

Effectiveness of Peer Mentoring and College Success Courses on Developing the
Self-Efficacy of First-Year Community College Students

by

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ABSTRACT

President Obama's *Completion Agenda* is a plan that emphasizes improved student retention and persistence. The agenda also emphasizes the important role community colleges play in moving the nation toward economic prosperity. Current statistics indicate that nearly 48% of first-time college students are lost to attrition before the end of a student's first year of college. Student success is largely determined by student experiences during the first year; in order to address the *Completion Agenda*, colleges will need to support initiatives designed to help first-year students succeed.

This study investigated the effectiveness of peer mentoring and college success courses on developing the self-efficacy of first-year community college students by evaluating the effectiveness of two course formats of a college success course; one format uses support of a peer mentor(s) and the other format does not use support of a peer mentor(s). The self-report College Student Self-Efficacy Inventory (CSEI) served as a data source instrument designed to measure the college experience in general and, in particular, the degree of confidence students have in their abilities to successfully perform a variety of college-related tasks. The CSEI consisted of 20 questions designed to measure three principle factors: academic self-efficacy, social self-efficacy, and social integration self-efficacy. Student demographic factors, including gender, age range, ethnicity, educational background, and data pertaining to the participants' educational goals and enrollment history, were also examined. Analysis methods included descriptive statistics, a *t*-test, and a one-way analysis of variance (ANOVA)

measuring differences for each factor based on whether the student was supported by a peer mentor or not.

Data analysis revealed no immediate measurable differences between the two formats; however, findings could suggest that the seeds of college success were nurtured and the experience of being enrolled in either course format of a student success course has yet to be realized. It was assumed that understanding the relationship between the two course formats and development of students' self-efficacy would provide useful insight into the effectiveness, merit, or value of peer mentoring and college success courses.

This dissertation is dedicated to members of my family, in particular my mother, stepfather, oldest sister, and sons, Hunter and Tanner. Each of these individuals has played a significant role in my life and academic success.

To my mother: having raised 7 children, she knew balancing work, school, and children would be challenging and sometimes difficult. Her kind words and loving support pulled me through the most difficult and trying times. Without my mother's support and confidence in my abilities I may have forgotten, just as Glinda, the Good Witch had to remind Dorothy in *The Wizard of Oz*, "You've always had the power" my mother has reminded me.

To my stepfather: a veteran of the Vietnam Conflict, he married my mother and dedicated his life to raising her five children and my half brother and sister. He was my number one cheerleader; never having earned a college degree he could not provide me with specifics as to how to successfully complete my education, but he provided me with an internal light that served as a reminder, "You can do anything you put your mind to." This man of great integrity, honor, and grace eventually lost his last battle to cancer after fighting like a soldier. His spirit and kind heart will be forever with me.

To my sister, Anna Marie, a teen mom who at the age of twenty-five trusted her younger sister's advice, "Go to college." Together we raised her two children, got her through college, and then later celebrated the success of her children as they became the third and fourth members in our family to earn college degrees. My sister's dedication to learning and unyielding spirit inspired me to forge ahead regardless of twists and turns life may place upon me.

To Hunter and Tanner: you help define my purpose. Hunter, your creativity, free spirit, and zest for life are your guide to discovering your passion. Whatever you choose to do with your life, I have no doubt you will have fun doing it. Tanner, your unyielding dedication to your studies, your inquisitive mind, and your love of knowledge inspire me not only as a mother but as an educator. I cannot wait to see what your future holds. I love you both and I and look forward to sharing the rest of my life with you.

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PREFACE

Mia and Cynthia, best friends since elementary school, always knew they wanted to go to college. When they were in 8th grade, they went on a field trip to the local university. They talked about sharing a dorm, traveling to Europe, and the possibility of joining a sorority. Mia, a talented artist, wanted to become an illustrator of children's books. Cynthia was not sure what she wanted to be when she grew up, but she had time to figure it out; after all she was only in the 8th grade.

Time seemed to fly by. In the last month of their senior year in high school, both young women found themselves without a concrete plan. Both Mia and Cynthia had grown up in middle class families and were encouraged by their parents to talk to their high school counselor about college. Since neither set of parents had attended college, they did not really understand the process. Additionally, their parents told them to find out about applying for grants and scholarships. Mia's mother had heard that there was a lot of free money available; one just had to apply. Both ladies decided to focus on finishing high school and their upcoming senior trip. Together they decided they would visit their local community college sometime during the summer.

Just as they had promised each other, one day in July both ladies woke up early and headed to the community college just a few miles from their homes. Upon arrival they were told to fill out an application, take a placement test, meet with an advisor, and attend New Student Orientation. Both agreed the process was confusing and overwhelming. They had no idea they would have to do "so many

things.” Much to their dismay, both Mia and Cynthia tested into what the lady at the window referred to as developmental math and writing courses. Eight hours later they were registered and *ready* to start college.

Mia and Cynthia’s postsecondary educational journey began the fall semester of 2009. Although Mia admits college was much harder than she had thought, Mia successfully completed twelve credit hours her first semester. Mia had a goal and did not doubt that one day she would become an illustrator of children’s books. She was confident in her abilities and knew she was capable of earning a college degree. Cynthia enrolled in twelve credit hours her first semester of college but only completed six credit hours successfully. She, too, had not realized college, especially a community college, would be so hard. It seemed as though she never had time to study. She tried juggling school and work but often times felt overwhelmed and discouraged. Cynthia wanted to meet with an advisor, but she felt the advisors were always too busy, and she never got around to making an appointment. Mia and Cynthia rarely saw each other especially since Cynthia left campus daily as soon as her classes ended. They did run into each other once, and Mia gave Cynthia a quick hug and apologized for not having time to talk; she had a club meeting and was running late. Cynthia stopped going to class three weeks into her second semester of college, overall she completed six credits during her college experience. She decided “college just wasn’t for her”. Cynthia never returned.

This fictional story is a very common scenario for community colleges; some students are able to successfully transition to college while others are not.

The freshman year is a critical time in the lives of students. During this period of change and adjustment, nearly 48% of first-time, full-time college students are lost to attrition before the end of their first year of college (Center for Community College Student Engagement, 2007, 2009a, 2010; Hossler, Bean, & Associates, 1990; Johnson, Rochkind, Ott, & DuPont, 2009; McClenney, 2009; Tinto, 1997). This data is particularly disconcerting for public community colleges, because the percentage of college students who leave within the first year is higher than from any other type of institution (Center for Community College Student Engagement, 2010; McCabe, 2003).

CHAPTER 1

INTRODUCTION

The Economy and Its Connection to Education

In 1983, the National Commission on Excellence in Education declared the U.S. educational system to be in a state of crisis on the grounds that educational structures were ill-equipped to prepare a skilled workforce that could compete internationally. The commission's report, *A Nation at Risk*, called on government leaders to reform education at the local, state, and federal levels. Over twenty-five years have passed since this document's landmark publication, yet many of the same issues plague the U.S. today. In actuality, education faces a greater risk today than ever before. In 2009, the United States' economy reached its most precarious condition since the Great Depression of the 1930s and the nation's greatest economic driver, education, was poorly positioned to aid in a recovery (Cole, 2010).

In an increasingly competitive world economy, America's economic strength depends upon the education and skills of its workers. In a speech delivered during the nation's first ever community college summit (White House Summit on Community College, 2010), President Barack Obama makes a plea to the nation:

Now is the time to build a firmer, stronger foundation for growth that will not only withstand future economic storms, but one that helps us thrive and compete in a global economy. It's time to reform our community colleges so that they can provide Americans of all ages a chance to learn

the skills and knowledge necessary to compete for the jobs of the future.
(p. 1)

Providing high-quality education to all citizens is critical to America's economic future. Our nation's economic competitiveness and the path to the American Dream depend on a higher education system that can produce graduates with the knowledge and skills necessary to compete and succeed in a global economy that is predicated on knowledge and innovation (Complete College America, 2010). "Genuine progress depends on making sure that degree completion is a proxy for real learning – for developing thinking and reasoning abilities, content knowledge, and the high-level skills needed for 21st century jobs and citizenship" (Center for Community College Student Engagement, 2010, p. 1). Given our country's current economic difficulties it is crucial that elected governors, state legislatures, and higher education leaders aggressively move toward more comprehensive higher education reform by setting goals, establishing uniform measures, and monitoring progress (Center for Community College Student Engagement, 2010; Complete College America, 2010). Education is more valued and more necessary than ever before as education is the most effective intervention available for improving the social and economic future of America (Achieve, 2010; Achieving the Dream Community Colleges Count, 2009; Gates Foundation, 2008; White House Summit on Community College, 2010).

In generations past, low-skill but high-paying manufacturing jobs paved the way into the middle class for a large number of Americans; this is no longer

the case. Success in the 21st century demands skills, attitudes, and abilities that make some form of postsecondary education a virtual requirement; those who can manage to successfully navigate their way through post-secondary education will enjoy a considerable economic advantage over those who cannot (Gates Foundation, 2008; Miller, Lincoln, Goldberger, Kazis, & Rothkopf, 2009).

