy has led to increased enrollment and a better education for community college students.

The Mission of the Community College

Community colleges are unique institutions of higher education; they are committed to open access and community building. These fundamental values play a major role in the shaping of the role and scope of the American community college (Vaughn, 2006). Over time, the question of equity has been raised, as has the question of whether students who are under prepared, low skilled or learning disabled actually belong in community colleges or if they should be routed to other alternatives such as employment or the military. Community colleges must acknowledge that an open admissions policy is not the same as access and equity. In order to have access and equity, the community college must do more than just simply enroll students; the community college must provide support services,

including counseling, academic advising, and financial aid, helping to ensure that every student has the opportunity to succeed academically (Vaughn, 2006).

Frequently students enrolling in community colleges tend to be less academically prepared, lack a high desire to achieve academically, and many of them have already had academic difficulties (Nora, 1987.). Historically, community colleges have been charged with the task of providing a legitimate entry point to higher education for all students. The mission of the community college can be seen in terms of the different services it provides: career services, remedial or developmental education, community education, vocational education, and liberal arts education (Cohen & Brawer, 2008). Likewise, Ayers's (2002) lists seven defining characteristics of the public community college: public support, open access, commitment to teaching, an identified service area, community-based programs, comprehensive programs, and support services.

Community colleges are frequently perceived as a safe place for at risk students to pursue higher education and should strive to be responsive to the particular and unique needs of all at risk students (Ayers, 2002; Vaughn, 2006). The American community college system has expanded rapidly, typically serving students from a wider range of socioeconomic backgrounds, ages, and levels of academic preparation, educational aspirations, and levels of English fluency (Williams, 2002). Reflecting the changing demographics of the nation, the community college student body will continue to grow in size and diversity. The programs and services offered by community colleges will need to adapt to student populations that are increasingly composed of students who are underprepared, underrepresented, underachieving, and social economically of the lower

class (Williams, 2002). Of the students entering community colleges, almost half will enroll in at least one remedial course. While many students require some remediation, 80% of the remedial population needs only one or two courses, with math the most common area of remediation (Oudenhoven, 2002).

The transfer function has been a primary element of the community college mission. Three core indicators are typically used to assess the transfer function: (a) the number of students who transfer in a given year; (b) the transfer rate, which is typically defined as the number of students who transfer divided by the number of students who could have transferred; and (c) the academic performance of students after transfer (Seybert, 2002). A significant portion of the college student population enrolls in vocational education programs each year. Community college programs prepare much of the nation's mid-skilled workforce, which includes three-quarters of all American employees, for jobs in business, health care, engineering, computer and information technologies, and childcare (Bragg, 2002).

Community college programs and services are under growing pressure to better assess student learning and program effectiveness. The community colleges with its programs and services offer greater social and economic opportunities for students. How community colleges address emerging demographic and socioeconomic challenges will influence the quality and availability of low-cost, open-access higher education in the U.S. for years to come.

Student Retention

Virtually every institution of higher education in the United States is faced with the issue of student retention (Lau, 2003; Pitkethly & Prosser, 2001). A growing numbers of students have been applying to colleges and universities in the U.S. (Pittman & Richmond, 2008). At the same time, attrition rates have remained the same over the last 30 years (DeBerard, Spielmans & Julka, 2004). An estimated one third of college students do not complete a degree, and of that, one-third of them leave within their first year of college (Pittman & Richmond, 2008). According to Schrader and Brown (2008), one in four college freshmen do not return to four-year universities. Lower graduation rates due to attrition are costly to colleges and universities, which lose large amounts of money when enrollment is reduced (DeBerard, Spielmans & Julka, 2004; Porter & Swing, 2006; Tinto, 2005). Beyond the financial considerations, institutions of higher education, especially community colleges with their open enrollment policies, have made an implicit commitment to students to provide them with intellectual and social development (Cuseo, 2003; Pascarella & Terenzini, 2005; Tinto, 1997). For many reasons retention is important, but ultimately we want our students to achieve their academic goals and to enter the workforce (Fike & Fike, 2008).

Student retention is an area of research concerned with understanding the factors that influence student persistence. The literature relating to factors and problems in higher education involving student retention is reviewed here. Every year, a significant number of college students fail to complete their college education. Attrition occurs in a number of

ways, some students fail academically, others transfer to another institution, and there are those who withdraw or reduce their course load.

Initial studies on retention were based on psychology, focusing on personal, individual characteristics. Starting in the mid-seventies there was a shift in emphasis from psychology to sociology. Recently the emphasis centered on the institutional environment and its relationship to the students' integration (O'Gara, Karp & Hughes 2008). Most of the literature describes the differences between those students who withdraw from the institution and those who persisted.

While much research has been done to, help our understanding of student attrition at institutions of higher education, there is still a need to identify why students "drop out" or "stop out". Understanding student behaviors and explaining retention and attrition rates have continued to be a difficult task. Until the factors influencing student attrition are better understood, retention efforts are likely to have mixed results. At the same time, higher education administrators are seeing increased pressure to explain retention and attrition at their institution of higher education.

Retention describes an institution's capacity to keep a student enrolled at the institution, whereas the term persistence describes the student's ability to stay enrolled in the institution. Therefore, retention and attrition represent the institutional view (Rhoads, Buenavista, & Maldonado, 2005). Attrition focuses on who leaves while the retention focuses on who stays. Just as attrition is the negative view of retention, dropout is the negative way of looking at persistence.

Students are retained if the institution can influence them to re-enroll and students persist if they elect to re-enroll (Tinto, 2012). This includes students who transfer to another institution. Students who transfer may achieve their academic goals, but the institution is not able to measure that. For a community college, this is problematic as some transfer students successfully complete their associate's degree prior to transfer. However, many students transfer without completing their degree requirements and this can be viewed as students who leave and do not come back.

Spady (1970) asserts that attrition occurs when a student leaves the institution of higher education at which he or she is registered. The concept of attrition matches the concept of retention presented by Berger and Lyon (2005) and Derby and Smith (2004). Wild and Ebbers (2002) offer a comparable definition but include a minimum GPA as a part of the measure. When selecting an appropriate definition of attrition for use at a community college, we should consider the factors that make community college students different from the four-year intuitions (Gibson & Slate, 2010). Most of the students who attend community college work and many have families; hence, the time required for degree completion is longer. Community colleges generally are not concerned with how long students are enrolled, and they tend to have liberal academic suspension and reinstatement policies. Often, courses that students fail are not calculated into the cumulative GPA when retaken with a passing grade.

Retention is generally measured as enrollment in a subsequent semester. Retention is often what is measured because the focus is on the institution's effort to re-enroll students. In other words, retention is defined as the institutions ability to keep a student

from enrollment to commencement (Berger & Lyon, 2005; Derby & Smith, 2004).

Recruitment is an important function of an institution of higher education. However, the retention of students and ultimately the graduation of students is an attribute of excellence for an institution (Porchea, Allen, Robbins, & Phelps, 2010). Tinto (2012) points out that of every 100 students entering higher education, roughly 41 will leave the higher education system before earning a college degree. Improving retention of minority students includes broadening curriculum offerings and employing more minority faculty and staff (Gardner, 1998). An important component of minority retention is creating an environment in which minority students can flourish. Unlike their White counterparts, many minority college students do not have the luxury of needing only to manage college life as they progress towards a college degree. Colleges and Universities need to develop ways to provide institutional support for these students (Garcia, 2010).

Some community colleges measure retention at a rate of persistence rather than degree completion (Wild & Ebbers, 2002). This definition allows the integration of student goals, which is advantageous if the goal is something other than graduation. Another community college definition of retention uses enrollment in a subsequent semester to define retention accompanied by a GPA of 2.0 or higher to define academic achievement.

Studies published by the National Center for Education Statistics, did not include students who earned fewer than 10 academic credits (Calcagno, Crosta, Bailey, & Jenkins, 2007). This approach attempted to identify those who enrolled for personal enrichment with no intention of graduating.

Higher education must confront the issue of developing strategies for improving student retention. Record numbers of students enrolled in college in the fall of 2011, but the gap between enrollment and completion has led to focus on improving retention (Adams, 2011). Institutions of higher education have begun to realize the need to be more responsive to students' needs in order to recruit and retain them in college (Levitz & Noel, 2000). Retention rates have been relatively unchanged, hovering around 67%. Students are more likely to return for a second year of college at four-year institution, where retention rates were about 74% in 2011 (Adams, 2011). Community colleges have shown improvement in retention rates which climbed from 51% in 2004 to 56% in 2011 (Adams, 2011). Fike and Fike (2008) stated that taking an internet course is a strong predictor of student retention. Allen and Seaman (2007) noted that the growth in online enrollments in higher education is greatest for nontraditional students at community colleges and that demand for the availability of online courses is expected to continue to grow.

However, Garcia (2010) noted that first semester Hispanic students in online courses reported having difficulty reaching their instructors for help and discovering that they needed the discipline of attending classes on campus. Unfortunately, they discovered this after being enrolled in an online class and often just stopped participating in the online class. Crisp and Nora (2010), in referring to the difference in retention rates among diverse student populations, commented that although community colleges provide equality of access to higher education; many minority students lack financial support and drop out of college when they find a decent paying job. Institutions of higher education that promote

academic involvement and social support networks generally experience better persistence among their first year students (Tinto, 2012).

White students are more persistent in terms of retention and graduation rates than minority students are. Academically they are better prepared, adjust to college life easier, and hail from middle class families (Mattson, 2007). According to Crisp and Nora (2010), minorities are often ill equipped academically and financially. Combine these problems with the significant cultural conflict they encounter at predominately-white institutions, and the hurdle can be perceived as insurmountable (Mattson, 2007). Many minority students base their decisions about where to attend college on the decisions of friends and siblings (Perez & McDonough, 2008). This would suggest that minority students are unlikely to choose to enroll in an institution that has a low minority population. For this reason, social support is imperative for retention of minority students. In fact, studies show that social experiences of minority students in college are more significant in predicting retention than family background and individual characteristics (Garcia, 2010). Historically African American colleges or Hispanic serving institutions generally do not have a problem with retention as these students do not feel socially isolated. As a result, they stay in college and are more successful academically (Mattson, 2007).

National and state reports reflect that minorities are earning less of the degrees awarded by colleges and universities. The most frequently cited hindrances to increasing minority enrollments are often related to environmental conditions, financial constraints, and institutional reputation (Friar & Hawes, 2012). The rate of women enrolling in higher education surpasses that of men, resulting in a higher percentage of female students

(Snyder & Dillow, 2009). Increases in higher education enrollment for both women and men are expected to continue by about 16 percent for women and 9 percent for men by 2018 (Hussar & Bailey, 2008).

There are several theories to explain the college persistence process. The two most often used theoretical frameworks are Tinto's Student Integration Model (1975) and Astin's Involvement Model (1993). A third model introduced by Bean, the Student Attrition Model (1985), offers additional insights for addressing the issues related to student retention. Lastly, in addition to these three models, Padilla (1999, 2009), introduced the Local Model of Successful Minority Students and Rendón's Model of Validation (1994) which have provided insightful research on student retention.

Models of Student Persistence and Retention

Researchers such as Barefoot (2000), Cueso (2003), and Gardner (1998), have generated theories of the college student experience that have yielded recommendations aimed at improving retention and graduation rates among college students. These theories may be sorted into the categories of student departure and student success. Student departure theories primarily examined student departure from college and made recommendations to reduce student departure rates. Student success theories (Tinto & Pusser, 2006) have sought to (a) identify the conditions that foster student success; (b) develop recommendations for policies, programs, and practices to support student success; and (c) propose theoretical frameworks and implementation models to help institutions improve student success rates.

Student departure theories have been criticized because they do not specify how to help students be successful (Tinto & Pusser, 2006). Student success theories have been criticized because for failing to neither address the complexity of student success, nor do they incorporate the cognitive processes associated with student departure from college. They offer few theoretical models to assist with a definable course of action. (Kuh, Schuh, Whitt, & Kinzie, 2010; Tinto, 2012; Tinto & Pusser, 2006). Critics of student departure theories and student success theories have called for solutions fitted to individual institutional settings (Rendón, 1994; Tinto, 2012; Tinto & Pusser, 2006). In other words, “. . . existing research and theory . . . has yet to provide institutional leaders the sorts of information they need to frame effective programs and policies for the persistence of their students” (Tinto & Pusser, 2006, p. 1).

Bean and Metzner’s Student Attrition Model.

Bean and Metzner (1985) proposed an alternative model of college retention. This model suggests that students leaving college are much like employee turnover (Bean, 1985). This model takes into account external variables and how they can affect the student’s attitude and decision. Bean and Metzner suggest that nontraditional students are less impacted by on-campus involvement than their traditional peers are. Bean makes an argument that financial issues are a primary concern and that students who perceive financial difficulties are more likely to leave the college or university.

Building on that research, Bean (1985) developed a second conceptual model of attrition in which academic, social-psychological, and environmental factors influence socialization factors, which in turn influence dropout syndrome. Bean defined dropout as

the failure of a student enrolled in the spring semester to reenroll at the same campus the following fall semester. He believed continued attendance to be a measure of successful socialization. Because Bean (1985) uses dropout syndrome, he did not differentiate between the types of dropout. Unlike Tinto (1975) and Spady (1970), he includes those who leave involuntarily due to academic dismissal as socialization failures. Thus, Bean makes no distinction between students who voluntarily dropout and those who are forced to leave because of poor performance. He also takes a different view of socialization. Bean (1985) saw the individual actively influencing the process and making choices to determine the outcome.

Later, Bean, with Metzner (1985), developed a model specifically for nontraditional students at four-year commuter colleges. They recognized the need for a different approach because the level of integration is not the same as residential students in universities. For the nontraditional students, the level of social integration plays a much smaller role.

The term retention describes the institution's ability to keep a student enrolled at the institution, whereas the term persistence describes the student's ability to stay enrolled in the institution. Bean and Metzner (1985) Focus on student attrition or the lack of persistence based on external variables. This study is more so concerned with the institution's retention efforts as it relates to the integration of students into the institution.

Padilla's Local Model of Successful Minority Students.

Padilla (1999) introduced his Local Model of Successful Minority Students in which he identifies factors that enable students to overcome barriers in the college experience. In

a ten-year study that focused on successful “Chicano” and other minority students, Padilla identified four barriers to success: (a) discontinuity barriers; (b) barriers that are experienced as lack of nurturing; (c) barriers related to a lack of presence on campus; and (d) resource barriers. For each of these barriers, a successful student must use his or her knowledge combined with the suitable action in order to understand the barrier and to identify the possible solutions to that barrier at the particular institution. With the proper knowledge and solutions, the student is then able to take actions to overcome barriers to success. Padilla’s (1999) model showed how the student and the institution are involved in achieving student success. This model offered insight as to why institutions struggle to retain students in that it identified external variables that led to student attrition.