It is projected that, through 2018, nearly two thirds (or 63%) of all new jobs will require more than a high school diploma; nearly half of those will require some college experience, but less than a bachelor's degree (e.g., associate degree or certificate completion) (Carnevale, Smith, & Strohl, 2010; Kuh, Cruse, Shoup, Kinzie & Gonyea, 2008). During this same time period the U.S. Bureau of Labor Statistics projects that twenty-one of the thirty fastest-growing occupations require postsecondary education (Lacey & Wright, 2009).

Within this context, the inability to retain and graduate students may harm the interests of many constituents. For example, such interests include the long-term earning options of students, the economic vitality of communities needing skilled workers, loss of revenue for the college which can greatly affect the ability to meet its mission, and political impact (Bragg, 2001). If graduation rates do not increase dramatically, jobs will be lost to the global economy, and the U.S. will be exhausted of human capital (Carnevale & Desrochers, 2003; Jenkins & Bailey, 2009; Moltz, 2010). Former Harvard President, Derick Bok, (2005) suggests that the higher education system needs to do a much better job of educating our nation's undergraduate students and preparing them for life. Stagnant college completion rates coupled with external pressure for institutional accountability for

student learning have intensified the need to better understand the factors that influence student success in college (Bailey & Alfonso, 2005; Bok, 2005; Kuh et al., 2008).

College Completion

Since coming into office in January 2009, President Obama has identified education as one of three main priorities (the additional two priorities being energy and health care) that demand significant attention and investment by the country (Lederman, 2009; American Association of Community Colleges, 2009). President Obama makes a strong push toward national policy that supports continued access to postsecondary education but places even more emphasis on the urgency to improve students' completion of degrees so that the United States can regain its position as being the most educated country in the world (Lederman, 2009; Moltz, 2010).

President Obama's *Completion Agenda*, is a plan that emphasizes reduced student attrition, and increased persistence. The agenda also emphasizes the important role community colleges play in moving the nation toward economic prosperity. The agenda challenges community college leaders to ensure more students leave their campuses with earned degrees or at least one year of community college experience (Jaschik, 2009; Jenkins & Bailey, 2009; O'Banion, 2010). This is a challenge that can only be met after college administrators, stakeholders, and policy makers are able to identify factors, strategies, and activities that increase opportunities for student retention and success in postsecondary education. In doing so, purposefully developed comprehensive

strategies must be firmly rooted in data driven evidence and emphasis must be placed on student-centered learning and student personal growth (Bailey, & Alfonso, 2005; Center for Community College Student Engagement, 2010; Dwyer, Millet, & Payne, 2006; Horn, Neville, & Griffith, 2010; Koljatic & Kuh, 2006; Kuh, Kinzie, Schuh, Whitt, & Associates, 2005). Additionally, more effective ways of fostering transformative teaching and learning must be implemented on today's campuses (Achieving the Dream Community Colleges Count, 2009; Taylor & Haynes, 2008). Community colleges across the nation have accepted President Obama's challenge by signing a *statement of commitment* supporting his call to action. The signed document serves as a formal commitment toward college completion and student success (American Association of Community Colleges, 2010).

The success of institutional retention requires the commitment of the entire campus community. Faculty and administrators must be willing to work collaboratively to ensure students are provided with learning opportunities that support academic, and personal growth by fully engaging their students in the learning process (Tinto, 2005). "Successful education, not retention, is the secret to successful retention programs" (Tinto, 2005, p.1). Effective programs that influence retention are those programs in which faculty and staff reach out to their students in efforts to make contact and personal connections to ensure the social and intellectual development of the program's student members (Achieving the Dream Community Colleges Count, 2009; Tinto, 2005). Students who are not connected to the campus community or who do not integrate their learning

experiences across departmental lines and divisions are more likely to leave prior to achieving their academic goals (Astin, 1996; Center for Community College Student Engagement, 2010; Pascarella & Terenzini, 1998; Tinto, 1997, 2005).

Financial strain on state budgets threatens to undermine President Obama's college-completion agenda; enrollment numbers continue to grow while state operating dollars continue to dwindle (Fischer & Parry, 2009; Gonzalez, 2010). To illustrate a lack of support for education initiatives, let us consider Arizona universities and the state's largest community college district: the Maricopa Community College District. Arizona's three state universities have sustained the largest budget cuts of any other state universities in the nation (Solutions Through Higher Education, 2010). During the 2010-11 fiscal year, Arizona's largest community college district had revenue of \$1,615,045,591 (Maricopa Community College District, 2011). Even though only three percent of Maricopa's revenue (\$45,427,400) comes directly from state funding, Maricopa Community Colleges are facing severe budget cuts much like the three state universities. The state's governor, Jan Brewer, signed a bill that equates to an 85% cut in state appropriations to the district. The cut would reduce state funding from \$45.4 to \$6.9 million for the 2011-2012 budget. This proposed loss of \$38 million is a significant loss particularly at a time when the country has turned to the community college to aid in the nation's economic recovery (Complete College America, 2010).

The Maricopa Community College District is not alone; community colleges throughout the nation are facing budget cuts parallel to those of the

Maricopa Community College District. With significant cuts in state appropriations it is going to be extremely difficult for community colleges to meet President Obama's challenge of producing an additional five million community college graduates by the year 2020. We must be mindful that stronger education systems are a result of greater funding and the result of strong educational systems is a stronger workforce better equipped to compete in national and international marketplaces (Rogers, 2005). In addition, students who graduate buy more goods and services, pay more taxes, engage civically in their communities, and require less social-service spending (Complete College America, 2010; Kirwin, 2007; Leaderman, 2009; Rogers, 2005). Clearly, investments in education that lead to postsecondary graduation are important on macro levels.

College administrators perceive student retention rates as indicators of academic quality and student success (Barbatis, 2008). Retention is not only linked to student success and goal attainment, it is a critical component in the stability of institutional budgets. As state and federal funding is shrinking, more colleges and universities are facing pressures to improve both retention and graduation rates. This pressure reflects a movement among states to include graduation rates in a system of institutional accountability as graduation rates are considered one measure of quality (American Association of Community Colleges, 2009; Bailey & Alfonso, 2005). As a result, more higher education institutions are increasingly concerned about the persistence and graduation of their students and in finding useful models proven to help guide students toward reaching their educational goals. Due to the funding structure of many community

colleges, these institutions garner a large percentage of their funding from property taxes. However, if funding becomes contingent upon course completion and persistence rates, community colleges may be forced to reconsider their open-door philosophy, thereby requiring first-year students to possess some level of academic preparedness and a means of measuring that preparedness (i.e., SAT or ACT scores or a qualifying application process).

College Success

Most students arrive at college expecting to succeed and believing that they are motivated to do so, yet only slightly more than half (or 52%) of first-time college students in public community colleges return for their second year (Center for Community College Student Engagement, 2010). The transition into college can place significant stress and demands on first-year students, particularly when entering students lack an understanding of what it takes to be a successful student. A number of studies seeking to identify predictors of success in college have pointed to student's secondary achievement and experiences (Adelman, 1999; Conely, 2005; Pascarella & Terenzini, 2005). Other studies have aimed to identify factors during the actual college experience (Astin, 1993, 1997; Bailey & Alfonso, 2005; Center for Community College Engagement, 2009a, 2010; Conely, 2005; Tinto, 1997, 1998, 2005). Collegiate factors include social and academic integration, student involvement/engagement, college readiness, and first-year acculturation.

Student success in higher education is an area that has been analyzed and explored extensively over the last fifty years. Nevitt Sanford (1962) argued that in

order for first year students to succeed, they must be provided with educational experiences that foster learning and personal development and be supported with a campus climate that helps students learn and develop. In 1972, authors Roueche, Baker, and Brownell published *Accountability and the Community College: New Directions for the 70's*, a book that highlights calls for increased attention to student progress and success, including course completion rates, persistence rates, and the number of entering community college students who graduate with certificates or degrees. In 2010, the Center for Community College Student Engagement published *The Heart of Student Success: Teaching, Learning and College Completion*. Findings support the message of authors Roueche, Baker, and Brownell (1972) suggesting that today's community college students have many of the same needs of students almost fifty years ago. Institutions that are able to provide first-year students with challenging educational experiences accompanied by effective support services are more likely to experience success in their transition to college (Center for Community College Engagement, 2010; Kuh et al., 2005; Upcraft, Gardner, Barefoot, & Associates, 2005). Consistent with Public Agenda's work with Lumina Foundation for Education, findings from the report *Engaging Adjunct and Full-time Faculty in Student Success Innovation* (Achieving the Dream Community College Count, 2009) provide a well-established conclusion that faculty engagement is crucial to the success of community college students and the College Completion Initiative.

Successfully integrating students into the college environment is more challenging for community colleges than for four-year institutions as these

institutions are faced with unique challenges specific to their student population (Nomi, 2005). Community colleges tend to enroll a larger percentage of first-generation students (i.e., undergraduate students whose parents have no postsecondary education experiences) (Nomi, 2005). In 2003, first-generation students made up 45% of the public community college population (Horn et al., 2005; Dennis, Phinney, & Chuateco, 2006). First generation community college students are more likely to be women, older than traditional college age (18-24), employed full-time, and supporting dependents living at home. These students also tend to take fewer credit hours each semester due to greater financial problems and family responsibilities (Johnson et al., 2009; Nomi, 2005). Researchers have found that first-generation students are often less equipped for college due to poor academic preparation from high school (Johnson et al., 2009; Nomi, 2005; Rendon, 2006; Zalaquett, 1999). As many as 59% of students attending two-year community colleges must enroll in developmental coursework designed to address academic skills deemed to be below college level (Bailey, Jeong, & Cho, 2010). Additionally, these students tend to work more hours and expect to take longer to complete their degrees (Johnson et al., 2009; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). First-generation community college students often enroll in college to improve job skills and obtain an associate degree; whereas most students whose parents have earned college degrees attend community college for the purpose of transferring to a 4-year college (Complete College American, 2010; Nomi, 2005; Pascarella, & Terernzini, 2005). Furthermore, the parents of first-generation college students often lack first-hand

knowledge of the college experience and typically cannot directly help their students with college related tasks and tend to have less influence on their children's education decisions than do parents of non-first-generation students (Dennis et al., 2005; Nomi, 2005; Terenzini et al., 1996; Zalaquett, 1999).

Regardless of whether a student enrolls at a community college or at a four-year institution, the literature supports a conceptual framework for the first year: challenge and support (Center for Community College Engagement, 2009a; Upcraft et al., 2005). High expectations are an essential condition for student success. Attaining high expectations requires high support, both academic and social (Center for Community College Engagement, 2009a). The challenge for many institutions is how to make sure high expectations and support services are present, visible, and part of the college culture (Center for Community College Engagement, 2009a).

More and more studies are reporting that relationships with other students, faculty, and staff members strengthen a student's desire to continue pursuing their college goals beyond the first year (Achieving the Dream Community Colleges Count, 2009; Center for Community College Engagement, 2009a, 2010; Upcraft et al., 2005). Other identified key factors contributing to decreased attrition and increased retention include (a) structures that increase high levels of faculty-student interaction and integrate academic and social activities, (b) opportunities for involvement, (c) leadership experiences (d) cultural and social support and (e) use of campus resources and student services (Astin, 1996; Harvey-Smith, 2002; Roueche & Roueche, 1997; Tinto, 1997) and (f) college success courses (Hunter

& Linder, 2003). Recent literature in higher education also suggests that mentoring can lessen the negative experiences and barriers students may face as they try to understand and navigate their way through their first year college experience (Galbraith & James, 2004; Nora & Crisp, 2007-2008). Despite the benefits mentoring offers within higher education, little is known about how mentoring affects student persistence. With respect to the community college system, Galbraith and James (2004) offered that “mentoring is assuming national importance as a vital and essential component in the personal, educational, and professional experiences of learners in community colleges” (p. 690). Typically mentoring relationships in higher education are between a faculty member and a student. However, due to increased budget cuts and increased faculty responsibilities, institutions are seeing the value of having experienced (second-year) college students serve as peer mentors to less experienced (first-year) college students.

As Coordinator of Student Success Programs at Estrella Mountain Community College (EMCC) I have the responsibility of developing and supporting student retention and success programs specific to first-year community college students. Like EMCC, institutions across the nation have strengthened their enrollment management and retention efforts through strategies and tactics such as student success courses, summer bridge programs, early alert processes, and peer mentoring programs. As a member of the Student Success and Retention Team at EMCC, it is my responsibility to uncover practices promote that and/or hinder college student’s achievement particularly during the first year

of college. The findings from this study may also offer important insight about the types and scope of institutional support that first-year community college students may require.

The peer mentor program and college success courses (CDP 150) at EMCC serve as interventions to aid first-year students with their transition to college. The main objective of the peer mentor program and college success courses are to provide both academic and social support and aid students' transition to college. This type of support is particularly important for first-generation students or students who may have grown up in environments where nobody they know attended college (Hunter, 2006; Nora & Crisp, 2007-2008; Rendon, 2006). Peer mentors serve as navigation guides by introducing their mentees to support system throughout the institution. Peer mentors often times provide these students with experiential knowledge and support that their families were unable to provide. Integrating peer mentors into the college success course provides opportunities for the mentor and mentee to establish a working relationship both in- and out- of the classroom.

Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs in turn determine how people feel, think, motivate themselves and behave (Bandura, 1994). Peer mentoring and college success courses support Bandura's theory of self-efficacy by providing first-year students with encouragement and support during challenging times. Peer mentors serve as role models to new students by sharing

their own trials and tribulations in addition to helping new students set academic and career goals for themselves. College success courses provide students with opportunities to learn “how to do college” by orienting them to the college experience and by providing them with support in the development of personal and academic growth (Hunter & Linder, 2003; Upcraft et al., 2005).

Community of Practice

My community of practice is situated within Estrella Mountain Community College (EMCC), one of ten colleges in the Maricopa County Community College District. EMCC serves residents of western metropolitan Phoenix and a diverse mix of residents from both rural and suburban towns and cities. The current service area population is an estimated 503,372. More than half of the College’s service area residents are minority at 51%, with Hispanics representing 81% of that minority population. The College enrollment is characterized by steady growth in both headcount and in full-time student equivalents (FTSE). Enrollment for the fall 2010 semester was 8,122 headcount and 4,077.5 FTSE, a 12.8% increase when compared to fall 2009.

The College was designated a Hispanic Serving Institution (HSI) by the U.S. Department of Education in fall 2002, which indicates that the College has 25% Hispanic undergraduate students and is Title III eligible. Title III eligibility has multiple requirements, including a student financial need requirement for the entire student body where at least 50% of degree students receive need-based assistance under Title IV of the Higher Education Act (U.S. Department of Education, 2010). Estrella Mountain Community College uses the term Hispanic

to refer to persons of Latin American descent. The College's student population is more diverse with regard to ethnicity, gender, and age when compared to the Maricopa County Community College District (MCCCD) student population. Based upon the fall 2009 semester, Estrella Mountain had the 3rd highest percentage (48.8%, excluding White and Other) of minority students in the MCCCD and the 2nd highest percentage (34.2%) of Hispanic students. Age is another source of student population diversity. In the fall 2009, the ages of students ranged from 11 to 77. Students ranging in ages of 15-19 made up 41% of student enrollment (Estrella Mountain Community College, 2011).

The college's strategic plan speaks specifically to student success and the need to consider paradigm transcendence through innovation, and the creation of new opportunities and learning strategies (Love & Estanek, 2004; O'Banion, 1997). For purposes of this study, retention is defined as successful completion of a college success course (CPD 150) with a grade of a "C." Persistence is defined as subsequent re-enrollment in the following term. Due to MCCCD's recent student success initiative course enrollment in CPD 150 sections across the district have reflected a dramatic increase. Estrella Mountain Community College's Fall 2006 CPD 150 course enrollment was fifty two students. Fall 2010 course enrollment was 589 students. Although the college has experienced a large increase in CPD 150 course enrollment retention and persistence rates have fluctuated anywhere from 38% to 80%. Most recently, Spring 2011 reported retention rates were reported as 75%. The reported persistence rates for this same semester were 52%, a rate slightly lower than national findings.

ACT (2010) reported national first- to second-year persistence rates for two-year public institutions to be 55.7%. The first- to- second year persistence rate is considered to be particularly important in terms of an institution's overall retention because the greatest number of students who eventually leave do so before the second year (Center for Community College Engagement, 2009b; Tinto, 1997). EMCC is committed to implementing and supporting proven practices that improve student first- to-second year persistence rates. Spring 2007 marked the beginning of Estrella Mountain Community College's ongoing transition in becoming a Learning College. Emphasis on changing the campus culture by placing *learning* at the core of all programs, procedures and processes had EMCC examining institutional efforts by asking, "how does an activity, effort and/or process impact learning and how do we know"?

"The Learning College concept captures a college's commitment and journey to realign institutional priorities, policies, programs, practices, and personnel to focus on learning as the primary business of the college" (League for Innovation for the Community College, 2011). This model supports a learning paradigm that places emphasis on student learning not teaching, by focusing on learner-centered outcomes based on the belief that the most important people in the institution are the learners. Institutional decisions and policies are based on the needs of the student, not those of the faculty or the staff (League for Innovation for the Community College, 2011; O'Banion, 1997). The Learning College engages learners as full partners, with learners assuming primary responsibility for their choices; however, the Learning College assumes final responsibility for

producing student learning by empowering students to become active, responsible partners in their education. The Learning College model encourages institutions to create and offer as many options for learning as possible (O'Banion, 1997).

During the fall of 2010, EMCC's new Vision, Mission, and Core Values statements were presented and approved by the Maricopa Community Colleges Governing Board. The college's mission and vision are as follows:

Mission: We provide exceptional and creative learning experiences that prepare all learners to achieve their dreams and transform their lives.