The Expertise Model of Student Success (EMSS) (Padilla, 2009), a theoretical student success model based on expert systems theory (Harmon & King, 1985), proposed that student expertise includes theoretical and heuristic knowledge. Theoretical knowledge is the formal (or academic) knowledge that students must master to meet college degree requirements. Heuristic knowledge is acquired from peers, faculty, and staff. It enables students to make decisions and take actions that facilitate their ability to overcome barriers to their success while navigating the campus environment. Heuristic knowledge increases as students gain experience in the college environment.

The EMSS assumed that students are the experts about student success. Further, it assumed that the barriers to success that students encounter are distinct for each student. The model was designed to reveal the strategies that successful minority students employ to overcome barriers to academic success in college (Padilla 1999). It assumed that the

effects of campus environment, student preparation, race, gender, lifestyle, social and cultural capital, and all other student characteristics, such as family background and college trajectory, are collectively embodied in the student and are reflected in the student's expertise.

The term retention described the institution's ability to keep a student enrolled at the institution, whereas the term persistence described the student's ability to stay enrolled in the institution. Padilla's EMSS (2009) focuses on student retention based on the students' ability to cope with the barriers to success. This study is more so concerned with the institution's retention efforts as it relates to the integration of students into the institution.

Rendón's Model of Validation.

Rendón (1994) suggested that in order to increase retention, higher education must transform its campuses to create a culture of caring and success. In Rendón's theory of validation, students are best supported by being provided an array of services that will assist them in making connections with the institution. The validation model is an enabling, confirming, and supportive process supported by in-class and out of class experiences that enhance the academic and personal development of students. Rendón's study (1994) of student persistence emphasized a holistic approach to working with students. Rendón's research has been primarily focused on Hispanic student populations. The college's culture may also impact students in both positive and negative ways (Rendón, Jalomo, & Nora, 2000). Students often find it difficult to persist in mainstream colleges and universities in part because of inadequacies in the institutional culture.

Rendón's (1994) theory of validation is especially well suited to this study as the institution of concern has a Hispanic/Latino enrollment of 53%.

Rendón, Jalomo, and Nora (2000) observed that Tinto's model is based on the acculturation/assimilation theories developed during the 1960s. According to Tinto's theory, it was considered the responsibility of students in college, like minorities in society, to assimilate to the culture of the college. Acculturation/assimilation theory took the perspective that separation from pre-existing traditions, customs, and values, along with the incorporation of the traditions, customs and values of the dominant society (Hurtado & Carter, 1997), could help minority populations overcome apparently self-perpetuating cycles of poverty and deprivation. This theory, when applied to low income and minority students on the college campus, implied that students were struggling because something was wrong with them and therefore they needed to change.

The dominant acculturation/assimilation perspective led researchers to use mainstream cultural norms as evaluative criteria (Rendón, Jalomo, & Nora, 2000). This practice steered researchers away from considering that the problem of low student success rates among minority students might be pertinent to the situation of students (Rendón, Jalomo, & Nora, 2000) rather than to their personal characteristics. The research resulting from the assimilation/acculturation framework resulted in (a) a focus on academic failure as opposed to success, (b) the exclusion of contextual and historical factors as they pertain to racial/ethnic minorities, (c) a lack of focus on systemic barriers to success in college, (d) a failure to challenge theoretical assumptions and paradigms, and (e) a failure to connect

theory to practice by virtue of eliminating minority student perspectives from theory development (Rendón, Jalomo & Nora, 2000).

Retention described the institution's ability to keep a student enrolled at the institution. Rendón's Academic Validation model focused on student retention based on the students' sense of validation. According to Rendón (1994) academic validation occurs when faculty and staff, as well as family members and peers, actively reach out to students and provide feedback that lets them know they are capable learners, are valued by the institution, and play an important role in their own learning. Whereas Rendón's theory of validation offered insight to minority attrition based on the students inability to assimilate, this study was concerned with the institution's retention efforts as it relates to the integration of students into the institution

Astin's Involvement Model.

Astin, (1984, 1993) introduced the developmental theory of student involvement, which looked to clearly designate issues that affect student retention in the college environment. In Astin's (1993) revisiting of the theory, he found that students were most impacted by three types of differing aspects of involvement: with faculty, with academics, and with peer groups which, according to his observations, is the most influential of the involvement areas. According to Astin (1984, 1993), the amount of effort that a student exerts and invests both socially and academically in his or her university experience has a direct relationship with retention.

An involved student is a student that devotes significant energy to academics, spends considerable time on campus, participates actively in student organizations, and interacts often with faculty (Astin, 1984). This differs from the role of the student in Astin's earlier "input-process-output" model (Pascarella & Terenzini, 2005), where the student is passively developed by the faculty and by university programs. The Theory of Involvement suggests that the student plays an integral role in determining his or her own degree of involvement in college classes, extracurricular activities, and social activities. Of course, the more quality resources available, the more likely those students who are involved will grow or develop. Therefore, faculty interaction both inside and outside the classroom and high quality university programs and policies reflective of institutional commitment to student learning are necessary for student growth.

Astin stated that the quality and quantity of the student's involvement would influence the amount of student learning and development (Astin, 1984). True involvement requires the investment of energy in academia, relationships, and activities related to the campus. The amount of energy invested will vary greatly depending on student interest and goals, as well as the student commitments. The most important institutional resource, therefore, is student time. The extent to which students can be involved in the educational development is tempered by how involved they are with family, friends, jobs, and other outside activities (Astin, 1984).

Astin (1993) developed one of the first and longest-lasting models to help in understanding the impact of college on students. This model, known as the Input-Environment-Output Model (I-E-O Model), includes three elements: Inputs, Environment,

and Outputs. The concept of Astin's involvement theory suggested that students are more likely to have a positive college experience by becoming involved in the college (1984).

Astin's work suggests that students enter college with a preexisting set of characteristics and perceptions that he called the Inputs. These Inputs typically include family background, high school grades, test scores, race, gender, ethnicity, marital status, and their individual reasons for attending the university. Astin's conceptual model indicated that the Input elements not only directly influence the student Outputs, but they also have an effect on the Environment which also influences the student Outputs (Astin, 1993; Pascarella & Terenzini, 2005).

The second set of elements in Astin's model is Environmental factors, which have an influence on the student's transition experience and on their Outcomes. These Environment factors often include the institutional characteristics of the college or university, peer groups, academic major, campus experiences, place of residence, financial aid, and student involvement. The Environmental factors differ based on the students' Inputs and they directly affect the student Outputs.

The final component of the I-E-O Model is regarded as the Outputs. These Outputs can include such things as satisfaction with the college or university environment, student characteristics, beliefs, behavior, academic achievement, academic understanding, abilities, attitudes, career development, and retention (Astin, 1993; Pascarella & Terenzini, 2005). Astin has actually identified 146 possible Input variables; 192 Environmental factors; and 82 Outcome variables (Upcraft, Gardner, Barefoot, & Associates 2005). According to

Astin's model, these factors interact and create the opportunity for tremendous impact upon students.

In addition to developing a framework to guide research on college students, Astin also developed a Theory of Involvement as a result of his work with longitudinal studies of college student persistence and the important function of higher education as a means of talent development. This theory was developed as a way to explain the dynamic process of change or development, which affects college students (Astin, 1993; Edman & Brazil, 2009; Pascarella & Terenzini, 2005; Smith & Wertlieb 2005). After looking at the factors that affect retention, Astin framed a theory that advanced the concept that students learn by being involved, and as they become involved, they will remain enrolled (Astin, 1993). “Quite simply, student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1984, p. 297). Astin's model suggested that a significant predictor of the student remaining at the present institution is the level of engagement that a student demonstrates (Amenkhienan & Kogan, 2004). The opposite is also predicted; a student who is not involved is disengaged and is more likely to withdraw from the college or university (Astin, 1993).

Astin's theory is based on these five assumptions. First, involvement requires the investment of psychological and physical energy in “objects” of one sort or another such as tasks, people, or activities, whether specific or general. Second, involvement is a continuous concept; different students will invest varying amounts of energy in different objects. Third, involvement has both quantitative and qualitative features. Fourth, the amount of learning or development is directly proportional to the quality and quantity of

involvement. Fifth, educational effectiveness of any policy or practice is related to its capacity to induce student involvement (Astin, 1993)

According to Astin (1984), students learn by becoming involved. Astin's theory of student involvement is grounded in psychoanalysis and classical learning theory. The student involvement theory focuses on the student's commitment to his/her educational goals. Astin describes involvement as the quantity and quality of the physical and psychological energy a student devotes to their academic experience. Astin suggests that educators focus their efforts on what the student does in the classroom and on campus. Involvement occurs along a continuum. The degree of student success in college is directly proportional to the quality and quantity of student involvement with the institution (Astin, 1984). The more interaction between students and faculty the more likely it is that the student will have a positive experience (Astin, 1984). Astin shows that students who get involved with college staff and activities tend to have higher retention rates than students who limit their involvement only to classroom learning.

Berger and Milem (1999) used Astin's theory of involvement (1984) to help explain Tinto's model of institutional departure (2005). Institutional fit or connectedness is an important factor in student retention (Berger and Milem, 1999). To this end, social networks such as Facebook have the capacity to help create small communities within large institutions, making students more comfortable and connected (Schofield & Dismore, 2010). Astin's theory of involvement (1984) supported Heiberger's finding that a students' social integration as a result of being involved in student organizations and establishing

friends at their institution encompasses a substantial piece of their overall social integration, which then predicts institutional commitment (Heiberger, 2007).

Astin's research (1993) documented that women involved in sororities were more likely to report increased leadership abilities than women who did not join these groups and that attending a women's college had a positive effect on many leadership outcomes. Women who joined sororities were more likely to be elected to office in college and report increases in their leadership abilities. Whitt's research (1993) on women's colleges revealed that participation in leadership activities was linked to positive intellectual and affective outcomes for women students.

Tinto's Student Integration Model.

The key model for retention was developed by Tinto whose work also supports the importance of student involvement in the transition experience for transfer students (Tinto, 2005). He specifically pointed to the need to understand the connection between student involvement in learning and the resulting impact on persistence (Berger & Milem, 1999).

There have been several studies detailing why and when students drop out of college. Studies by Tinto (1975), Cabrera, Nora, and Castaneda (1993), have shaped how researchers and practitioners view the issues of student retention and departure. Tinto's model (1975) was constructed using work by Spady (1970). Spady presented one of the early conceptual models of the student attrition process in higher education. Spady suggested that suicide is more probable when individuals are poorly integrated into the shared structure. Using this framework to study student retention, he theorized that the social integration of students increases the student's institutional commitment, which will

then in turn reduce the likelihood of student attrition. Tinto (1975) expanded Spady's theory to include the process of student integration into the academic and social systems of institutions of higher education. Tinto's goal was to clarify the effect of multifaceted interactions within the system on student persistence. Tinto (1975) concluded that the interplay between the individual's commitment to the goal of college completion and his commitment to the institution would determine whether the individual decides to drop out.

Tinto's original model was introduced in 1975 and it has received a great deal of examination, critique, and feedback (Berger & Milem, 1999). The development of Tinto's model began with the work of Arnold Van Gennep, an anthropologist, who studied the process of gaining membership in societies. Tinto was especially interested in the component of Van Gennep's research that focused on the movement from one type of membership to another, especially from youth to adult status. Tinto cited Van Gennep's classic 1960 study, *The Rites of Passage*, and its three stages of separation, transition, and incorporation (Tinto, 1975).

Using Van Gennep's research as a foundation, Tinto based his model on the three steps or stages of integration, and his use of these stages has been supported by Elkins, Braxton, and James (2000). The first stage of the college student experience is separation and it successfully occurs when the student is able to disassociate themselves from the social norms of their previous communities – like their previous college, their family, and their high school friends. Often these previous communities have different values, norms, behaviors, and ideas than the college community. Because of these differences, and in order for the student to effectively integrate into the new campus community, there must be at least some transformation and possibly rejection of the norms of previous communities.

The second stage is focused on the transition and it comes either during or after the separation stage. Transition is the stage where students find themselves separated from their previous norms, but they have not yet fully taken on the norms of the new institution. This can be a very challenging time for many students because there is a sense of disconnectedness – they are no longer tightly connected to their previous norms and behaviors nor are they yet firmly attached to the norms and behaviors of their new community. Students who come from families, schools, or communities whose norms and behaviors are very different from the new university the student has chosen to enter may have an especially difficult time (Tinto, 1997).

The third stage, incorporation, finally occurs when new students adopt the norms and behaviors of the new campus community, and it can only happen when they have passed through the other stages of separation and transition. While the first two stages tend to occur near the beginning of a student's time at the university, incorporation is not assured. The student is still faced with the challenge of adopting new behavior patterns that are appropriate, but typical university communities lack formal rituals and ceremonies to connect these students to the campus community. It is important in the university community that the incorporation includes both the academic and social life of the institution (Tinto, 1997).

Van Gennep's research provided a beginning for Tinto's work to develop a theory of student departure, but it did not encompass the largely informal interactions which take place in the university setting and which lead to the incorporation of individuals. As a result, Tinto began a continuation of the work of Spady (1970) who had already begun to utilize the theory of suicide developed by Durkheim in 1951 to explain the connection of community and departure (Tinto, 1997). Tinto based his work upon the idea that students come to the university with a

background that contains unique family experiences, school experiences, personal expectations, skills, and goals. These perspectives and expectations are then affected and reshaped by the student's interactions with the individual and group level aspects of the academic and social systems of the university (Pascarella and Terenzini, 2005).

Tinto's (1975) student integration model explains the student integration process as a function of academic and social experiences in college. He measured successful academic integration by GPA and social integration by the frequency of positive interactions with peers and faculty in addition to involvement in extracurricular activities. Before they matriculate to postsecondary education, students will develop attributes that are shaped by their familial upbringing. At the same time, they develop academic and social skills and abilities in both formal and informal settings. In turn, these skills and abilities help form students' goals and commitments regarding college, the workforce, and their place in society as a whole. During their time in college, formal and informal college experiences influence the student's level of integration into the college both academically and socially. According to Tinto, this level of integration has an impact on the student's development of goals and commitments, which results in a decision to either persist in or depart from college. The match between student characteristics and institution, therefore, shapes students' goal commitments, which in turn influence persistence (Swail, Redd, & Perna, 2003).