Vision: Estrella Mountain is an innovative higher learning organization responding to the diverse needs of the West Valley communities. Learners have an opportunity to successfully accomplish their educational and personal goals through the following college purposes: Developmental Education; General Education; Transfer Education; Learner Support Services; Workforce Development; Community Education; Civic Responsibility; Global Engagement (Estrella Mountain Community College, 2011). Both EMCC's mission statement and vision provide a foundation for the college's service strategy and philosophy of teaching and learning. Estrella Mountain is a vibrant learning college that provides opportunities for personal growth and achievement.

Problem Statement

Many student success scholars point to the notion that students must get involved and engaged in institutional life. Engaging students is the most effective way to make students feel emotionally connected to faculty members and college in general; emotional connection to the campus is key to persistence in

completing a college degree (Tinto, 1998). Tinto's integration theory (1975, 1993) and Astin's (1997) student involvement theory posit social and academic integration and campus involvement as central determinants of successful college adjustment. Pascarella and Terenzini (2005), well known scholars of student retention, published a synthesis of over 2,600 studies, *How College Affects Students*, and were confronted with the sobering realization that these studies did not provide a complete or comprehensive portrait of the American undergraduate population (Pascarella & Terenzini, 2005). What they discovered was that most of the studies were largely based on samples of "traditional" undergraduate colleges: White students range in ages 18-22 who attended four-year institutions full-time who did not work, and who lived on campus (Pascarella & Terenzini, 2005.) Final analysis suggests that the majority of retention studies do not include the student body of a community college and fail to take into account the differing circumstances of older, non-traditional and minority students.

In order to meet the challenges of today's educational needs, new models of student success must begin to address issues related to characterizing the diverse nature of students who are entering higher education (Cabrera et al., 1993; Johnson et al., 2009; Rendon, 2006). Today's students, particularly community college students are diverse in many ways: gender, race/ethnicity, age, academic preparation, learning style preference and worldview (Bailey & Alfonso, 2005; Cabrera et al., 1993). Rendon (2006) suggests looking at other factors, identified in the literature as having an influence on the success of underserved students such as self-efficacy and institutional validation and encouragement. These

factors involve faculty and staff reaching out to students in effort to help make their college experience more meaningful and positive. Rendon's recommendations echo Boylan's (2001) proposition that students fail to do well in college for a variety of reasons related to personal autonomy, self-confidence, study behaviors, social competence, and a student's ability to successfully move through the academic experience (Astin, 1997; Boylan, 2001).

In recognizing the challenges in retention and persistence efforts with first-year and underprepared students, Estrella Mountain Community College created and implemented a structured student-to-student peer-mentoring program aligned with and as a component of the college's student success initiative. Grounded in student development theory, the college's counseling department assumes the major responsibilities of supervising, coordinating, and facilitating the peer mentor program. The program, piloted in the spring of 2009 and fully implemented in the fall of 2009, was a result of collaborative efforts between counseling faculty, student affairs personnel, and student leaders and was supported by scholarly literature reporting that first-year student success courses have a positive impact on student persistence (Ellis, 2003; Hunter & Linder, 2006 2005; Upcraft et al., 2005). What emerged was a structured, purposeful mentoring program embedded into college success courses (CPD 150). Peer mentors work in collaboration with counselors teaching the course and serve as guides and role models assisting and supporting students with their transition to college. This course focuses on increasing student success through college orientation, and personal growth, study skills development, and educational and career planning.

The peer mentor program seeks to increase the quality of first-time students' educational experiences by mandating regular check-ins between mentors and mentees as well as small-group discussions about class work, campus services, and support programs.

Students wanting to serve as peer mentors go through a competitive selection process entailing a written application, faculty recommendations, and personal interviews. Once hired, mentors work approximately 15 hours a week and are paid at a rate of \$9.00 per hour, a rate that is considered to be above the average rate of most student workers. Peer mentors receive training throughout the semester specific to providing effective supportive encouragement intended to help mentees realize their full potential. The design of the program allows mentors and mentees an opportunity to develop a working relationship in an open learning environment supported by faculty and staff members. Program objectives for peer mentors include (a) provide extra guidance and support to ensure students' academic success by helping students brainstorm strategies that help CPD 150 students negotiate transition to EMCC; (b) connect and refer students to campus resources and support personnel; (c) share personal experiences related to academic success and college transition; (d) provide motivation and encouragement to mentees by encouraging academic success. It is believed that as a result of positive, quality interaction with a college representative who has evidenced academic success (the peer mentor), students will be more inclined to persist due to increased academic and social interaction and the support and encouragement of their peers and faculty and staff members (Dennis et al., 2005;

Jacobi, 1991; Koljatic & Kuh, 2006; Kuh et al., 2008; Rendon, 2006; Upcraft, et al., 2005).

According to Roueche and Roueche (1996), the institution must commit to the success of all its students not just certain cohorts of students, “A total program approach to the complex needs of at risk students – systemic approach – has the greatest potential for success” (p. 29). This philosophy encourages collaboration throughout the institution. Estrella Mountain’s peer mentor program is dependent on participation and support from faculty, staff and student leaders. As role models, student peer mentors invest their time, energy and effort in helping new students by using their own experiences as a frame of reference to inform, to advise, and support new students throughout their first semester of college. This is done by having the mentors (a) serve as teaching assistants in the selected CPD 150 courses; (b) participate in New Student Orientation; (c) assist with recruitment activities; and (d) attend structured peer mentor group meetings. The mentoring program aids institutional efficiency because the mentors are trained credible resources for mentees and cost the institution substantially less than full-time employees. The mentors serve to direct students to the appropriate services, staff and processes in proactive ways, rather than reactive ways. Peer mentors are paid employees of the college.

Upon reviewing CPD 150 course retention and persistence rates over the last two years, it was discovered that CPD 150 sections without the support of a peer mentor produced slightly higher retention and persistence rates. As mentioned above, retention is defined as successful completion of the course with

a grade of a “C” or higher and sub-sequent re-enrollment in the following term.

(See Table 1).

Table 1

CPD150 Successful Retention Rates, Mentor vs. No Mentor

Term	Total Enrolled	Total Complete A, B, C, D, F	Total Success A, B, C,	% Completed	% Success	Persist Next Term	% Persist to Next Term
Fall 2009 Mentor	110	101	81	92%	74%	87	79%
Fall 2009 No Mentor	239	205	194	86%	81%	179	75%
Spring 2010 Mentor	197	147	113	75%	57%	89	45%
Spring 2010 No Mentor	60	42	33	70%	55%	26	43%
Fall 2010 Mentor	186	162	144	87%	77%	145	78%
Fall 2010 No Mentor	403	363	330	90%	82%	322	80%
Spring 2011 Mentor	169	144	120	85%	71%	87	51%
Spring 2011 No Mentor	125	112	100	90%	80%	76	61%

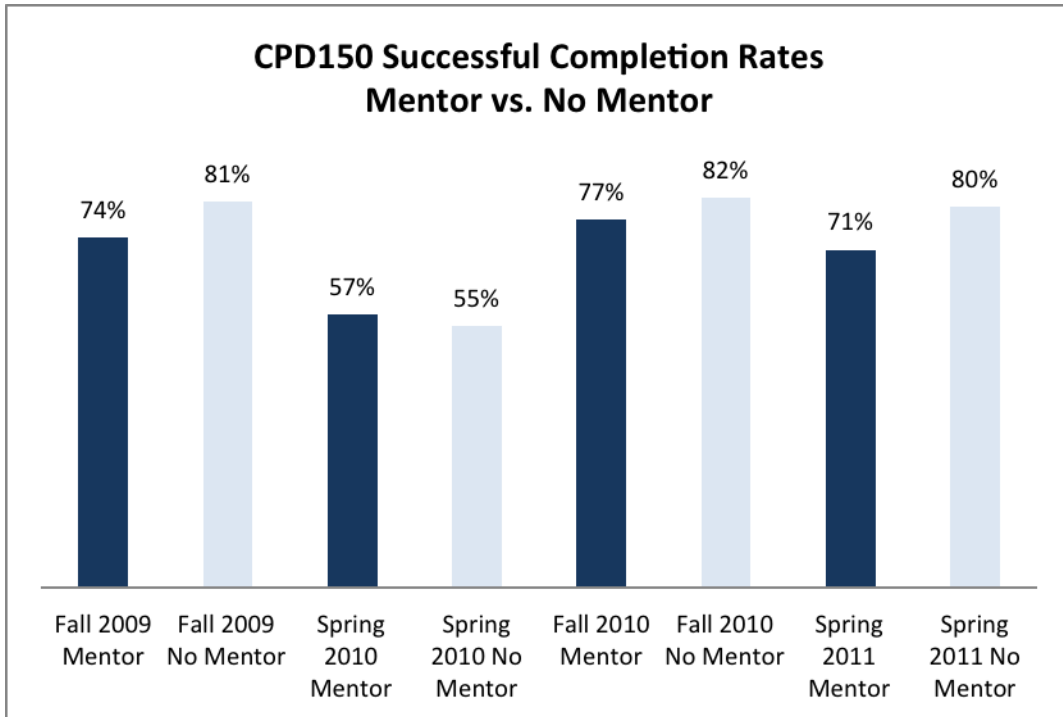


Figure 1. CPD150 Successful Completion Rates, Mentor vs. No Mentor.

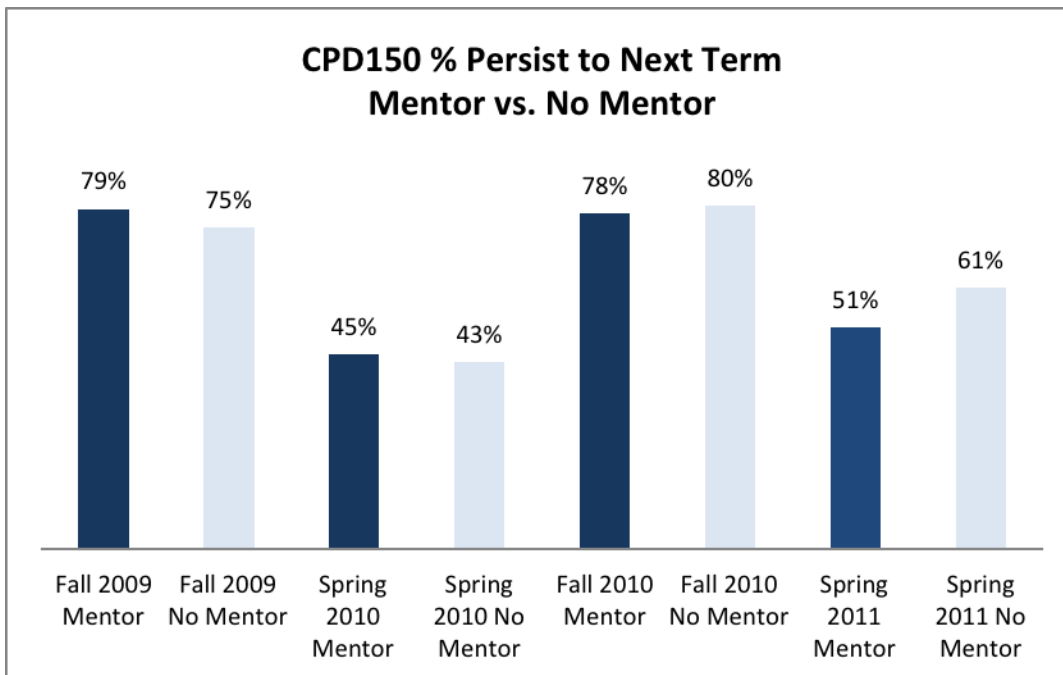


Figure 2. CPD150 Percent Persist to Next Term, Mentor vs. No Mentor.

The peer mentor program does not appear to increase student retention or persistence rates of those students enrolled in a college success (CPD 150) at Estrella Mountain Community College. Current quantitative data provides institutional information supporting student input characteristics (i.e., student grades, test scores) and output characteristics (i.e., institutional counts of degrees granted) but does not provide a comprehensive understanding of such factors as self-efficacy, or students' individual levels of confidence in their abilities to successfully complete college related tasks (Dwyer et al., 2006). Current persistence and retention data does not tell my community of practice *why* persistence and retention rates did not increase as suggested by the literature supporting mentor programs (Carver & Katz, 2004; Jacobi, 1991).

This study is intended to provide leverage for enhancing EMCC's peer mentor program to have the intended increase on student persistence particularly since the peer mentor program has been identified as a program the college would like to continue supporting. Through this study I intend to learn more about how peer mentoring and college success courses contribute to the college self-efficacy of first-year students. College self-efficacy, defined as one's belief in one's ability to successfully engage in college-related behaviors, is a construct that may serve to further our understanding of college persistence and performance (Gore, Leuwerke, & Turley, 2006; Solberg, O'Brien, Villareal, Kennel, & Davis, 1993). As a practitioner-researcher, I want to further contribute to the culture of evidence by supplementing current institutional data with data specific to self-efficacy and students' confidence in their ability to successfully perform a variety of college-

related tasks through the use of the College Self-Efficacy Instrument (Solberg et al., 1993)(see Appendix I). This additional data will help my community of practice determine how effective peer mentoring is in a college success course specifically to improve the success (i.e., persistence) of first-year students (See Table 2).

Table 2

CPD150 Course Completion and Persistence

Term	Total Enrolled	Total Complete A, B, C, D, F	Total Success A, B, C,	% Completed	% Success	Persist Next Term	% Persist to Next Term
Fall 2006	52	49	38	94%	73%	39	75%
Spring 2007	13	12	11	92%	85%	10	77%
Fall 2007	41	30	27	73%	66%	29	71%
Spring 2008	8	8	3	100%	38%	6	75%
Fall 2008	32	24	22	75%	69%	20	63%
Spring 2009	50	37	25	74%	50%	20	40%
Fall 2009	349	306	275	88%	79%	266	76%
Spring 2010	257	189	146	74%	57%	115	45%
Fall 2010	589	525	474	89%	80%	467	79%
Spring 2011	294	256	220	87%	75%	163	55%

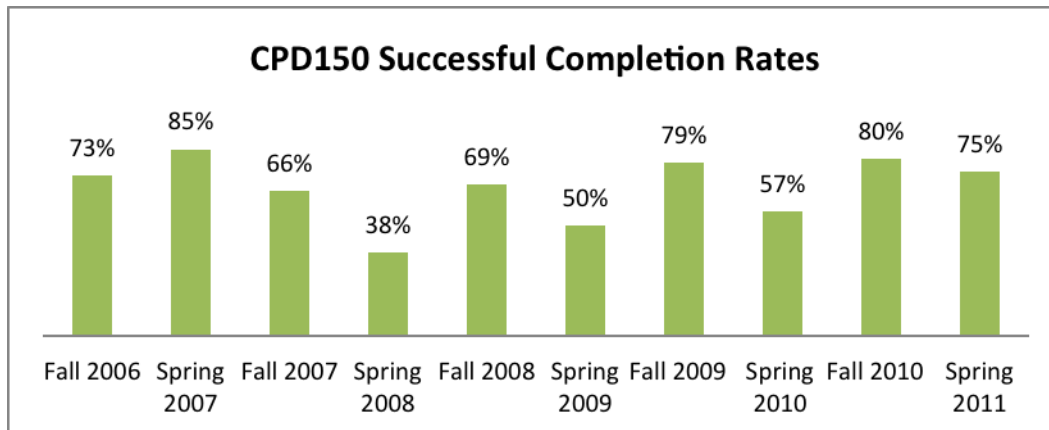


Figure 3. CPD150 Successful Course Completion.

Statement of Purpose

The question of access has recently shifted to one of persistence and degree attainment. Educators, policy-makers, and researchers have shifted their focus to the low completion rates of community college students and caution that institutional practices and policies need to focus on improving retention and completion (Bailey & Alfonso, 2005; McClenney, 2009; O'Banion, 2010; Tinto, 2005). For the prospects of individual students and for the future viability of both the U.S. economy and the American democracy educational attainment and college completion is crucial (Center for Community College Engagement, 2010). Because community colleges have been placed in the spotlight it is imperative that these institutions gain greater understanding of how to increase persistence rates and student success. The structure of the mentor program is supported by principles found in Downing's *On Course: Strategies for Creating Success in College and in Life* (2001). Downing encourages institutions to empower students to become active, responsible partners in their education in order to achieve greater success in college and in life. Persistence and retention rates of those

students benefiting from the peer mentor program have not increased as much as college administration at EMCC had hoped.

Peer-mentors have been incorporated into college success courses. However, the significance of peer-mentors in these courses has not been explored. In fact, recent research has not defined the “precise nature” of peer relationships and influence in college (Pascarella & Terenzini, 2005, p. 419). This study examined both peer mentoring as a part of the first-year student success course and the first-year success courses without a peer-mentoring component.

The purpose of this study was twofold; (a) the author’s intention was to evaluate the effectiveness of two course formats of a college success course: 1) supported by a peer mentor (s) and 2) not supported by a peer mentor (s) on developing the self-efficacy of first-year community college students. I wanted to examine the effectiveness of each course format model on students’ beliefs in their ability to successfully perform a variety of college related tasks. By evaluating the impact these two class formats have on the development of self-efficacy of first-year community college students, administrators were able to determine the value of the peer mentors’ role as it relates to the confidence of first-year students enrolled in a college success course. The second purpose was to better understand self-efficacy theory in an applied setting (e.g., the peer mentor program). This increased understanding was beneficial in my role as Coordinator of Student Success Programs. Findings from this study have allowed me to further collaborate with faculty and staff who have a vested interest in the

peer mentor program, college success courses, and retention and persistence rates of first-year students.