Tinto suggested that students are more likely to remain enrolled in an institution if they are connected to the social and academic life of that institution. Students become integrated into an institution of higher education by developing connections to individuals,

participating in clubs, or engaging in academic activities, and therefore are more likely to persist. Students who do not feel at home in an institution or do not believe that an institution can help them meet their goals are less likely to persist. Likewise, students who are isolated, or who do not engage in social interactions within the college, are less likely to persist in the institution. Tinto pointed out that student integration into an institution can occur along two dimensions, the academic, and the social. Academic integration occurs when students become attached to the intellectual life of the college, while social integration occurs when students create relationships and connections outside of the classroom. These two concepts interact with and enhance one another. Students must be integrated into the institution along both dimensions to increase their likelihood of persistence. Tinto noted that there are both formal and informal systems within institutions that can encourage integration and persistence.

In 1987, Tinto expanded his view of student dropouts to include a three-stage process: separation, transition, and incorporation. He adapted this from Van Gennep's (1960) social anthropology theory which drew a parallel between the movement of an individual from one group to another in tribal societies with the departure of a student from home and his or her incorporation into the new college community (Tinto, 2012). The separation stage refers to the student's parting from past habits and patterns of associations. According to Tinto, students must, leave their former communities if they want to consider themselves part of the community college. The transition stage refers to how students cope with stresses of departing from the familiar, while not completely understanding or integrating into the new college environment. The incorporation stage reflects students'

competency as an institutional member. After incorporation, the student is no longer the person he or she once was. This student, in effect, has become a new individual. This view adds a time dimension in the form of longitudinal stages of the integration process that addresses the early stages of separation and transition and difficulties students typically face academically and socially before their incorporation into campus life. Lack of integration into the college campus may also result from students' inability to separate themselves from past associations to make the transition to the new community (Swail, Redd, & Perna, 2003; Tinto, 2005, 2012).

Tinto's framework has been applied to numerous studies of student persistence in higher education. However, its usefulness for community college students has been questioned. There is an assumption that community colleges fail to provide students with opportunities for social integration or that the social aspect of higher education may be less appealing to students attending two-year commuter institutions (Bailey & Alfonso, 2005). Tinto himself has questioned whether the factors that encourage social integration in particular are relevant to community college and commuter students (Tinto, 1997).

An institutional response to Tinto's work has been to implement structured student support services meant to encourage integration. Community colleges in particular have taken this approach (Bailey & Alfonso, 2005). The underlying assumption is that if colleges provide enough structured opportunities for students to engage with the institution, students will become integrated into the college and persist at higher rates. Studies investigating academic persistence compose one of the most widely reported areas of research in higher education (Metz 2004). Tinto is most often cited in and associated with

student persistence research (Elkins, Braxton, & James, 2000). Applying the model to two-year colleges and or commuting students have produced varied results (Deil-Amen 2011). Some research suggests the model is not relevant. Voorhees (1987) found no association between persistence and integration in one community college. Bean and Metzner (1985), Tinto himself (2005), and Braxton, Sullivan, and Johnson (1997) contend background characteristics and external circumstances have a greater impact on persistence than on-campus factors. Pascarella and Chapman (1983) found community college persistence was influenced by academic integration, not social integration. Later Tinto (1997) found classroom involvement not only facilitates academic integration but also promotes integration beyond the classroom. Tinto's model has been found to be inadequate for minority students because it assumes disconnection from a home community must occur before integration into a college community can happen (Hurtado & Carter, 1997). This perspective reinforces the need to understand the experiences of marginalized students such as two-year college students (Reason, 2009; Rendón, Jalomo, & Nora, 2000). The vast majority of two-year students enroll in community colleges while remaining in their communities of origin, so the issue of separating from a culture of origin is minimal. The dynamics of race, class, and culture have not yet been adequately explored in two-year contexts while utilizing Tinto's concept of integration to frame the discussion (Deil-Amen 2011).

Researchers have turned to persistence theory in an attempt to explain and gain an understanding of student departure and persistence patterns. Tinto (1975, 2005) is one of the most notable researchers of persistence. Tinto drew his research from Spady's (1970)

work based on Durkheim's (1951) research on suicide. Tinto (2012) argued that individual departure from institutions arises from a longitudinal process of interactions between an individual with various attributes, skills, and dispositions (intentions and commitments) and other members of the institutional academic and social systems. According to Tinto's theory, the more a student integrates him or herself into the social and academic life of the campus, the more the student becomes committed to the goal of graduation and develops loyalty to the individual institution. This will increase the chances that the student will persist and obtain their degree.

Researchers such as Cabrera, Nora, and Castaneda (1993), and Pascarella and Terenzini, 1983 have conducted studies using Tinto's theory of departure to have a better understanding of and use findings regarding the departure and persistence behavior of students to affect college continuance to goal completion. Perhaps the most comprehensive assessment of Tinto theoretical framework was performed by Braxton, Sullivan, and Johnson in their study published in the 1997 edition of *Higher Education: Handbook of Theory and Research*. When exploring the variables of social and academic integration across institutional types, Pascarella and Chapman (1983) determined that two-year college students had more friends attending the same college and had more informal social contact with faculty than did university students. Two-year students seemed to be the least socially integrated of all students studied at all-types of institutions. In another study conducted by Pascarella and Chapman (1983), they found that two-year students were low in both social and academic integration as compared with students from other types of institutions. Those

that persisted in two-year colleges had significantly more informal contact with both faculty and peers than those who withdrew.

Other studies have been conducted to determine if Tinto's factors of goal and institutional commitment are related to student persistence. Braxton, Sullivan, and Johnson (1997) reviewed a large number of studies based in varying degrees on Tinto's model and identified 15 testable propositions specified by Tinto and then evaluated the empirical evidence relevant to each. They also examined whether the evidence, which was generally based on multiple regression or structural equation modeling techniques, varied for single versus multi-institutional studies, for men versus women, and for residential versus commuter campuses. They concluded that the evidence provided only partial support for the model overall, and that was true in residential, but not commuter settings. Their evidence, specific to males and females, provided low support for the model. Pascarella and Terenzini (2005) have concluded that even after taking into account students' pre-college degree goals, abilities, and other relevant characteristics, initial attendance at a two-year institution reduced the likelihood of bachelor's degree completion by 15 to 20 percent. Pascarella and Terenzini (2005) suggested that students' institutional commitments exert an important and positive effect in shaping their persistence decisions, both planned and actual. This effect persists even in the face of controls for the pre-college demographic and academic characteristics and the initial goal and institutional commitments students bring with them to college. They also suggest that the level of student involvement and integration in any of the components of an institution's academic and social systems can be a critical factor in a student's persistence decisions.

College student retention has been studied for over 75 years (Braxton, Sullivan & Johnson, 1997). During this time, scholars have found a number of reliable influences on college student departure (Braxton, Sullivan & Johnson, 1997). One of these is social integration. The goal of this study was to examine the efforts of the institution in its attempts to have a positive impact on subsequent institutional commitment and, in turn, a positive impact on student retention.

First Year Experiences Programs

Evaluation of retention activities such as First Year Experience (FYE) programs is essential in light of diminishing financial resources. FYE programs need to be both effective and efficient (Schrader & Brown, (2008). Interventions should be tailored to the institution and evaluated to make sure they are meeting the unique needs of the institution and its students (Fike & Fike, 2008). The purpose of evaluating retention efforts such as FYE programs is to gather data to provide insight into the factors influencing student retentions.

Smith (1963) conducted what is commonly accepted as the first published researched-based study comparing retention rates among students completing an orientation course with those not completing the course. Smith found that the completion of an orientation course and retention were related. Since this study, a number of articles have examined these types of courses. However, the majority of these studies have focused on four-year institutions. Orientation programs have been in existence for more than 100 years. The first historical mention of an orientation program in higher education was in 1888, when Boston University offered a program to introduce students to the college

experience (Drake, 1966). In the 1960s, orientation courses started to shift from being generally informative to an academically engaging course. Early studies by Smith (1963), Taufest (1961), and Fley (1962), provided a foundation of research on first-year college student and orientation courses.

In the early 1960s, Taufest (1961), Shaffer (1962) and Fitzgerald and Busch (1963) all presented a strong argument to institutionalize the orientation programs, which up until that time were at best informational courses. Warnath and Fordyce (1961) proposed that the student needed attitudes and values that were similar to that of the institution. A student is more likely to leave an institution if they do not share similar values. Fley (1962) found television forums an effective means of presenting key information to college freshman. Smith (1963) was the first to introduce a research hypothesis to test the relationship between orientation and retention. These studies provided the foundation for research of first-year college students, which has predominately examined three major outcomes: persistence, adjustment and cognitive development (Sax et al., 2000).

Drake (1966) suggests orientation programs were changing from a course format toward an emphasis on freshman week. In addition to the development of the freshman week seminar, there was also an expansion of orientation programs nationwide. Yoder and Beals (1966) noted that, in their study of 86% junior colleges, 88% offered some form of an orientation program. In the early 1970s, the entering student population began to change (Felker, 1984; O'Banion, 1994). The students enrolling in college were older adults, less academically prepared, and first generation students (Cross, 1971). College administrators responded to the new, more diverse student population with the belief that programs were

needed to help all freshmen learn about college (Dwyer, 1989). In 1972, the University of South Carolina created “University 101” a seminar course for college freshman (Jewler, 1989). Forty years later, at hundreds of colleges across the country, the freshman seminar courses still follow the same basic philosophy.

In the 1980s, orientation programs experienced tremendous growth in the number of student participants, number of colleges supporting orientation programs, and the number of research studies on the subject. Shanlye and Johnston (2008) referred to the 1980s as the decade of reform and a time of substantive research, that led to great interest in the first year. Barefoot (1993) noted that it was during the 1980s that orientation becomes a part of the standard higher education curriculum at many colleges.

Cueso (2001) reported that research supports the effectiveness of orientation programs in improving retention, degree completion, and academic performance. The positive effects of orientation programs have been reported at both the university and the community college (Barefoot & Gardner, 2005). The majority of students entering college are now taking orientation courses specifically designed to facilitate the adjustment to college (Sax et al., 2000). These same students reported greater satisfaction with faculty contact and with adjustment to college life after completing an orientation course (Barefoot, 2004; Barefoot & Fidler, 1996).

In response to the growing need to prepare students for their first year of college, institutions of higher education have developed programs and initiatives intended to assist in the transition to higher education. Early efforts took the form of increased institutional resources such as libraries, writing centers, computer labs, or personal computers

(Pascarella & Terenzini, 2005). Colleges and universities also have offered courses and seminars focused on the development of academic and social skills (Howard & Jones, 2000). Whether the courses were offered as formal requirements or as an option, they were designed to ease the transition into higher education (Barefoot & Gardner, 2005; Howard & Jones, 2000). These curricular initiatives have taken the name: First Year Experience programs (or FYE).

White, Goetz, Hunter, and Barefoot (1995) were among the first researchers to describe the FYE intervention strategy for incoming first-year students. The research focused not only on the assessment of first-year students' skills and their success, but also on the design and implementation of FYE programs. (White, Goetz, Hunter, & Barefoot, 1995) suggested that the FYE should afford students opportunities to interact socially (with peers and faculty) as well as introduce students to academic facilities, counseling staff, and other faculty during advising/planning sessions. The FYE program, "should be understood not as single events, but as processes that should be linked programmatically" (White, Goetz, Hunter, & Barefoot, 1995, p. 33).

In addition to describing the various program objectives, (White, Goetz, Hunter, & Barefoot, 1995) indicated that FYE programs must be tailored to meet the needs of the institution. Unfortunately, this presents challenges in terms of program evaluation. Colleges and universities vary in many ways, as do the corresponding FYE programs and course topics. Therefore, evaluation strategies must be developed to suit those particular needs. At the same time, assessment strategies must remain comprehensive and address the FYE program as a whole. Although White, Goetz, Hunter, and Barefoot, (1995)

recommend that FYE programs should be evaluated holistically; colleges and universities often, focus on the first-year population as a whole. They tended to adopt a one-size-fits all mentality about serving college students (Kuh, Schuh, Whitt, & Kinzie, 2010). This evaluation approach neglected the ways in which males and females have been shown to differ on many cognitive tasks (King 2010). At the collegiate level, males and females have been shown to exhibit differences in the ways they cope with stress (Lawrence, Ashford, & Dent, 2006). In light of the changing demographics, gender continues to emerge as an important issue. Women were awarded 75% of all bachelor's degrees in the U.S., a statistic that has steadily risen since 1970 (Wirt et al., 2004). Given the quantity of research in the area and the changing student population, developing and evaluating FYE programs also must take into account the changing demographics. In an effort to increase student success and retention, the SDEV 0170 course offered at the institution of interest in this study attempts to provide the first time in college student with the necessary academic and social integration.

Non-Traditional College Students

Non-traditional students have been returning to higher education at a rapidly increasing rate (Newbold, Mehta & Forbus, 2010). Non-traditional students are generally defined as students who do not follow a continuous educational path into higher education (Newbold, Mehta & Forbus, 2010). As a result, they tend to be older than traditional students are, (Evelyn, 2002) and they have significantly more time and role constraints than traditional college students do (Morris, Brooks, & May, 2003). These outside demands and additional responsibilities create time limitations that traditional students may not

encounter (Lundberg, 2003). With the increase in non-traditional students enrolling in higher education, there is a need to understand how balancing of the multiple demands and roles of work, school, and life affects adult students.

There is a relationship between academic achievement and retention. The higher the academic achievement, the better the retention is (Reason, 2009; Schofield & Dismore, 2010). Gender was selected as a demographic factor primarily because a statistical correlation between gender and both first semester GPA and first semester academic warning (DeBerard, Spielmans & Julka, 2004).

Females, minorities, and older students are entering higher education at an increasing rate. The influx of these "non-traditional" students has led to quite different enrollment patterns in which stopping out of college and part-time enrollments are increasingly more common. Many students have objectives that are not synonymous with earning a baccalaureate degree within four years. By understanding the characteristics of these "non-traditional" student populations and their experiences, institutions of higher education will be better equipped to support student development and growth. Pascarella (2005) identified several variables that influence the transition to higher education, such as academic and social involvement, family background, socioeconomic standing, and academic preparation. Astin (1984) identified the three of the most influential forms of involvement as being (a) academic involvement, (b) involvement with faculty, and (c) involvement with peer groups.