Theoretical Lens

The theoretical framework undergirding this study was self-efficacy theory, a theory that has its roots in psychology (Bandura, 1977). Traditionally, self-appraisals have been associated with factors including self-concept, self-esteem, and locus of control. Bandura (1977, 1997) suggested that self-efficacy be added as a component to the self-appraisal process. He believed self-efficacy to be an important determinant in personal adjustment as measured by psychological and physical outcomes. According to Bandura's (1997) theory, performance accomplishment is the most influential source of self-efficacy. A strong sense of self-efficacy enhances human accomplishment and personal well being in many ways. Self-efficacy has been linked to motivational constructs, such as persistence, goals, and goal setting (Multon, Brown, & Lent, 1991); the use of strategies, such as self-regulated learning (Pintrich & Degroot, 1990); and actual achievement (Pajares & Miller, 1995); and affective constructs such as personal adjustment and overall wellness (Gore, 2006; Solberg & Villareal, 1997). These studies have shown that individuals with higher levels of self-efficacy tend to be more motivated, use more college study strategies, and have higher achievement than individuals with lower self-efficacy (Barry & Finney, 2009).

This study examined the relationship of a peer-to-peer mentoring program and the effects this relationship had on the self-efficacy of first-year community college students. Bandura (1977, 1986) claims the development and modifications

of a person's self-efficacy and beliefs comes from four sources of information (1) performance accomplishment; (2) vicarious experiences or modeling; (3) verbal persuasion; (4) social and emotional influences. The four sources of self-efficacy as described are components of the peer-to-peer mentoring program under study.

Bandura (1977, 1996) argued that strong self-efficacy expectations about a given behavior increase the likelihood that a behavior will be performed when necessary. People do not have a singular, over-all sense of efficacy (Barry & Finney, 2009). The level of self-efficacy is dependent on the task and context in which the task is undertaken. Research has shown that when the specificity of the efficacy assessment matches the criterion, there is a stronger link between self-efficacy and the outcomes (Choi, 2005; Pajares & Miller, 1995). For example, strong academic self-efficacy expectations are expected to result in more effective college related behaviors. The result of performing academic-related behaviors such as studying, learning to use appropriate resources, and making social connections on campus would contribute to one's personal adjustment in college (Solberg & Villareal, 1997; Solberg et al., 1993). For the purpose of this study, I looked specifically at self-efficacy as it related to specific college-related tasks.

Research Questions

1. How effective is peer mentoring in a college success course on developing the self-efficacy of first-year community college students?
2. How effective is a first-year college success course on developing the self-efficacy of first-year community college students?

CHAPTER 2

REVIEW OF THE LITERATURE

This literature review will first provide an overview of the community college and its purpose. It will then cover college readiness and the impact college readiness has on the success of first-year community college students. Next, the literature review will provide an overview of components directly related to first year success, which include academic and social integration, cultural and academic incongruity, validation, encouragement and support, and college success courses. Finally, this literature review will discuss the intervention of this study: mentoring. A history of mentoring is included as well as a section on mentoring in higher education, peer mentoring, and the role and benefits of peer mentoring.

Community Colleges

Overview of community colleges. The community college is a uniquely American institution representative of democracy in mission and function. As open-door institutions, community colleges provide access to anyone wanting to pursue higher education, attracting and enrolling students from a wide range of backgrounds, experiences, and cultures. The community college access mission is built on low tuition, flexible scheduling, and convenient locations. These institutions serve as access points for large numbers of low-income, minority, first-generation, and underprepared students, or students who would otherwise be unable to attain a college education (American Association of Community Colleges, 2008; Wells, 2008). The open door policy and affordability has

extended access to an unprecedented diverse student population. According to the American Association of Community Colleges (2008), U. S. community colleges enroll 55% of Native American/Indian, 46% of Asian/Pacific Islander, 46% of African American, and 55% of Hispanic undergraduate students in the American post-secondary education system.

Community college and persistence. In addition to their affordability, flexible scheduling of courses, and local conveniences, community colleges offer vocational preparation, adult education, remedial schooling and career enhancement for professionals. McClenney, a leader in community college research, supports the nation's plea to community colleges and their crucial role in America's economic recovery. McClenney (2009) recognizes the important role of community colleges. "Even in the midst of crisis, American community colleges embody the spirit of hope and change that has energized our national politics" (2009, p. 1). However, she is realistic in recognizing the challenges of these institutions. Community colleges serve to contribute to educational access, work-force development, and economic prosperity, but when one considers student achievement and degree completion, statistics are grim (McClenney, 2009). In 2008, more than 46% of those who attended higher education institutions were enrolled in two year institutions; of those 46%, nearly 14% of those students did not complete a single credit during their first academic term; 25% of entering fall-term students do not return for the subsequent spring term; almost half of these students do not return by the second fall term; fewer than 30% have earned an associate degree after three years. In addition, fewer than

50% of community college students who aspire to earn associate or bachelor's degrees or transfer to four-year institutions achieve their goals within six years (Center for Community College Engagement, 2009a; McClenney, 2009; Scrivener, Weiss, & Tess, 2009).

Community college students often face challenges significantly different from those their counterparts at four-year institutions face. Community college students possess a wide variety of demographic characteristics, goals, needs, and backgrounds (Nomi, 2005) and the pool of students only continues to get wider, deeper, and more diverse than ever. One group of students who is likely to enroll in community colleges is first-generation students. The National Center for Education Statistics (2005) reported that in 2003, first-generation college students made up 45% of the public community college population. African-American and Hispanic students graduate at lower rates than their White classmates (McClenney, 2009). Studies of these underrepresented populations have identified external factors that affect persistence include academic preparedness, finances, and the lack of support from family and friends (Braxton, Hirshy, & McClendon, 2004; Swail, Cabrera, Lee, & Williams, 2005). Even though adult learners pursue postsecondary education for a range of reasons such as wanting to be better educated, to increase their employment opportunities, to make more money, or to enhance personal happiness (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006), students want to succeed in their academic endeavors.

Findings from several studies reveal gaps in the higher education system that serve to undercut the efforts of particularly low-income, first-generation

students (Johnson et al., 2009; McClenney, 2009; Nomi, 2005). These students often times work full time and/or receive financial aid to support their education (Johnson et al., 2009; Nomi, 2005). As college costs continue to increase at a rate faster than family incomes these same students are the hardest hit financially because state and federal financial aid programs have been cut and more students find themselves with unmet financial needs and struggle to meet the financial demands of pursuing a college education (Breland, Maxey, Gernand, Cuning, & Trapani, 2002; Nomi, 2005).

Research-based practice at the community college. After decades of near invisibility on the national policy and state level, community colleges have suddenly risen to the forefront. In an increasingly competitive world economy, America's economic strength depends upon the education and skills of its workers. Jobs requiring at least an associate's degree are projected to grow twice as fast as those requiring no college experience (Complete College America, 2010). Earning a baccalaureate degree is the most important path to economic prosperity, as college graduates on average earn almost a million dollars more over the course of their working lives compared to those with only a high school diploma (Pennington, 2004). If the production of bachelor's degrees continues at the current trend there will be a 14 million shortfall of college-educated working adults by the year 2020 (Carnevale & Desrochers, 2003). According to Carnevale and associates (2010) by 2018, the American economy will create 46.8 million openings. Nearly two-thirds of these 46.8 million jobs will require workers with at

least some college experience. Many believe community college plays a key factoring in helping to produce an educated citizenry.

With an enrollment of more than eight million students, community colleges have become the focus of high-profile government and philanthropic initiatives (e.g., Gates Foundation, the Lumina Foundation for Education). Known for contributing to educational access, work-force development, and economic prosperity, these institutions have been described as the “the greatest equalitarian force in the twentieth century society” (Nichols & Oliver, 1994, p. 73), yet because of the great diversity not only in student population but in college mission and purpose as well there are few student success models for community colleges to emulate (Bailey & Alfonso, 2005). Colleges’ providing college access to post-secondary education can no longer be seen as an appropriate end goal: College enrollment must lead to college completion (Bailey & Alfonso; 2005, Gates Foundation, 2008; McClenney, 2004). Community colleges must begin to produce results that matter, results that have a positive impact on the economy (White House Summit on Community College, 2010).

In 2003, The Lumina Foundation for Education joined eight other organizations in launching Achieving the Dream Community: Colleges Count, a project focused on research specific to community colleges and the success of their students, particularly low-income students and students of color (Bailey & Alfonso, 2005). The project focused on four specific types of practices centered on increased persistence and completion at community colleges: (1) advising, counseling, mentoring, and orientation programs; (2) learning communities; (3)

developmental education and other services for academically under-prepared students; and (4) college-wide reform. As of 2011, the Lumina Foundation for Education has spent \$76-million on the project. Despite the fact that colleges have changed their practices and policies significantly, recent statistics report that student outcomes have remained relatively unchanged (Gonzales, 2010). On February 9, 2011, *The Chronicle of Higher Education* reported, “‘Achieving the Dream’ Produces Little Change at Community Colleges.” Most of the original 26 colleges in the project have relied on data to drive strategies designed to increase student achievement. Examples include the introduction of learning communities and college success courses. However, those efforts have not resulted in more students successfully completing courses that are required for degree completion. Lumina acknowledged that meaningful change requires a longer-term effort and plans to continue to support the efforts of the project. The Achieving the Dream Project marks the first time in history that community colleges have undertaken such a major effort in trying to create a culture of evidence to support academic progress and the success of their students (Gonzalez, 2010). The Achieving the Dream Project, though viewed by some as not producing significant change, marks the first multiyear national initiative that is particularly concerned about student groups that traditionally have faced the most significant barriers to success, including low-income students and students of color.

The Center for Community College Student Engagement, a leader in community college research, produced a report titled, *The Heart of Student Success: Teaching, Learning, and College Completion* (2010). Four key strategies

were reported as requisites to both increased levels of college completion and deeper levels of learning. Findings indicate key strategies such as (1) strengthening classroom engagement, (2) integrating student support into learning experiences, (3) expanding professional development focused on engaging students, and (4) focusing institutional policies on creating the conditions for learning. Findings suggest that students want to be challenged and connected to the institution, and they want to be actively involved in learning through creative and innovative ways. If we are to reach the goal of ensuring that more college students attain high-quality certificates and degrees post-secondary institutions will need to consider new ways to create and foster purposeful interactions between students and faculty, between students and student service professionals, and peers. Innovative strategies can ultimately serve as ways to help reshape the American education system by placing emphasis not only on increased access but on increased student progress and success, including course completion rates, persistence rates, and the number of community college student graduates (Center for Community College Student Engagement, 2010; Kuh et al., 2006).

The study, *With Their Whole Lives Ahead of Them* (Johnson et al., 2009) offers firsthand testimony from young adults about the barriers they face trying to earn a degree or credential. The report provides a comprehensive look at why some college students drop out prior to completing their intended educational goals. In trying to solve the perplexing problems behind college attrition the study surveyed 600 young adults, ages 22 to 30 that had at least some higher education coursework. The study was designed to test the assumptions many have when

trying to understand why students fail to graduate. A comparison was conducted between those students who had started college but did not complete a degree with the viewpoints and experiences of those students who had successfully completed a two- or four-year college program. The comparisons were presented in a format design of myth versus reality. The number one reported reason why students drop out of college was due to students' inability to manage their time effectively by balancing work and school. Some might believe most college students leave without a degree because they are bored with their classes and do not want to work hard. The reality however is most students leave college because they are working to support themselves and going to school. At some point, the stress of work and study just becomes too difficult and they are forced to make a choice between work and school. More than half of the participants of this study who left college prior to earning their degree indicated that they "needed to work and make money." Another comparison dispelled the myth that students who do not graduate understand the value of a college degree and the consequences of leaving school prior to completing a degree. The truth is most students who leave college realize that a degree is an asset, but they may not fully recognize the impact dropping out of school will have on their future.

Findings from the study revealed a gap in today's higher education system between the numbers of students who show a willingness to start college with those students who actually leave with earned degrees. This study along with several thought-provoking studies provides possible explanations to "why students leave school without finishing" that can serve to help leaders debate

different ways to tackle the problem of high attrition rates. Possible explanations include: rising tuition costs, poor academic preparation and study skills, and minimal student support (Johnson et al., 2009).

Community college early engagement. An overwhelming amount of evidence supports the fact that student success is largely determined by student experiences during the first year (Center College Center for Student Engagement, 2009a, 2010; Kuh et al., 2005; Tinto, 1993; Upcraft et al., 2005). Comprehensive efforts to integrate first-year students into mainstream collegiate experiences can no longer be treated as auxiliary; instead, research indicates that best practices to integrate students must be supported and fully implemented as soon as students make the commitment to attend college (Center for Community College Student Engagement, 2009b; Kuh et al., 2005; McClenney, 2009). The Survey of Entering Student Engagement (Center for Community College Engagement, 2007) reflects and promotes the confluence of three positive developments, which include that community colleges are (1) becoming more diligent about using evidence to improve practices and better serve students, (2) beginning to serve entering students as a distinct cohort, and (3) using this perspective and data to be more intentional about organizing systems. This research supports the importance of helping entering students feel welcomed and connected to the institution.

The Survey of Entering Student Engagement (SENSE) 2010 Report (Center for Community College Engagement, 2010) introduced benchmarks of Effective Practice with Entering Students in community colleges with the hope of helping community colleges assess their educational practices so they could

improve student outcomes. SENSE benchmarks focus on institutional practices and student behaviors that promote student engagement early in the college experience (Center for Community College Engagement, 2010). These six benchmarks include: (1) early connections; (2) high expectation and aspirations; (3) clear academic plans and pathway; (4) effective track to college readiness; (5) engaged learning; and (6) academic and social support networks. Survey results indicate that when students are asked to describe their early college experiences, they typically reflect on occasions when they felt discouraged or thought about dropping out of school. Their reasons for not dropping out almost always include one comment element: they felt a connection to the college. This connection could have been made with a simple “Hi, how can I help you?” or by a staff member taking the time to help them complete the application process or apply for financial aid. The more students are integrated and feel themselves to be valued members on the campus, the more likely they are to persist (Tinto, 1997).

The design of early engagement programs should include prescribed learning outcomes and assessment tools (Community College Student Engagement, 2009a; Kuh et al., 2005; O’Banion, 2010). If community colleges are serious about producing more graduates, institutional strategic plans must include strategies to meet, welcome, and educate students at the front door. Community colleges not only lose nearly half of their students in the first year but also have no idea how many students they lose during the registration and enrollment process. McClenney (2004) stated, “We need to connect early and connect often. We need to help students set goals and milestones so that they can

see possibilities, so that they have reason to come back to school on Monday, in January, next year” (p.16). Creating a culture that supports the learner helps contribute to the retention of the student (Kuh et al., 2005; Rendon, 2006; Tinto, 2005). Tinto (1998) further suggested that institutions should provide students with structured opportunities to form peer groups and to have interactions with faculty; failure to establish academic integration can often lead to feelings of isolation. A true balance must be achieved between individual student characteristics and attributes and the institution’s expectations and culture (Barbatis, 2008; Harvey-Smith, 2002).

Organizational environments can be created to intentionally foster and enhance student development, learning, and success (Achieving the Dream Community Colleges Count, 2009; Kuh et al., 2005; O’Banion, 1997; Sander, 2008). At the community college, these intentional environments can serve to ease the transition from high school to college. Lack of contextual knowledge and a basic understanding of the culture of college can make the experiences of enrolling in a community college daunting and discouraging; often times these initial experiences play a role in a potential student’s decision not to enroll after all (Bailey & Alfonso, 2005; Conley, 2005; McClenney, 2004; Zalaquett, 1999). The concept of early school engagement, or the extent to which students are committed to and participate in the curriculum or other campus activities, plays a prominent role in theories of educational achievement and attainment (Kuh et al., 2008; Rendon, 2006; Sander, 2008; Tinto, 1993,1998; Upcraft et al., 2005).

College Readiness

Transition from high school to college. The likelihood that students will make a successful transition to the college environment is often a function of their readiness, in other words, the degree to which previous educational and personal experiences have equipped them for the expectations and demands that they will encounter in college (Conley, 2008). Approximately 50% of the national entering college freshman do not meet the placement standards and are not ready for college level work. Three-fifths of students in public 2-year colleges and one-quarter in four-year colleges and universities require at least one year of remedial coursework immediately upon enrolling in college (Horn & Berger, 2004). The level of academic preparedness is a factor influencing the retention and graduation of higher education students (Bailey & Alfonso, 2005; Gates Foundation, 2008; Hamm, 2004). As the number of required remedial coursework increases, so do the odds that that student will drop out of college (Burley, Butner & Cedja, 2001).

A community college advisor explained the disjuncture between high school graduation and preparedness by saying:

Well, I think the biggest thing for them is, here, they've graduated from high school but they come and take our placement test and they're still in pre-college reading, writing, and math and they don't understand that if they stop taking math in their sophomore year that, you know, they don't get it...and I think the sad thing is that they say... "no one told me that I should be taking math all the way through." They just weren't warned or

they don't remember being warned, so now they're paying for it, and that is extremely frustrating. I think it's embarrassing, especially with reading and writing. It's embarrassing to them. And they'll almost start crying because [they'll say]. "I graduated [from high school]." (Venezia, Kirst, & Antonio, 2003, p. 30)

The statements above are a recurring affirmation that there is a breakdown in communication between what institutions of higher education expect of first-year students and the preparation that high school students receive (Kirst & Venezia, 2004; Venezia et al., 2003). Students have aspirations but lack adequate preparation for college because the two systems (secondary and post-secondary) do not provide students with a clear and comprehensive understanding of what it means to be *college ready* (Venezia et al., 2003).

In almost every state, K-12 and postsecondary education systems are governed, financed, and operated independently. As a result, young people face needless obstacles in moving from one system to the next; many students experience great frustration and difficulties in making the transition from high school to college (Conley, 2005). All too often, these difficulties result in students leaving college prior to reaching their academic goals.