There is an indication that a significant number of students currently enrolled in higher education are not prepared to meet the academic and social challenges required of

them. Wirt et al. (2004) reported that in the fall of 2000, approximately 76% of institutions of higher education offered some form of remediation in the area of basic skills. This suggests that many students are underprepared for the academic demands of higher education. Pitts, White, and Harrison (1999) found that college instructors perceive a decrease in student motivation to learn as compared to a generation ago. Higher education requires that students be able to manage their time and allocate resources toward completing assignments. In college, freshmen are no longer in the familiar teacher-directed environment but instead enter a student-directed environment (Wratcher, 1991). If these factors are not addressed adequately in their first year, students are not likely to persist and in turn drop out of school entirely (Astin, 1993; Tinto, 2005).

Females have made notable gains in higher education. In fact, women have become the majority of degree earners in nearly every level of postsecondary education except Ph.D. and M.D. programs (King, 2010). The number of men enrolling in higher education has remained constant. However, the number of women enrolling in higher education has grown to exceed that of men. The result of this trend is an overall increase in the percentage of female students relative to male students (King, 2010). In order to establish a more complete picture of the status of women students in higher education, one must examine the representation of women students by field of study in addition to their representation in other arenas of student life (Allan, 2011).

Summary Review of Literature

The review of the literature explored the issue of student retention with an emphasis on community colleges. It demonstrates a need for programs that help the increasingly

more diverse college student's population transition to higher education. There is a lack of research on retention at community colleges. Further research is needed to define what factors contribute to the success of students who persist and transfer to four-year institutions in order to complete their undergraduate studies. Institutions of higher education need to identify programs and strategies that will help at-risk students stay connected with an institution through the completion of a certificate or a degree.

The literature provides supporting theories and explanations for student retention and persistence. However, there is a lack of research on the satisfaction of experiences on campus and even less on the impact of student satisfaction or retention. Research has shown that at-risk populations within higher education may need additional support in order to help them connect with an institution and persist in their education. There is a need for the identification of programs that have demonstrated success in enhancing student persistence and which can be applied to similar populations at other institutions. Chapter three provides a description of the methods employed in researching the relationship between student development course and student retention and academic success.

Chapter 3: Methods

This chapter presents a description of the methodology employed in researching the relationship between FYE programs and student retention and academic success.

Specifically, this study compared the academic and retention performance of students in relation to their involvement with a course designed to facilitate the college experience, SDEV 0170. The setting for this study was a Community College in central Texas. This chapter describes the study's research design, participants, variables, and the data analysis procedures.

The research design for this study involved the analysis of existing transcript data that is maintained by the college. All of the data needed to conduct this study are available through students' transcripts and admissions records. It assessed the fall 2010 cohort of first time in college (FTIC) students in order to examine academic achievement as well as retention. This cohort was selected since this was the first semester that the college offered the SDEV 0170 course as both face to face and as an online course. It also examined two demographic characteristics (gender and ethnicity) as to their relationship to student retention and student achievement. The results of this study can be used to help determine if there is justification for using the resources required to offer the FYE program and more specifically the SDEV 0170 course. Furthermore, the results of this study are useful in identifying possible areas of improvement for the SDEV course and the overall FYE program.

Research Design

This was an ex post facto, quantitative study employing a causal-comparative design, using data from the college. The ex post facto research design is used to examine possible relationships between independent variables and the dependent variable after the fact (Gall, Gall, & Borg 2007). In ex post facto studies, the independent variable is not manipulated; therefore, no causal inferences are made (Meltzoff, 2004). The ex post facto design attempts to compare variables, not show causation (Gay & Eurasian, 2000). The causal-comparative design is a method that intends to discover possible causes and effects of a phenomenon by comparing individuals who are exposed to the phenomenon with individuals who are not (Gall, Gall, & Borg 2007).

The characteristic-present group consisted of first time in college students who participated in the SDEV 0170 course. The outcome measures are retention, as measured by enrollment in the three subsequent semesters, and academic achievement, as measured by Grade Point Average (GPA), over four subsequent semesters.

Participants

The college is a comprehensive community college offering general education, liberal arts and sciences education, vocational/technical education, continuing education, and developmental education programs. The college is an open admission institution, which mirrors the diverse population of a large city in central Texas. With more than 50% of the student population being comprised of Hispanics, the institution has been identified as a Hispanic serving institution. Hispanic-Serving Institutions (HSIs) are defined by the U.S. Department of Education as accredited and degree-granting public or private nonprofit

institutions of higher education with 25% or more total undergraduate Hispanic full-time equivalent student enrollment. The defining characteristic of HSIs is their Hispanic enrollment, not their institutional mission.

For many students, the choice is not between the community college and a four-year institution, the choice is between the community college and nothing (Cohen & Brawer, 2008). In an effort to create an environment more conducive to retention of students, the institution will collect quantitative data that includes information from student transcripts, the financial aid office, the admission office, and other administrative sources. The population is comprised of students entering the college for the first time and earned less than twelve semester hours.

The college defines a student who has earned less than twelve semester hours and enrolled at the campus for the first time as a first time in college (FTIC) student. At the college of interest, the SDEV 0170 is required for all FTIC students. The characteristic present group will be composed of those who enrolled and successfully completed an 11 week SDEV 0170 course, or who enrolled and successfully completed an on-line SDEV 0170 course.

This study had 1557 participants: 1508 participants in the 11-week SDEV 0170 course; and 48 participants in the on-line SDEV 0170 course. The study group is comprised of 47% males, and 53% females. The participants in the study had an ethnic breakdown of 1.9% Asian, 4.9% Black, 23.7% White, and 61 % Hispanic, with the remaining 5.8% either unknown or unreported.

Variables

The outcome measures, namely, achievement and retention, were obtained from a report generated by the Banner system, the student information system at the college. On October 19, 2007, the U.S. Department of Education issued guidance on the reporting of aggregate data, the categories do not denote scientific definitions of anthropological origins. This study used the race/ethnicity categories for reporting data to IPEDS.

Independent Variables.

SDEV 0170. A course offered as an attempt to provide the first time in college student with the necessary academic and social integration. Interventions should be tailored to the institution and evaluated to make sure they are meeting the unique needs of the institution and its students (Fike & Fike, 2008).

11-week Course. A traditional format designed with the advisor and students meeting each week over an 11-week semester. The class sessions last for approximately one hour. In traditional classroom instruction, the learning pedagogy is instructor-centric and the majority of students are traditional college age, between the ages of 19 and 24 (Garrison & Vaughan, 2007).

Online Course. A course provided in the on-line platform format where students have direct access to the professor as well as the course content. The course was conducted over a period of 11 weeks. Internet courses are comprised of digital content with asynchronous delivery, which allows learners to complete work at their own pace, and location rather than being at a physical location at a specific time (Altmyer & Yang, 2010).

Gender. Students proclaim their gender status on the Apply Texas form when applying for admission to the college as one of two categories: (a) *male*, or (b) *female*.

Ethnicity. The Texas Higher Education Coordinating Board identifies nine categories that are used for the Integrated Postsecondary Education Data System (IPEDS). The current race/ethnicity categories for reporting data to IPEDS are used in this study and are outlined below:

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American. A person having origins in any of the black racial groups of Africa.

Hispanic or Latino. A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

Dependent Variables.

Academic Achievement. A Grade Point Average (G.P.A.) of C or better, measured at the end of the semester. G.P.A is calculated by multiplying the semester-hour value of the course by the point value of the grade received, then all of the grade points from all courses and divide by the total semester hours attempted based on a 4-point scale.

Retention. In this study is defined as students enrolled in a given fall semester who re-enroll the next Spring semester, or the students enrolled in a given Spring semester who re-enroll the next Fall semester (Jardine & Krause, 2005). This study tracked students from the fall semester of 2010 to the spring semester of 2011 and then from the spring semester of 2011 to the fall semester of 2011, and finally the spring 2012.

Data Collection

The research design of this study involved the use of survey instruments. Survey research is broadly defined by Creswell (2009) as quantitative or numeric description of trends, attitudes, or opinions from a population or sample. All of the data was obtained from transcript and admissions records. The college of interest uses the Banner system, which integrates information from various student processes into one system, offering Web access to student information in one central location. The Banner system is divided into modules. At the college of interest, the following modules are being used: (a) admissions; (b) registration; (c) academic history; (d) accounts receivable; and (e) graduation. Quantitative data on achievement as measured by GPA, and retention as measured by the students' enrollment in the subsequent semester, will be analyzed to determine if

relationship exists between the SDEV 0170, retention, and success. The following figure illustrates the data collection points:

Figure 1.

Data Collection Points Enrollment in SDEV

	Fall 2010	Spring 2011	Fall 2011	Spring 2012
Enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention

This study also examined two student characteristics (gender and ethnicity) to see if they have an influence on student retention and student achievement. The following figure illustrates the data collection points:

Figure 2.

Data Collection Points Enrollment in SDEV by Gender

	Fall 2010	Spring 2011	Fall 2011	Spring 2012
Males enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention
Females enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention

Figure 3.

Data Collection Points Enrollment in SDEV by Ethnicity

	Fall 2010	Spring 2011	Fall 2011	Spring 2012
American Indian enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention
Asian enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention
Black enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention
White enrolled in the SDEV 0170	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention
Hispanic enrolled in the SDEV	Achievement	Achievement, Retention	Achievement, Retention	Achievement, Retention

Data Analysis

The characteristic-present group consisted of first time in college students who participated in the SDEV 0170 course. The outcome measures were retention, as measured by enrollment in the two subsequent semesters, and academic achievement, as measured by Grade Point Average (GPA), at the three subsequent semesters.

The following research questions guided this study:

RQ1: What is the impact of the SDEV 0170 course on achievement of first time in college students at the college?

RQ2: What is the impact of the SDEV 0170 course on retention of first time in college students at the college?

RQ3: What is the difference between 11 week and online courses of SDEV 0170 course on achievement of first time in college students at the college?

RQ4: What is the difference between 11 week and online courses of SDEV 0170 course on retention of first time in college students at the college?

RQ5: How does achievement differ between students who enrolled in the SDEV 0170 course according to gender?

RQ6: How does retention differ between students who enrolled in the SDEV 0170 course according to gender?

RQ7: How does achievement differ between students who enrolled in the SDEV 0170 course according to ethnicity?

RQ8: How does retention differ between students who enrolled in the SDEV 0170 course according to ethnicity?

The quantitative data was coded and entered into the computer by the researcher. The Statistical Package for the Social Sciences 21.0 student version for Windows was used to analyze the data. Descriptive statistics were used to summarize the data.

To answer research question one, a univariate analysis of the characteristic-present group was performed, an ANOVA was performed to examine the relationship between the SDEV 0170 course and achievement. A bivariate correlation was used to examine the correlation or relation between the SDEV 0170 course and achievement

(Pearson, 1900). Correlation coefficients estimate strength and direction of association between two interval/ratio level variables.

To answer research question two, in which the characteristic-present was examined based on retention (1 = returned; 0 = not returned), an ANOVA was performed to examine the relationship between the SDEV 0170 course and retention. A bivariate correlation was used to examine the correlation or relation between the SDEV 0170 course and retention (Pearson, 1900). Correlation coefficients estimate strength and direction of association between two interval/ratio level variables.

To answer research question three a univariate analysis of the characteristic-present group an ANOVA was performed to examine the relationship between the SDEV 0170 11-week and on-line course and achievement.

To answer research question four a univariate analysis of the characteristic-present group was performed on the basis of retention (1 = returned; 0 = not returned), an ANOVA was performed to examine the relationship between the SDEV 0170 11-week and on-line course and retention.

To answer research question five, a multivariate analysis of the characteristic-present group was performed, an ANOVA was performed to examine the relationship between the SDEV 0170 course, gender, and achievement.

To answer research question six, in which the characteristic-present was examined on the basis of retention (1 = returned; 0 = not returned), an ANOVA was performed to examine the relationship between the SDEV 0170 course, gender and retention.

To answer research question seven, a multivariate analysis of the characteristic-present group was performed, an ANOVA was performed to examine the relationship between the SDEV 0170 course, ethnicity, and achievement. A post-hoc test was performed after the ANOVA in order to determine which groups differ from each other.

To answer research question eight, in which the characteristic-present was examined based on retention (1 = returned; 0 = not returned), an ANOVA was performed to examine the relationship between the SDEV 0170 course, ethnicity and retention. A post-hoc test was performed after the ANOVA in order to determine which groups differ from each other.

Summary

This was an ex post facto study employing a causal comparative design. The data was obtained by running a report from the colleges' Banner system, the student information system at the college. An analysis was conducted based on the results generated by the Statistical Program for the Social Sciences 21.0 student version for windows.

Chapter 4: Results

The purpose of this study was to examine the effect of a developmental course on retention and academic achievement. Specifically, this study focused on the Student Development Course, SDEV 0170. This course is intended to provide the student with skills necessary to assume responsibility for individual learning. This study examined the possible effect of the SDEV 0170 course on retention and academic achievement. It also examined instructional method (face-to-face and online) and two demographic characteristics (gender and ethnicity) as to their relationship to student retention and student achievement. The study used pre-existing data from the Community College District student information database.

The characteristic-present group consisted of first time in college students who participated in the SDEV 0170 course. The outcome measures were retention, as measured by enrollment in the three subsequent semesters, and academic achievement, as measured by Grade Point Average (GPA), in the three subsequent semesters. The Statistical Package for the Social Sciences 21.0 student version for Windows was used to analyze the data.

Table 1.

Completion of SDEV 0170 Course N = 1557

Completion of SDEV 0170	Frequency	Percent
Passed the Course	1331	85.5
Failed the Course	226	14.5

All of the data were obtained from transcript and admissions records. The college of interest uses the Banner system, which integrates information from various student processes into one system and offers web access to student information in one central location.

Table 2.

Instruction Method N= 1557

Instruction	Frequency	Percent
Face to Face	1509	96.9
On-Line	48	3.1

All of the data were obtained from transcript and admissions records. The college of interest uses the Banner system, which integrates information from various student processes into one system and offers web access to student information in one central location.

Table 3.

Gender N = 1557

Gender	Frequency	Percent
Female	732	47
Male	825	53

All of the data were obtained from transcript and admissions records. The college of interest uses the Banner system, which integrates information from various student processes into one system and offers web access to student information in one central location.

Table 4.

Ethnicity N= 1557

Ethnicity	Frequency	Percent
American Indian or Alaska Native	4	0.3
Asian	30	1.9
Black or African American	92	5.9
Hispanic	950	61.0
White	369	23.7
Other/unreported	112	7.2

All of the data were obtained from transcript and admissions records. The college of interest uses the Banner system, which integrates information from various student processes into one system and offers web access to student information in one central location.

Statistical Assumptions

The initial statistical analyses for the research questions were to be two-way ANOVAs. The one-way ANOVA is used to test for differences among at least three groups, since the two-group case can be covered by a *t*-test (Gosset, 1908). When there are only two means to compare, the *t*-test and the F-test are equivalent; the relation between ANOVA and *t* is given by $F = t^2$. Conducting multiple two-sample *t*-tests would result in an increased chance of committing a type I error.

A commonly employed correlation coefficient for scores at the interval or ratio level of measurement is the Pearson product-moment correlation coefficient, or Pearson's *r*. The

Pearson's r is a descriptive statistic that describes the linear relationship between two or more variables, each measured for the same collection of individuals. Such pairs of measurements are called bivariate data.

Research Questions

RQ1: What is the impact of the SDEV 0170 course on achievement of first time in college students at the college? To answer research question one, an analysis of the characteristic present group was performed. An ANOVA was used to examine the relationship between the SDEV 0170 course and achievement. For fall 2010 the impact of the SDEV 0170 course was statistically significant with achievement (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) at $F(1, 1556) = 740.67, p < .001$. For spring 2011 the impact of the SDEV 0170 course was statistically significant with achievement (GPA for spring 2011: failed course, $M = 1.65$; passed course, $M = 2.68$) at $F(1, 1277) = 79.29, p < .001$. For fall 2011 the impact of the SDEV 0170 course was statistically significant with achievement (GPA for fall 2011: failed course, $M = 2.07$; passed course, $M = 2.77$) at $F(1, 945) = 24.52, p < .001$. For spring 2012 the impact of the SDEV 0170 course was statistically significant with achievement (GPA for spring 2012, failed course $M = 2.12$; passed course, $M = 2.74$) at $F(1, 841) = 16.95, p < .001$. Table #5 provides an overview of the results.

Table 5.

Impact of SDEV 0170 Course on Achievement (GPA)

Variables	n	Mean	SD	F	<i>p</i>
*Fall 2010 GPA				740.67	<.001
Failed Course	226	1.27	1.28		
Passed Course	1331	3.10	.87		
Total	1557	2.83	1.14		
*Spring 2011 GPA				79.29	<.001
Failed Course	115	1.65	1.32		
Passed Course	1163	2.68	1.17		
Total	1278	2.59	1.22		
*Fall 2011 GPA				24.52	<.001
Failed Course	65	2.07	1.08		
Passed Course	891	2.77	1.31		
Total	956	2.72	1.11		
*Spring 2012 GPA				16.95	<.001
Failed Course	63	2.12	1.33		
Passed Course	780	2.74	1.12		
Total	843	2.69	1.15		

* Statistically significant at $p < .001$

Since achievement according to GPA showed lower mean scores from term to term, a one-tailed correlation was run to indicate if there was a trend. Frankfor-Nachmais (1999) considered correlations coefficients to be (a) weak ($r = .22$), moderate ($r = .52$) and (c) strong ($r = .82$). Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010 (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) to spring 2011 (GPA for spring 2011: failed course, $M = .85$; passed course, $M = 2.35$), $r = .49$, $p < .001$. Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010 (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) to fall 2011 (GPA for

fall 2011: failed course, $M = .60$; passed course, $M = 1.86$), $r = .39$, $p < .001$. Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010 (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) to spring 2012 (GPA for spring 2012, failed course $M = .60$; passed course, $M = 1.60$), $r = .32$, $p < .001$. As students moved through the program, GPAs declined.

Results showed statistical significance for students who passed the SDEV 0170 course in fall of 2010 for spring 2011 (GPA for spring 2011: failed course, $M = .85$; passed course, $M = 2.35$) to fall 2011 (GPA for fall 2011: failed course, $M = .60$; passed course, $M = 1.86$), $r = .57$, $p < .001$. Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010 for spring 2011 (GPA for spring 2011: failed course, $M = .85$; passed course, $M = 2.35$) to spring 2012 (GPA for spring 2012, failed course $M = .60$; passed course, $M = 1.60$), $r = .51$, $p < .001$. As students moved through the program, GPAs declined.

Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010 for fall 2011 (GPA for fall 2011: failed course, $M = .60$; passed course, $M = 1.86$) to spring 2012 (GPA for spring 2012, failed course $M = .60$; passed course, $M = 1.60$), $r = .69$, $p < .001$. As students moved through the program, GPAs declined.

Results also showed statistical significance for students who failed the SDEV 0170 course in the fall 2010 (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) to spring 2011 (GPA for spring 2011: failed course, $M = .85$; passed course, $M = 2.35$), $r = .58$, $p < .001$. Results showed statistical significance for students who failed the SDEV 0170 course in the fall 2010 (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) to fall 2011 (GPA for fall 2011: failed course, $M = .60$; passed course, $M = 1.86$), $r = .49$, $p < .001$. Results

showed statistical significance for students who failed the SDEV 0170 course in the fall 2010 (GPA for fall 2010: failed course $M = 1.27$; passed course $M = 3.10$) to spring 2012 (GPA for spring 2012, failed course $M = .60$; passed course, $M = 1.60$), $r = .46$, $p < .001$. As students moved through the program, GPAs declined.

Results showed statistical significance for students who failed the SDEV 0170 course in fall of 2010 for spring 2011 (GPA for spring 2011: failed course, $M = .85$; passed course, $M = 2.35$) to fall 2011 (GPA for fall 2011: failed course, $M = .60$; passed course, $M = 1.86$), $r = .56$, $p < .001$. Results showed statistical significance for students who failed the SDEV 0170 course in the fall 2010 for spring 2011 (GPA for spring 2011: failed course, $M = .85$; passed course, $M = 2.35$) to spring 2012 (GPA for spring 2012, failed course $M = .60$; passed course, $M = 1.60$), $r = .61$, $p < .001$. As students moved through the program, GPAs declined.

Results showed statistical significance for students who failed the SDEV 0170 course in the fall 2010 for fall 2011 (GPA for fall 2011: failed course, $M = .60$; passed course, $M = 1.86$) to spring 2012 (GPA for spring 2012, failed course $M = .60$; passed course, $M = 1.60$), $r = .70$, $p < .001$. As students moved through the program, GPAs declined. Table #6 provides an overview of the results.

Table 6.

Correlation between SDEV 0170 and Achievement (GPA)

Measure	Spring 2011 GPA	Fall 2011 GPA	Spring 2012 GPA
Passed SDEV Course			
Fall 2010	.49*	.39*	.32*
Spring 2011		.57*	.51*
Fall 2011			.69*
Failed SDEV Course			
Fall 2010	.58*	.49*	.46*
Spring 2011		.56*	.61*
Fall 2011			.70*

* Correlation is statistically significant at $p < .001$ (1 tailed)

RQ2: What is the impact of the SDEV 0170 course on retention of first time in college students at the college? To answer research question two, an analysis of the characteristic present group was performed based on retention (1 = returned; 0 = not returned), an ANOVA was used to examine the relationship between the SDEV 0170 course and retention. For spring 2011 the impact of the SDEV 0170 course was statistically significant with retention (enrollment for spring 2011: failed course, $M = .51$; passed course $M = .87$) at $F(1, 1556) = 196.81, p < .001$. For fall 2011 the impact of the SDEV 0170 course was statistically significant with retention (enrollment for fall 2011: failed course, $M = .29$; passed course $M = .67$) at $F(1, 1556) = 128.49, p < .001$. For spring the impact of the SDEV 0170 course was statistically significant with retention (enrollment for spring 2012: failed course, $M = .28$; passed course $M = .59$) at $F(1, 1556) = 77.0, p < .001$. Table #7 provides an overview of the results.

Table 7.

Impact of SDEV 0170 Course on Retention

Variables	n	Mean	SD	F	p
*Spring 2011 Enrollment				196.8	< .001
Failed Course	226	.51	.50		
Passed Course	1331	.87	.33		
Total	1557	.82	.38		
*Fall 2011 Enrollment				128.49	< .001
Failed Course	226	.29	.45		
Passed Course	1331	.67	.47		
Total	1557	.61	.48		
*Spring 2012 Enrollment				77.00	< .001
Failed Course	226	.28	.45		
Passed Course	1331	.59	.49		
Total	1557	.54	.50		

* Statistically significant at $p < .001$

Since retention according to enrollment showed lower mean scores from term to term, a one-tailed correlation was run to indicate if there was a trend. Frankfor-Nachmais (1999) considered correlations coefficients to be (a) weak ($r = .22$), moderate ($r = .52$) and (c) strong ($r = .82$).

Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010, for enrollment from spring 2011(enrollment for spring 2011: failed course, $M = .51$; passed course $M = .87$) to fall 2011 (enrollment for fall 2011: failed course, $M = .29$; passed course $M = .67$), $r = .37$, $p < .001$. Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010, for enrollment from spring 2011(enrollment for spring 2011: failed course, $M = .51$; passed course $M = .87$) to spring 2012 (enrollment for

spring 2012: failed course, $M = .28$; passed course $M = .59$), $r = .32$, $p < .001$. As students moved through the program retention fell.

Results showed statistical significance for students who passed the SDEV 0170 course in the fall 2010, for enrollment from fall 2011 (enrollment for fall 2011: failed course, $M = .29$; passed course $M = .67$) to spring 2012 (enrollment for spring 2012: failed course, $M = .28$; passed course $M = .59$), $r = .65$, $p < .001$. As students moved through the program retention fell.

Results also showed statistical significance for students who failed the SDEV 0170 course in the fall 2010, for enrollment from spring 2011(enrollment for spring 2011: failed course, $M = .51$; passed course $M = .87$) to fall 2011 (enrollment for fall 2011: failed course, $M = .29$; passed course $M = .67$), $r = .45$, $p < .001$. Results showed statistical significance for students who failed the SDEV 0170 course in the fall 2010, for enrollment from spring 2011(enrollment for spring 2011: failed course, $M = .51$; passed course $M = .87$) to spring 2012 (enrollment for spring 2012: failed course, $M = .28$; passed course $M = .59$), $r = .47$, $p < .001$. As students moved through the program retention fell.

Results showed statistical significance for students who failed the SDEV 0170 course in the fall 2010, for enrollment from fall 2011 (enrollment for fall 2011: failed course, $M = .29$; passed course $M = .67$) to spring 2012 (enrollment for spring 2012: failed course, $M = .28$; passed course $M = .59$), $r = .61$, $p < .001$. As students moved through the program retention fell. Table #8 provides an overview of the results.

Table 8.

Correlation between SDEV 0170 and Retention

Measure	Fall 2011 GPA	Spring 2012 GPA
Passed SDEV Course		
Spring 2011	.37*	.32*
Fall 2011		.65*
Failed SDEV Course		
Spring 2011	.45*	.47*
Fall 2011		.61*

* Correlation is statistically significant at $p < .001$ (1 tailed)

RQ3: What is the difference between 11 week and online courses of SDEV 0170 course on achievement of first time in college students at the college? To answer research question three, an analysis of the characteristic present group was performed. An ANOVA was used to examine the relationship between the SDEV 0170 face to face and on-line course and retention. For fall 2010 the impact of method of instruction for the SDEV 0170 course was not statistically significant with achievement (GPA for fall 2010: face-to-face, $M = 2.84$; on-line, $M = 2.80$) at $F(1, 1556) = .05, p = .82$. For spring 2011 the impact of method of instruction for the SDEV 0170 course was not statistically significant with achievement (GPA for spring 2011: face-to-face, $M = 2.59$; on-line, $M = 2.51$) at $F(1, 1276) = .16, p = .69$. For fall 2011 the impact of method of instruction for the SDEV 0170 course was not statistically significant with achievement (GPA for fall 2011: face-to-face, $M = 2.72$; on-line, $M = 2.93$) at $F(1, 954) = .85, p = .36$. For spring 2012 the impact of method of instruction for the SDEV 0170 course was not statistically significant with achievement (GPA for spring 2012: face-to-face, $M = 2.69$; on-line, $M = 2.76$) at $F(1, 841) = .84, p = .77$. Table #9 provides an overview of the results.

Table 9.

Impact of Method of Instruction on Achievement (GPA)

Variables	n	Mean	SD	F	p
Fall 2010 GPA				.50	.82
Face to Face	1509	2.84	1.14		
On-line	48	2.80	1.16		
Total	1557	2.84	1.14		
Spring 2011 GPA				.16	.69
Face to Face	1242	2.59	1.22		
On-line	36	2.51	1.39		
Total	1278	2.59	1.22		
Fall 2011 GPA				.86	.36
Face to Face	932	2.72	1.11		
On-line	24	2.93	1.16		
Total	956	2.72	1.11		
Spring 2012 GPA				.84	.77
Face to Face	820	2.69	1.15		
On-line	23	2.76	1.17		
Total	843	2.69	1.15		

RQ4: What is the difference between 11 week and online courses of SDEV 0170 course on retention of first time in college students at the college? To answer research question four an analysis of the characteristic present group was performed based on retention (1 = returned; 0 = not returned). An ANOVA was used to examine the relationship between the SDEV 0170 face-to-face and on-line courses and retention. For spring 2011 the impact of the teaching method of the SDEV 0170 course was not statistically significant with retention (enrollment for spring 2011: face-to-face, $M = .82$; on-line, $M = .75$) at $F(1, 1556) = 1.69, p = .19$. For fall 2011 the impact of the SDEV 0170 course was not statistically significant with retention (enrollment for

fall 2011: face-to-face, $M = .62$; on-line, $M = .50$) at $F(1, 1556) = 2.72, p = .10$. For spring 2012 the impact of the SDEV 0170 course was not statistically significant with retention (enrollment for spring 2012: face-to-face, $M = .54$; on-line, $M = .48$) at $F(1, 1556) = 77.0, p = .38$. Table #10 provides an overview of the results.

Table 10.

Impact of Method of Instruction on Retention

Variables	n	Mean	SD	F	p
Spring 2011 Enrollment				1.69	.19
Face to Face	1509	.82	.38		
On-line	48	.75	.44		
Total	1557	.82	.38		
Fall 2011 Enrollment				2.72	.10
Face to Face	1509	.62	.49		
On-line	48	.50	.51		
Total	1557	.61	.49		
Spring 2012 Enrollment				.77	.38
Face to Face	1509	.54	.50		
On-line	48	.48	.51		
Total	1557	.54	.50		

RQ5: How does achievement differ between students who enrolled in the SDEV 0170 course according to gender? To answer research question five, an analysis of the characteristic present group was performed. An ANOVA was used to examine the relationship between the SDEV 0170 course and gender on achievement. For fall 2010 the impact of gender and the SDEV 0170 course was not statistically significant with achievement (GPA for fall 2010: female $M = 2.88$; male $M = 2.78$) at $F(1, 1556) = 2.94, p = .09$. For spring 2011 the impact gender and the SDEV 0170 course was statistically significant with achievement (GPA for spring 2011: female $M = 2.71$; male $M = 2.46$) at $F(1, 1276) = 12.08, p < .01$. For fall 2011 the impact of

gender and the SDEV 0170 course was statistically significant with achievement (GPA for fall 2011: female $M = 2.82$; male $M = 2.61$) at $F(1, 954) = 8.27, p = .01$. For spring 2012 the impact of gender and the SDEV 0170 course was not statistically significant with achievement (GPA for spring 2012: female $M = 2.72$; male $M = 2.66$) at $F(1, 841) = .65, p = .42$. Table #11 provides an overview of the results.

Table 11.

Impact of Gender on Achievement (GPA)

Variables	n	Mean	SD	F	p
Fall 2010 GPA				2.94	.09
Female	825	2.88	1.17		
Male	732	2.78	1.10		
Total	1557	2.84	1.14		
*Spring 2011 GPA				12.80	< .01
Female	669	2.71	1.19		
Male	609	2.46	1.25		
Total	1278	2.59	1.22		
*Fall 2011 GPA				8.27	<.01
Female	499	2.82	1.09		
Male	457	2.62	1.13		
Total	956	2.72	1.11		
Spring 2012 GPA				.65	.42
Female	448	2.72	1.16		
Male	395	2.66	1.14		
Total	843	2.69	1.15		

* Statistically significant at $p < .01$

RQ6: How does retention differ between students who enrolled in the SDEV 0170 course according to gender? To answer research question six, in which the characteristic-present was examined based on retention (1 = returned; 0 = not returned), an ANOVA was used to examine the relationship between the SDEV 0170, gender and retention. For spring 2011 the impact of

the SDEV 0170 course and gender was not statistically significant with retention (enrollment for spring 2011: female, $M = .81$; on-line, $M = .83$) at $F(1, 1556) = 1.17, p = .28$. For fall 2011 the impact of the SDEV 0170 course and gender was not statistically significant with retention (enrollment for fall 2011: female, $M = .60$; on-line, $M = .62$) at $F(1, 1556) = .62, p = .43$. For spring 2012 the impact of the SDEV 0170 course and gender was not statistically significant with retention (enrollment for spring 2012: female, $M = .54$; on-line, $M = .54$) at $F(1, 1556) = .02, p = .89$. Table #12 provides an overview of the results.

Table 12.

Impact of Gender on Retention

Variables	n	Mean	SD	F	<i>p</i>
Spring 2011 Enrollment				1.17	.28
Female	825	.81	.39		
Male	732	.83	.37		
Total	1557	.82	.38		
Fall 2011 Enrollment				.62	.43
Female	825	.60	.49		
Male	732	.62	.48		
Total	1557	.61	.47		
Spring 2012 Enrollment				.02	.89
Female	825	.54	.50		
Male	732	.54	.50		
Total	1557	.54	.50		

RQ7: How does achievement differ between students who enrolled in the SDEV 0170 course according to ethnicity? To answer research question five, an analysis of the characteristic present group was performed. An ANOVA was used to examine the relationship between the SDEV 0170 course and ethnicity on achievement. Although American Indian was a category for

ethnicity, it was dropped from the analysis because of too few cases ($N = 4$). Since unknown was not a category for ethnicity, it was dropped from the analysis because ethnicity was not reported ($N = 112$). For fall 2010 the impact of the SDEV 0170 course and ethnicity was statistically significant with achievement (GPA for fall 2010: Asian, $M = 3.29$; Black, $M = 2.79$; Hispanic, $M = 2.78$; White, $M = 2.65$) at $F(3, 1440) = 5.17, p < .01$. For spring 2011 the impact of the SDEV 0170 course and ethnicity was statistically significant with achievement (GPA for spring 2011: Asian, $M = 3.16$; Black, $M = 2.45$; Hispanic, $M = 2.52$; White, $M = 2.73$) at $F(3, 1188) = 4.36, p < .01$. For fall 2011 the impact of the SDEV 0170 course and ethnicity was statistically significant with achievement (GPA for fall 2011: Asian, $M = 3.12$; Black, $M = 2.61$; Hispanic, $M = 2.67$; White, $M = 2.87$) at $F(3, 884) = 3.24, p < .05$. For spring 2012 the impact of method of instruction for the SDEV 0170 course was statistically significant with achievement (GPA for spring 2012: Asian, $M = 3.16$; Black, $M = 2.55$; Hispanic, $M = 2.64$; White, $M = 2.82$) at $F(3, 782) = 2.98, p < .05$. Table #13 provides an overview of the results.

Table 13.

Impact Ethnicity on Achievement (GPA)

Variables	n	Mean	SD	F	<i>p</i>
*Fall 2010 GPA				5.17	< .01
Asian	30	3.29	.86		
Black	92	2.79	1.10		
Hispanic	950	2.78	1.13		
White	369	3.01	1.12		
Total	1441	2.85	1.12		
*Spring 2011 GPA				4.36	< .01
Asian	28	3.16	.95		
Black	71	2.45	1.24		
Hispanic	788	2.52	1.23		
White	305	2.73	1.24		
Total	1192	2.58	1.23		
*Fall 2011 GPA				2.24	< .05
Asian	26	3.13	1.19		
Black	47	2.60	1.12		
Hispanic	592	2.66	1.10		
White	223	2.87	1.16		
Total	888	2.72	1.12		
*Spring 2012 GPA				2.98	< .05
Asian	24	3.16	.91		
Black	46	2.55	1.11		
Hispanic	524	2.62	1.14		
White	192	2.82	1.620		
Total	786	2.69	1.16		

*Statistically significant at $p < .01$

For fall 2010, the impact of the SDEV 0170 course and ethnicity was statistically significant with achievement. A post hoc comparison using the Tukey HSD test indicated that the mean score for achievement of Asians ($M = 3.29$, $SD = .86$) were significantly different from Blacks ($M = 2.79$ $SD = 1.09$) and Hispanics ($M = 2.78$, $SD = 1.13$). The mean score for

achievement of Whites ($M = 3.0$, $SD = 1.12$) and Hispanics ($M = 2.78$, $SD = 1.13$) were also found to be significantly different.

For spring 2011, the impact of the SDEV 0170 course and ethnicity was statistically significant with achievement. A post hoc comparisons using the Tukey HSD test indicated that the mean score for achievement of Asians ($M = 3.15$, $SD = .95$) was significantly different from Blacks ($M = 2.45$, $SD = 1.24$) Hispanics ($M = 2.52$, $SD = 1.23$). The mean score for achievement of Whites ($M = 2.73$, $SD = 1.24$) and Hispanics ($M = 2.52$, $SD = 1.23$) were also found to be significantly different.

For fall 2011, the impact of the SDEV 0170 course and ethnicity was statistically significant with achievement. A post hoc comparisons using the Tukey HSD test indicated that the mean score for achievement of Asians ($M = 3.12$, $SD = 1.19$) was significantly different from Hispanics ($M = 2.66$, $SD = 1.10$). The mean score for achievement of Whites ($M = 2.87$, $SD = 1.16$) and Hispanics ($M = 2.66$, $SD = 1.10$) were also found to be significantly different.

For spring 2012, the impact of method of instruction for the SDEV 0170 course was statistically significant with achievement. A post hoc comparisons using the Tukey HSD test indicated that the mean score for achievement of Asians ($M = 3.07$, $SD = 1.22$) was significantly different from Blacks ($M = 2.46$, $SD = 1.29$) and Hispanics ($M = 2.62$, $SD = 1.14$). The mean score for achievement of Whites ($M = 2.82$, $SD = 1.20$) and Hispanics ($M = 2.62$, $SD = 1.14$) were also found to be significantly different.

Table 14.

Impact of SDEV Course and Ethnicity on Achievement (GPA)

Dependent Variable	(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Sig.
GPA Fall 2010				
	Asian	**Black	.49	< .05
		**Hispanic	.51	< .05
		White	.28	.18
	Black	**Asian	-.49	< .05
		Hispanic	.01	.93
		White	-.21	.10
	Hispanic	**Asian	-.51	< .05
		Black	-.01	.93
		*White	-.22	< .01
	White	Asian	-.28	.84
		Black	.21	.10
		*Hispanic	.22	< .01
GPA Spring 2011				
	Asian	**Black	.70	< .05
		*Hispanic	.64	< .01
		White	.43	.08
	Black	*Asian	-.70	<.01
		Hispanic	-.07	.66
		White	-.27	.09
	Hispanic	**Asian	-.64	< .05
		Black	.07	.66
		**White	-.21	< .05
	White	Asian	-.43	.08
		Black	.27	.09
		**Hispanic	.21	< .05
GPA Fall 2011				
	Asian	Black	.51	.06
		**Hispanic	.46	< .05
		White	.25	.28
	Black	Asian	-.51	.06
		Hispanic	-.05	.76
		White	-.26	.14

Table14 (continued)

Dependent Variable	(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Sig.
	Hispanic	**Asian	-.46	< .05
		Black	.05	.76
		**White	-.21	< .05
	White	Asian	-.25	.28
		Black	.26	.14
		Hispanic	.21	< .05
GPA Spring 2012				
Asian	**Black	.61	< .05	
	**Hispanic	.54	< .05	
	White	.34	.17	
Black	**Asian	-.61	< .05	
	Hispanic	-.07	.68	
	White	-.27	.15	
Hispanic	**Asian	-.54	< .05	
	Black	.07	.68	
	**White	-.20	< .05	
White	Asian	-.34	.17	
	Black	.27	.15	
	**Hispanic	.20	< .05	

*Statistically significant at $p < .01$

**Statistically significant at $p < .05$

RQ8: How does retention differ between students who enrolled in the SDEV 0170 course according to ethnicity? To answer research question eight in which the characteristic-present was examined based on retention (1 = returned; 0 = not returned), an ANOVA was performed to examine the relationship between the SDEV 0170 course and ethnicity with retention. For spring 2011 the impact of the SDEV 0170 course and ethnicity was not statistically significant with retention (enrollment for spring 2011: Asian, $M = .93$; Black, $M = .77$; Hispanic, $M = .83$; White, $M = .83$) at $F(3, 1440) = 1.46, p = .22$. For fall 2011 the impact of the SDEV 0170 course and ethnicity was statistically significant with retention (enrollment for fall 2011: Asian, $M =$

.87; Black, $M = .51$; Hispanic, $M = .62$; White, $M = .60$) at $F(3, 1440) = 4.26, p < .01$. For spring the impact of the SDEV 0170 course and ethnicity was statistically significant with retention (enrollment for spring 2012: Asian, $M = .80$; Black, $M = .50$; Hispanic, $M = .55$; White, $M = .52$) at $F(3, 1440) = 3.24, p < .05$. Table #15 provides an overview of the results.

Table 15.

Impact of SDEV 0170 Course and Ethnicity on Enrollment

Variables	n	Mean	SD	F	p
SP 2011 Enrollment				1.46	.22
Asian	30	.93	.25		
Black	92	.77	.42		
Hispanic	950	.83	.38		
White	369	.83	.38		
Total	1441	.83	.38		
*Fall 2011 Enrollment				4.26	< .01
Asian	30	.87	.36		
Black	92	.51	.50		
Hispanic	950	.62	.48		
White	369	.60	.49		
Total	1441	.62	.48		
**SP 2012 Enrollment				3.24	< .05
Asian	30	.80	.41		
Black	92	.50	.50		
Hispanic	950	.55	.50		
White	69	.52	.50		
Total	1441	.55	.50		

*Statistically significant at $p < .01$

**Statistically significant at $p < .05$

For fall 2011, the impact of the SDEV 0170 course and ethnicity was statistically significant with retention. A post hoc comparisons using the Tukey HSD test indicated that

the mean score for the retention of Asians ($M = .87$, $SD = .35$) was significantly different from Blacks ($M = .51$, $SD = .50$), Hispanics ($M = .32$, $SD = .49$) and Whites ($M = .60$, $SD = .49$). For spring 2012, the impact of the SDEV 0170 course and ethnicity was statistically significant with retention. A post hoc comparisons using the Tukey HSD test indicated that the mean score for retention of Asians ($M = .80$, $SD = .41$) was significantly different from Blacks ($M = .50$, $SD = .50$), Hispanics ($M = .55$, $SD = .50$) and Whites ($M = .52$, $SD = .50$). Table #16 provides an overview of the results.

Table 16.

Impact of SDEV 0170 Course and Ethnicity on Retention

Dependent Variable	(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Sig.
Enrollment Spring 2011				
	Asian	Black	.16	.18
		Hispanic	.10	.45
		White	.11	.45
	Black	Asian	-.16	.18
		Hispanic	-.06	.50
		White	-.06	.60
	Hispanic	Asian	-.10	.50
		Black	.06	.50
		White	.00	1.00
	White	Asian	-.11	.45
		Black	.55	.60
		Hispanic	.00	1.00
Enrollment Fall 2011				
	Asian	*Black	.36	< .01
		**Hispanic	.24	< .05
		**White	.26	< .05
	Black	*Asian	-.36	< .01
		Hispanic	-.11	.15
		White	-.09	.35

Table 16 (continued)

Dependent Variable	(I) Ethnicity	(J) Ethnicity	Mean Difference (I-J)	Sig.
Enrollment Spring 2012	Hispanic	**Asian	-.24	< .05
		Black	.11	.15
		White	.02	.92
	White	**Asian	-.26	< .05
		Black	.93	.35
		Hispanic	-.02	.92
	Asian	**Black	.30	< .05
		**Hispanic	.25	< .05
		**White	.28	< .05
	Black	**Asian	-.30	< .05
		Hispanic	-.05	.78
		White	-.02	.99
	Hispanic	**Asian	-.25	< .05
		Black	.05	.78
		White	.31	.74
	White	**Asian	-.28	< .05
		Black	.02	.99
		Hispanic	-.31	.74

* The mean difference is significant at the 0.01 level

** The mean difference is significant at the 0.05 level.

Summary

Chapter Four provided a description of data analysis procedures that were used to examine student achievement and retention among students who enrolled in the SDEV 0170 course at the college of interest. The study used SPSS V. 21 software to conduct all analyses. The researcher elected to use a series of ANOVA to examine the impact of the SDEV course. Chapter Five provides a summary of the study, a discussion of the major findings from the study, implications from the study, and recommendations for future research.

Chapter 5: Summary, Conclusions, and Recommendations

This study examined the possible effect of the Student Development Course SDEV 0170 on retention and academic achievement. It also examined instructional method (face-to-face and online) and two demographic characteristics (gender and ethnicity) as to their relationship to student retention and academic achievement. The study used pre-existing data from the Community College District student information database. The SDEV 0170 course employs techniques to assist students in gaining the most from their college education. This course is intended to provide the student with skills necessary to assume responsibility for individual learning. Although FYE programs have achieved varying degrees of success, Upcraft, Gardner, Barefoot, & Associates (2005) noted that overall the dropout rate, as reported by the American College Testing Program, has held steady at around 33% over several years. Perhaps this rate would be even higher without the intervention FYE programs provide. First year seminars seek to help the university or college meet persistence and graduation goals (Hunter & Linder, 2005). Successful first-year experience programs are supported by an outcome assessment process that is strongly connected to the FYE program goals (Smith & Wertlieb, 2005). Assessment results can provide guidance for improvement and program justification. Gardner, Barefoot, and others have observed that FYE programs that service large numbers of first-year students are frequently asked to justify their existence (Swing, 2001). However, assessment of FYE programs is somewhat limited to student satisfaction surveys and correlation analyses of program participation and one-year enrollment attrition (Swing, 2001).

The concern regarding students' first year of college in relation to their overall success goes back more than 150 years (Levine, 1988). First-year seminars are one type of program that has been implemented in many colleges and universities that seek to influence both achievement and retention. Examining whether a first-year program has an effect on variables that are believed to impact students' achievement and retention is an important area of study. This study examined the effect of a development course on retention and academic achievement of students who participated in an SDEV 0170 face-to-face class and those who participated in an SDEV 0170 online course. It also examined two demographic characteristics (gender and ethnicity) as to their relationship to student retention and academic achievement.

The purpose of this study was to examine the effect of a development course on retention and academic achievement. Specifically, this study focused on the Student Development Course (SDEV) offered at a Community College in central Texas. The course, SDEV 0170, employs techniques to assist students in gaining the most from their college education. It focuses on both life skills and study skills and includes such topics as familiarity with college regulations, communication and study skills, goal setting, priority management, reading for comprehension, note-taking, test-taking, creativity, establishing relationships, and the power of a positive attitude. This course is intended to provide the student with skills necessary to assume responsibility for individual learning.

Upcraft, Gardner, Barefoot, & Associates (2005) noted first-year programs that are designed to increase student success have become a prominent feature in higher education. The increase of programs aimed at first-year students is due to studies showing that

participation in first-year programs is significantly related to students' academic success (Chism, Baker, Hansen & Williams, 2008). The results of this study might be useful in identifying possible areas of improvement for the SDEV course and the overall FYE program.

The costs and other institutional investments make assessment of first year programs and seminars a necessity in higher education and receive attention from a number of stakeholders (Upcraft, Gardner, Barefoot, & Associates 2005). Although programs and services for first-year students are often developed, they are seldom assessed. The purpose of this study was to assess the college's SDEV 0170 course to examine whether its implementation has any relationship to retention rates and academic achievement of first time in college students. The study will provide data that will help the college of interest develop a FYE program that is more meaningful, purposeful, and relevant to the organization's mission and commitment to support its students' educational goals.

To address the following research questions, the researcher collected achievement data and retention rates of 1557 first time in college (FTIC) students in order to examine academic achievement and retention. It assessed the fall 2010 cohort of FTIC students in order to examine academic achievement as well as retention. This cohort was selected since this was the first semester that the college offered the SDEV 0170 course as both face to face and as an online course. It also examined two demographic characteristics (gender and ethnicity) as to their relationship to student retention and student achievement.

Conclusions

Student retention is the area of research concerned with determining the factors that shape student persistence in institutions of higher education. The types of activities in which students engage while attending college are as important to overall success as is the choice of college. The research on college student development shows that the amount of time and energy a student devotes to academically focused activities is the single best predictor of their learning and personal development (Astin, 1993; Pascarella & Terenzini, 2005; Schofield & Dismore, 2010). Schofield and Dismore (2010) reported that grades earned in a first-year course were better predictors of both college academic achievement and persistence than high school rank and SAT scores. This study examined whether the SDEV 0170 course has any relationship with retention and academic achievement of first time in college students. The following research questions guided this study:

RQ1: What is the impact of the SDEV 0170 course on achievement of first time in college students at the college? The main issue leading to this study is that students who enroll and successfully complete an FYE course such as SDEV 0170 will have higher GPAs and retention rates. Tinto's (2005, 2012) student integration model describes the student integration process as mostly a function of academic and social experiences in college. He measured successful academic integration by grade point average (GPA).

This study found the impact of the SDEV 0170 course was statistically significant with achievement as measured by GPA for the following semesters: fall 2010, spring 2011, fall 2011, and spring 2012. However, as students moved through the program, GPAs declined. Further statistical analysis for both students who passed the course and those who

failed the course showed a correlation between the course and GPA. As students moved through the program, GPAs declined as the correlation between the course and GPA strengthened. When academic and environmental variables are positive, students should succeed and persist. When both variables fail to support students, they are likely to have lower GPAs and are less likely to persist. When academic variables are positive, but environmental variables are negative, the favorable effects of academic variables on student goal attainment are suppressed or diminished. Students' academic success may decline over time despite strong academic performance if they perceive low levels of utility, satisfaction, or goal commitment, or if they experience high levels of stress (Pascarella & Terenzini, 2005).

Tinto's (2005, 2012) model validates the need for schools to assume a proactive role in a student's integration process. Accordingly, the students who passed the SDEV 0170 course showed higher GPAs than their peers who failed the course. Students who successfully completed the course may have been assisted in: (a) making the transition from high school to college; (b) being introduced to the services and culture of the college; and (c) integrating into an intellectual community of students and faculty. Additionally, Hashway, Baham, Hashway, and Rogers (2000) provided evidence that completion of developmental education programs increased first-year success and retention rates among academically at-risk students.

RQ2: What is the impact of the SDEV 0170 course on retention of first time in college students at the college? Community colleges often measure retention in terms of re-enrollment rather than degree completion (Wild & Ebbers, 2002). This definition allows

the integration of student goals, which is advantageous if the goal is something other than graduation. This study found a statistically significant impact of the SDEV 0170 course with retention. Students who successfully completed the course re-enrolled in the subsequent semester at higher rates than students who failed the course. There have been several studies detailing why and when students drop out of college. Studies by Tinto (1975), and Cabrera, Nora, and Castaneda (1993) have shaped how researchers and practitioners view the issues of student retention and departure. This study suggests that the students who passed the SDEV 0170 course are more likely to remain enrolled in the institution since they were formally introduced to the social and academic life of the institution and therefore integrated better into the institution. It also suggests that students who failed the course are less likely to feel integrated into the institution and therefore less likely to re-enroll at the institution. SDEV 0170 seems to help students become integrated into the institution by developing connections to individuals and providing academic activities. These students are, therefore, more likely to re-enroll. This study supports Tinto's (1975) student integration model. Academic integration occurs when students become attached to the intellectual life of the college while social integration occurs when students create relationships and connections outside of the classroom. SDEV students were integrated into the institution along both dimensions thus increasing the likelihood of retention.

RQ3: What is the difference between 11 week and online courses of SDEV 0170 course on achievement of first time in college students at the college? This study found that the impact of instruction method for the SDEV 0170 course was not statistically

significant with achievement. Academic success is an issue of increasing importance for distance education programs. The need, therefore, exists to examine ways of increasing academic success in postsecondary distance education because of: (a) the increase in numbers of nontraditional students; (b) the increase in the number of distance education programs; and (c) the added importance that the US federal government places on student retention (Rovai, 2003). This study found that the impact of method of instruction for the SDEV 0170 course was not statistically significant with achievement as measured by GPA.

Both the face-to-face and online SDEV 0170 course are designed with very specific course content and objectives. The course focuses on college resources, time management, note taking, degree plans, campus culture, career exploration, and college policies and procedures. The goal of the course is to provide the student with skills and knowledge about the institution. The SDEV 0170 course is more of a teacher-directed environment that is familiar to college freshman, unlike most other academic courses, which tend to be student-directed environment (Wratcher, 1991). The course design, which is to assist students in their academic and social development in addition to their transition to college, may help to reduce the barrier that online classes tend to present.

In addition, Workman and Stenard (1996) analyzed the needs of distance learners and identified five specialized needs: (a) clarity of online programs, policies, and procedures; (b) self-esteem; (c) identifying with the school; (d) social integration; and (e) access to support services. The SDEV course specifically addresses two of these needs. The course addresses the need to feel an identity with the school so students do not view themselves as outsiders. This need is closely related to sense of community, which Tinto (2005, 2012) refers to as institutional

commitment. The SDEV course also addresses the need of social integration. That is, the need for students to develop interpersonal relationships with peers, faculty, and staff. This need is also closely related to sense of community. These results provide additional evidence that social integration, a component of Tinto's model, is also relevant for both face-to-face and online students.

RQ4: What is the difference between 11 week and online courses of SDEV 0170 course on retention of first time in college students at the college? Academic retention is another issue of importance for both traditional and distance education programs. Accordingly, this study analyzes face-to-face and online instruction methods to examine the persistence of students successfully completing the SDEV 0170 courses. This study found that the impact of instruction method for the SDEV 0170 course was not statistically significant with retention.

Retention rates are a measure of the effectiveness of an online program (Willging & Johnson 2004). This suggests that online programs may be less desirable for certain students than the more traditional face-to-face type of instruction. Although specific reasons such as technology issues, the lack of human interaction, and communication problems are associated with the online learning environment, Willging and Johnson (2004) found no evidence to suggest that they were the primary reasons the online students were withdrawing. Studies have also indicated higher attrition rates for online courses than for face-to-face courses (Carr, 2000; Willging & Johnson, 2004). These studies may have limited application to this study since they examined online programs. The first year in

college students in this study that enrolled in the online SDEV class were also enrolled in face-to-face courses.

Both the face-to-face and online SDEV 0170 course are designed with very specific course content and objectives. The course focuses on college resources, time management, note taking, degree plans, campus culture, career exploration, and college policies and procedures. The goal of the course is to provide the student with skills and knowledge about the institution. The course, which is designed to assist students in their academic and social development in addition to their transition to college, may help to reduce the barrier that online classes tend to present. The SDEV course also addresses deficiencies in academic preparation and online student skills that can be remedied through early intervention efforts. Remediation and integration efforts can be presented either online or on-campus classes. This study suggests that offering SDEV with the convenience of an online course can introduce students to the college and its services and help integrate them into the academic and social life of the college.

RQ5: How does achievement differ between students who enrolled in the SDEV 0170 course according to gender? Ross and Powell (1990) reported that females tend to be more successful in online courses than males and Russell and Lehman (2008) indicate that women tend to have higher GPAs than men do. This study also found that females had higher GPAs than males. However, the difference was not statistically significant. Rovai (2001) found similar gender related differences in an online course and explained these as differences in communication patterns and sense of community. He found that the majority of men demonstrated an independent voice and the majority of women used a connected voice in their

communication patterns. Those with a strong sense of community were more likely to write messages using a connected voice while those with a low sense of community tended to communicate using the independent voice. Low sense of community is related to feelings of disconnectedness and isolation, which is believed to decrease student persistence in online courses.

Chee, Pino, & Smith, 2005 found that females tend to have higher GPAs as result from the benefits of their social relationships. These relationships contribute to socializing and their attitudes and behaviors for learning. Participation in student clubs or groups helps them integrate academically. Although this may explain the difference in academic success between females and males, the purpose of the SDEV 0170 course is to assist students in their academic and social development in addition to their transition to college. The college's effort to integrate students to the college with the SDEV course seems to minimize GPA differences between males and females.

RQ6: How does retention differ between students who enrolled in the SDEV 0170 course according to gender? The impact of the SDEV 0170 course and gender was not statistically significant with retention. Typically, postsecondary education persistence studies find that academic integration has an important impact on persistence (Pascarella & Terenzini, 2005). Consequently, persistence is often viewed as a measure of how well students integrate into a particular school. Tinto's (2005, 2012) student integration model explains the student integration process as mostly a function of academic and social experiences in college. He measured successful academic integration by grade point average (GPA) and evaluated social integration by the development and frequency of

positive interactions with peers and faculty and involvement in extracurricular activity.

The study did not support the idea that gender affects the retention or GPA, however it did support the idea that students are likely to remain enrolled in the college if they are integrated socially and academically into the institution.

There is evidence of a growing gender gap as females participate and persist in education at higher rates than their male counterparts do (Aud, et al., 2011). In 2010, as in every year since 1980, a lower percentage of male than female 18- to 24-year-olds enrolled in college. In addition to college enrollment differences, there are gaps in postsecondary attainment for males and females. Among first time in college students seeking bachelor's degrees who started full time at a 4-year college, a higher percentage of females than males completed bachelor's degrees within 6 years. This pattern was seen across all ethnic groups (Aud, et al., 2011). The college's effort to integrate students to the college with the SDEV course seems to minimize retention differences between males and females.

RQ7: How does achievement differ between students who enrolled in the SDEV 0170 course according to ethnicity? The SDEV 0170 course was statistically significant with achievement as measured by GPA and ethnicity. This study found the difference in mean scores for achievement between Hispanics and Whites were statistically significant, with Whites having higher GPAs during all four semesters. This study found statistically significant difference in mean scores between Asians and Hispanics, with Asians having higher GPAs during all four semesters. Lastly, this study found a statistically significant difference in mean scores between Asians and Blacks, with Asians having higher GPAs during in three out of the four semesters.

Tinto (2005, 2012) is most often cited in and associated with student persistence research (Elkins, Braxton, & James, 2000). Tinto's framework has been applied to numerous studies of student persistence in higher education. However, its usefulness for community college students has been questioned. Pascarella and Chapman (1983) found community college persistence was influenced by academic integration, not social integration. Rendón, Jalomo, and Nora (2000) observed that Tinto's model is based on the acculturation/assimilation theories developed during the 1960s. According to Tinto's theory, it was considered the responsibility of students in college, like minorities in society, to assimilate to the culture of the college. Applying the model to two-year colleges and commuting students has produced mixed results (Deil-Amen 2011). There is an assumption that community colleges fail to provide students with opportunities for social integration or that the social aspect of higher education may be less appealing to students attending two-year commuter institutions (Bailey & Alfonso, 2005). Studies show that social experiences of minority students in college are more significant in predicting retention than family background and individual characteristics (Garcia, 2010). Historically, African American colleges or Hispanic serving institutions generally do not have a problem with retention, as these students do not feel socially isolated. As a result, they stay in college and are more successful academically (Mattson, 2007).

Community colleges are often assumed a safe place for at risk students to pursue higher education (Ayers, 2002; Vaughn, 2006). Jones and Becker (2002) identified the need for programs that teach decision-making skills, encourage self-advocacy, provide rigorous curriculum advising, and provide services that support students during their first year. The

issue here may be academic preparedness; Hispanics tend to be first-generation students and are likely to enter college with less academic preparation, and to have limited access to information about the college experience, either firsthand or from relatives (Thayer, 2000). Academic preparation of Hispanics is lacking on average, Hispanic score lower on standardized college-admission tests, and require remedial English and mathematics compared to white students (Schmidt, 2003). Only 20 percent of all African-American students and 16 percent of Hispanic students leave high school ready for college (Cavanagh, 2004).

RQ8: How does retention differ between students who enrolled in the SDEV 0170 course according to ethnicity? The impact of the SDEV 0170 course and ethnicity was statistically significant with retention. A post hoc comparison showed that the mean score for the retention of Asians was significantly different from Blacks, Hispanics, and Whites. The community college is the primary starting point for minorities in higher education (Edman & Brazil, 2009). Students who passed the course as opposed to students who failed the course had higher GPAs and higher retention rates. Asians in particular had higher GPAs along with higher retention rates. Rendón (1994) suggested that in order to increase retention, higher education must transform its campuses to create a culture of caring and success. In Rendón's theory of validation, students are best supported by being provided an array of services that will assist them in making connections with the institution. This will increase the chances that the student will persist.

Higher education enrollment rates are generally lower for Blacks and Hispanics when compared to Whites and Asians (Aud, et al., 2011). Across ethnic groups, the

percentages of Black and Hispanic full-time students at 4-year institutions who attained bachelor's degrees were lower than the percentages of White and Asian students who attained a bachelor's degree (Ross et al., 2012). Asian students were also found to be more likely to participate in clubs than Hispanic, Black or White students were (Ross et al., 2012). According to Tinto's theory, the more a student integrates him or herself into the social and academic life of the campus, the more the student becomes committed to the goal of graduation and develops loyalty to the individual institution. The degree of student success in college is directly proportional to the quality and quantity of student involvement with the institution (Astin, 1993; Palmer, O'Kane, & Owens, 2009).

Discussion

Assessment of first-year experience (FYE) programs is a pressing concern of higher education. There is an ongoing need for data on what makes an effective FYE program especially within a community college setting. The findings in this study highlight the importance of assessing FYE programs, especially the curriculum of a development course, such as the SDEV 0170 course. Tinto (2005, 2012) focused considerable attention on institutional fit as a factor in student retention. His general departure models emphasize the importance of the academic and social integration experienced by the student. First-year experience programs are designed to assist students with this integration by helping students feel better prepared to begin college and by helping students develop a connection to the college through meaningful relationships with faculty and other students. Therefore, assessing FYE programs for their effectiveness cannot be overemphasized.

Institutions of higher education need to examine the factors that contribute to the early departure of its students in order to decide which programs or courses of action would best serve its students (Pike, Hansen & Lin, 2010; Pitkethly & Prosser, 2001). The research on student retention is centered on persistence or departure models (Pascarella & Terenzini, 2005; Reason, Terenzini, & Domingo, 2006; Tinto 1997). Orientation and other FYE programs are designed to support first time in college students (Gordon, 1989, 1994). Although FYE programs have achieved varying degrees of success, Upcraft, Gardner, and Barefoot (2005) noted that overall the dropout rate has held steady. Perhaps this rate would be even higher without the intervention FYE programs provide. Jones and Becker (2002) identified the need for programs that teach decision-making skills, encourage self-advocacy, provide rigorous curriculum advising, and provide services that support students during their first year. These are the skills taught in SDEV 0170 course.

FYE programs need to be both effective and efficient (Schrader & Brown, 2008). The environment of education is changing with the increasing popularity of online instruction. Developments in distance education have led to questions about the effectiveness of this method of educational delivery and the conditions that make it a successful experience for learners (Willging & Johnson, 2004). Fike and Fike (2008) stated that taking an internet course is a strong predictor of student retention. (Allen & Seaman, 2007) noted that the growth in online enrollments in higher education is greatest for nontraditional students at community colleges and that demand for the availability of online courses is expected to continue to grow.

As budgets become tighter and accountability demands from state legislatures and accrediting agencies grow (Leveille, 2005) it is reasonable to assume that so too will the need to justify the effectiveness of FYE programs. The costs associated with a FYE program make assessment of first year programs and seminars a necessity. This study found that the SDEV 0170 course has had an impact on academic success and student retention at the college of interest. The FYE program, specifically the SDEV 0170 course, may provide a suitable environment for facilitating interventions to improve students' retention and achievement.

The course is offered as a formal requirement and is designed to ease the transition into higher education. White, Goetz, Hunter, and Barefoot (1995) were among the first researchers to describe the FYE intervention strategy for incoming first-year students. The research focused not only on the assessment of first-year students' skills and their success, but also on the design and implementation of FYE programs. White Goetz, Hunter, and Barefoot (1995) suggested that the FYE should afford students opportunities to interact socially (with peers and faculty) as well as introduce students to academic facilities, counseling staff, and other faculty during advising sessions.

Implications

In an effort to increase student retention, institutions of higher education have introduced a number of retention strategies, one of which is the first-year experience course. The course is designed to enhance academic and social integration among first-year college students. Pascarella & Terenzini (2005) studied the relationship between integration and commitment and found that academic integration was related to institutional

commitment. The SDEV 0170 course is a one-semester hour course required for all first-time-in-college students and those transferring from other institutions who have earned less than 12 semester hours.

Females, minorities, and older students are entering higher education at a rapidly increasing rate (Newbold, Mehta & Forbus, 2010). Additionally, at-risk populations within higher education may need additional support in order to help them connect with an institution and persist in their education. The SDEV 0170 course is for the new student transitioning to college. The course includes, but is not limited to the following topics: college resources, time management, note taking, degree plans and transfer strategies, campus culture, career exploration, and college policies and procedures. This allows the student to gain skill and knowledge about the institution, and the skills that will help the student to be a competent member of the institution (Schrader & Brown, 2008; Tinto, 1990). However, this study did not take into account the ways in which males and females have been shown to differ on cognitive tasks (King 2010).

Retaining current students, as opposed to recruiting new ones, is generally considered an economically sensible strategy. An estimated one third of college students do not complete a degree, and most of them leave within their first year of college (Pittman & Richmond, 2008). Lower graduation rates due to attrition are costly to colleges and universities which lose large amounts of money when enrollment is reduced (DeBerard, Spielmans, & Julka, 2004; Porter & Swing, 2006; Tinto, 2005). Beyond the financial considerations, institutions of higher education, especially community colleges with their open enrollment policies, have made an implicit commitment to students to provide them

with intellectual and social development (Cuseo, 2003; Pascarella & Terenzini 2005; Tinto, 2005). First year seminars such as the SDEV 0170 course aim to assist students in their academic and social development in addition to their transition to college, they also help institutions of higher education meet retention goals (Hunter & Linder, 2005).

Gender was selected as a demographic characteristic because a statistical correlation between gender and first semester GPA has been shown in previous research (DeBerard, Spielmans, & Julka, 2004). Females have made notable gains in higher education. In order to establish a more complete understanding of female students in higher education, researchers must examine the representation of female students, their academic success, retention rates in addition to their representation in other areas of student life (Allan, 2011). With regard to gender the SDEV 0170 course, may provide a suitable environment for facilitating interventions to improve students' retention and achievement for both males and females. The course content appears to support both male and female students in identifying campus resources, establishing relationships with other students and with faculty members, and improving their academic and life management skills, all of which are consider important to academic success and retention (Palmer O'Kane & Owens, 2009; Smith & Wertlieb, 2005).

This study found that ethnicity did make a difference, which indicates that cultural values may influence GPA and retention. However, the dynamics of race, class, and culture have not yet been adequately researched in community college settings utilizing Tinto's concept of integration (Deil-Amen, 2011). Tinto's model has been found to be inadequate for minority students because it assumes disconnection from a home community

must occur before integration into a college community can happen (Hurtado & Carter, 1997). The vast majority of community college students enroll in classes while remaining in their communities of origin, so the issue of separating from a culture of origin is minimal. In addition to academic and social involvement, Pascarella and Terenzini (2005) also identified several other variables that influence the transition to higher education such as family background, socioeconomic standing, and academic preparation. Astin (1984) identified involvement with faculty as one of the three most influential forms of involvement along with academic and social involvement.

In response to the growing need to prepare students for their first year of college, institutions of higher education have developed programs and initiatives intended to assist in the transition to higher education. There is a need for the identification of programs that have demonstrated success in enhancing academic success and retention, which can be applied to similar populations at other institutions. Lower graduation rates due to attrition are costly (DeBerard, Spielmans, & Julka, 2004; Porter & Swing, 2006; Tinto, 2005). In addition to the financial considerations, community colleges with their open enrollment policies have made an implicit commitment to students to provide them with intellectual and social development (Cuseo, 2003; Pascarella & Terenzini, 2005; Tinto, 1997).

Recommendations

This study represents a continuing need for assessment of FYE programs and the various components within them. The study focused on the academic success and retention of first time in college students from fall 2010 to the spring 2012 and what role the SDEV 0170 course may have had in increasing academic success and retention for that group. The following

recommendations need to be considered to continue the assessment of the FYE program and the SDEV 0170 course, develop a means to assess the content provided by each SDEV instructor and analyze the data to determine whether there are significant differences in the SDEV content being presented.

Neither the instructional experience of the SDEV 0170 instructors nor the consistency with which the SDEV 0170 course was presented was considered in this study. Several researchers (Barefoot, 2000; Kuh, Schuh, Whitt, & Kinzie, 2010; Lau, 2003; Levitz & Noel, 2000) noted that quality of instruction was a factor used by students to judge their experience with the institution. Therefore, quality of instruction and consistency in the content of SDEV 0170 course could be considered a key component in student retention since the SDEV 0170 course is usually the student's first exposure to the campus and classroom environment.

Other factors of student retention discussed in the literature review should be incorporated into a thorough assessment of FYE programs. These include student characteristics (Cohen & Brawer, 2008; Tinto, 2005); external forces (Terenzini et al., 1996; Tinto, 2005); academic advising (Cuseo, 2003; Lau, 2003); and student accountability (Lau, 2003; Terenzini et al., 1996). Only by gathering specific data on its students can an institution design the most effective retention program. An institution must define its purpose for assessing an FYE program prior to designing a research plan and selecting an appropriate methodology.

Although the students who passed the course had higher GPAs than those who failed the course, the results of this study showed that student overall GPA declined over time. The fact that this is a one-hour credit course may mean that the course does not provide enough time to integrate students academically and socially to the institution. In order to identify trends in the

academic success of the students who completed the SDEV course, future studies may compare recent cohorts of first time in college students at the college. Follow-up studies may also evaluate differences among completers and nonparticipants' academic performance, persistence, and graduation rates from year to year.

Further research is required to define what factors contribute to the success of students who persist and transfer to four-year institutions in order to complete their undergraduate studies. Institutions of higher education need to identify programs and strategies that will help at-risk students stay connected with an institution through the completion of a certificate or a degree.

Finally, there are several issues raised for future research. First, future research regarding academic success and retention of first time in college students who complete SDEV 0170 may help the college understand the degree to which students are socially integrated in addition to their academic performance, persistence, and graduation rates. By comparing the social integration of SDEV 0170 completers to their non-completer counterparts, the college may determine that SDEV 0170 course completers are more socially integrated. If course completers are more socially integrated, it would provide important data for designing programs to help those students who are less socially integrated to become more socially integrated, hopefully leading to higher retention rates.

Second, the study showed that GPAs changed from semester to semester. Future research should look at the changes in GPA to see if they are significant. If so, it can help inform changes in the SDEV 0170 course or FYE experiences on campus. Pascarella and Terenzini (2005) noted that GPA is one of the most important factors for a student's persistence in college. What research lacks is an understanding of how changes in GPA affect retention. This study

showed that as students continued from term to term, their GPA declined. Further research could examine if a statistically significant drop in GPA affects persistence.

Third, since there were no differences in online and face-to-face courses, other studies could look at course quality. The SDEV 0170 course focuses on the process of integration both academically and socially. This may help overcome the isolation, which is believed to decrease student persistence in online courses (Rovai, 2001). This study showed no statistical significance between online and face-to-face instruction. Further research could examine if enrollment in an online course as opposed to a fully online program has a statistically significant effect on GPA and retention.

Fourth, a comparison should be done between those students who take FYE courses and those who do not. Comparisons should be longitudinal and can be made for choice of major, GPA, retention, and graduation. Significant portions of the community college population enroll in vocational education programs and thus community college programs prepare much of the nation's workforce (Bragg, 2002). Further research could examine if enrollment in and completion of an SDEV course has statistically significant effect on graduation rates.

Fifth, a study should be done to look at how many students who complete an FYE program at a community college go on to 4-year institutions. This also can include tracking their GPAs, retention rates, and graduation rates. The transfer function is a primary concern of the community college. A core indicator typically used to assess the transfer function is the number of students who transfer in a given year (Seybert, 2002). Further research could examine if enrollment in and completion of an SDEV course has statistically significant effect on graduation or transfer rates.

Finally, a comparison can be done of those students who complete an SDEV course and go on to a 4-year institution as to whether they have a higher graduation rate than those who started at a 4-year institution. Another core indicator typically used to assess the transfer function is the academic performance of students after they transfer (Seybert, 2002). Additional research would help in the understanding of transfer function between community colleges and four-year institutions. Further research could examine if a difference in academic performance exists among students who complete a FYE course at one institution and then transfer to another institution.

Summary

The goal of this study was to provide additional knowledge about the effectiveness of first-year experience (FYE) programs in relation to student retention and achievement. Specifically, this study examined a Student Development Course (SDEV) offered at a Community College in central Texas. FYE programs are designed to assist students with the transition into higher education. Student records were analyzed to determine whether retention and achievement improved. Community Colleges must insure that students are integrated in the most effective and appropriate learning environments to fit their needs. This study was intended to help understand the complex issues of preparing students for their first year of college. If community colleges are going to be successful in providing programs and initiatives intended to assist in the transition to higher education they need to assess these programs and services in order to understand their effectiveness.

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