Conley (2005) completed a groundbreaking research project to identify the knowledge and skills necessary for college readiness. This project, referred to as *Standards for Success*, analyzed course content at a range of American research universities to develop the *Knowledge and Skills for University Success* standards. Conley (2005) suggests that a key problem in our educational system is that the

current measures of college preparation are limited in their ability to communicate to students and educators the true range of what students must do to be fully ready to succeed in college. In 2007, he made available the *College Ready School Diagnostic*, a web-based tool that assesses how well schools prepare their students for enrollment and success in college. Conley's (2008) project is based on a nationally recognized model of college-readiness, which identifies four areas critical to college-readiness: key cognitive strategies, key content knowledge, academic behaviors, and contextual knowledge.

Students graduating from high school across the nation are also largely unprepared for college or work (Gates Foundation, 2008). The National Commission on the High School Senior Year empathetically draws this conclusion: the high school diploma is a prerequisite for college admission and most jobs, but students who earn one have no guarantee that they are prepared for college-level work or entry-level employment (Gates, 2008; Somerville & Yi, 2002). One significant outcome is the need for remedial high school-level coursework once students enroll in college. A descriptive policy review by the National Association of System Heads in 2002 reported that as many as 50% of all college students must enroll in such non-credit bearing courses to improve basic skills in reading, writing, and/or mathematics (Somerville & Yi, 2002).

College Readiness Must Accompany Access

Venezia et al. (2003) explored the disjuncture between the K-12 and postsecondary sectors, which produce a system that fails to foster a logical sequence of progressive skill attainment for students as they advance from

kindergarten through four years of college (K-16). “This disjuncture can impede successful transitions between the systems and diminishes educational opportunities for many students, particularly for those who are traditionally underrepresented in postsecondary education” (Venezia et al., 2003, p. 1). Creating a seamless K-16 education system for all students is a critical factor for building the future of America. It is essential that underserved students be given the necessary assistance to ensure they complete their degree requirements and in a timely manner (Bailey & Alfonso, 2005; Lotkowski, Robbins, & Noeth, 2004).

Today’s college students are expected to draw inferences, interpret results, support arguments with evidence, solve complex problems, and generally think deeply about what they are being taught. Additionally, college courses require students to be independent, self-reliant learners (Conley, 2005, 2008). College-ready students must have a high degree of self-awareness, self-control, persistence, and intentionality (Conley, 2005, 2008). An increasing number of studies have highlighted the complexity of the contextual knowledge associated with application and acculturation to college. This area is particularly difficult for students who are first in their families to apply to and attend college (Bailey & Alfonso, 2005; Cabrera, Nora, & Castaneda, 1993; Rendon, 2006; Zalaquett, 1999). Education reform programs that seek to improve college readiness and success should be grounded in the belief that a larger number of students can succeed in college given appropriate preparation, motivation, and support (Nodine, 2009). Most students have the intellectual ability to succeed in college. What many students do not have is a clear understanding of college expectations,

meaningful exposure to the college environment, sufficient academic rigor in the K-12 classes, and the habits of mind required for college success. High school graduates must possess the knowledge, habits, and skills that can only come with rigorous, rich, and well-rounded high school curriculum (Conley, 2005, 2008; Gates Foundation, 2008).

First Year College Success

Academic and social integration. Community colleges are not the only institutions of higher education that struggle with unsatisfactory rates of student persistence. There is a multitude of research that tries to explain why some students do not attain a postsecondary degree, even after professing the desire to do so and enrolling in college (Bean, 1990; Pascarella, 1996; Tinto, 1993; Venezia et al., 2003). Tinto (1975) proposes that academic and social integration influence a student's commitment to the institution and to the goal of college graduation. Tinto states that:

The greater the student's level of academic integration, the greater the level of subsequent commitment to the goal of college graduation. Also, the greater the student's social integration, the greater the level of subsequent commitment to the focal college or university. (p.110)

Even though Tinto's integration framework (1993) remains one of the most popular theoretical perspectives regarding student persistence, several studies find Tinto's integration framework to be inapplicable when studying community colleges due to the social integration construct. This is partly due to the fact that community college students are commuter students and have little

time to socialize or become active on campus because of other responsibilities (Karp, Hughes, O’Gara, 2008; Nomi, 2005). Karp et al.’s (2008) study, “An Exploration of Tinto’s Integration Framework for Community College Students,” however, supports Tinto’s theory of integration and its effect on student persistence. The small sample consisted of 44 students from two separate colleges; however, findings indicate that community college students do develop a sense of attachment to the institution particularly during their second year of college and when social integration opportunities are integrated into the classroom. In analyzing the data, it became clear that student participation in information networks was an important mechanism in encouraging both social and academic integration. Information networks were defined as opportunities for students to facilitate the transfer of institutional knowledge and procedures. Students wanted to interact with people who could share college related information; they wanted to learn about professors, course options, and support services (Karp et al., 2008). These information networks included both faculty and peers.

A typical community college response to Tinto’s integration theory has been to implement structured student support services that are meant to encourage integration in the classroom (Karp et al., 2008). The underlying assumption is that if colleges provide structured opportunities for students to engage with the institution and other students, eventually the students will be become integrated into the college and persist at higher rates. Gaither (2005) stated, “Positive experiences and interventions will reinforce persistence through heightening of

individual intentions and commitments, whereas negative experiences will weaken intentions and commitments” (p. 10). This position is particularly important for first-generation and low-income college students because the parents of these students tend to be less academically oriented and oftentimes exert less influence on their children’s education compared to the parents of non-first-generation students (Nomi, 2005).

In Tinto’s (1993) longitudinal model of institutional departure, he describes that a student’s exodus from an institution of higher education often has little to do with academic success. Tinto (1993) explains, “Positive integration serves to raise one’s goals and strengthens one’s commitment both to those goals and to the institution within which they may be attained” (p.116). Conversely, Tinto’s model points out that, other things being equal, the lower the degree of one’s social and intellectual integration into the academic and social communities of the college, the greater the likelihood of departure. Tinto strongly believes that students’ cultural characteristics and individual attributes significantly affect whether they persist to graduation or not. “To be fully effective, college communities, academic and social, must be inclusive of all students who enter” (Tinto, 1993, p.187).

Cultural and Academic Incongruity

Rendon (2006) speaks directly to academic incongruity adding that scholars and policymakers who are interested in the success of underserved students should be cognizant of the fact that the college world and the worlds of middle- and upper-class students are much more congruent with today’s college

environment. It is much more difficult for underserved students to fit in and become socially and academically integrated when they lack cultural capital or an understanding of the college world (Rendon, 2006; Turner, 1994; Valverde, 2008). “College capital” or “college knowledge” has arisen as a term describing what many community college student lack in comparison to their counterparts (Gonzalez, 2010; Valverde, 2008; Vargas, 2004). Turner (1994) describes cultural and academic incongruity by stating, “There are many barriers for students who constantly occupy a guest status that keeps them from doing their best work” (p. 370). Lack of understanding of the college world oftentimes equates to students feeling marginalized and alienated (Gonzalez, 2010; Nomi, 2005). Many students describe the culture of their families and communities and the culture that exists on college campus as being “worlds apart” (Engle, 2007). These feelings of exclusion or alienation have a direct impact on retention and persistence. Success of students is highly dependent on whether or not they are able to establish a support system and connection to the institution (McClenney, 2009).

Adjustment to college life requires that students possess the skills and knowledge necessary for understanding and navigating their way through the system. Underrepresented students often lack the appropriate knowledge and support necessary for making a smooth transition into the college environment, and, therefore, are dependent on the system to provide clearly defined expectations and support (Bailey & Alfonso, 2005; Nomi, 2005). Attrition commonly occurs when community colleges are unable to adequately teach nontraditional and underrepresented students how to successfully maneuver

through the higher education system (Longerbeam, Sedlacek, & Altatorre, 2004; Valadez, 1993).

Community colleges should seek to increase retention of their students by examining practices and policies to determine their effectiveness in helping students achieve academic and career goals. Institutions need to consider student aspirations more carefully while working to help students make informed decisions (Rendon, 2006; Taylor & Haynes, 2008; Valadez, 1993). Students possess the desire and motivation to attend college. What they need is increased confidence and support (Center for Community College Engagement, 2010; Gates Foundation, 2008; Kirst & Venezia, 2004; Rendon, 2006). When trying to deal with cultural and academic incongruity, students often turn to family members for support and direction. But often discover that these family members lack an understanding of college expectations and the culture. Other students form peer groups on campus in an effort to maintain their own cultural identity (Longerbeam et al., 2004). Students' aspirations for attending college are greatly affected by the amount of encouragement and support received from those around them. This includes family, faculty, staff, and peers (Engle, 2007).

Validation, Encouragement, and Support

Numerous scholars agree that Rendon's validation theory (1994, 2000, 2002, 2006) is a vital construct when considering the success of first-year students, particularly low-income, first generation students (Nora, 2003; Terenzini, Pascarella, & Billings, 1996; Woodlief, Thomas, & Orozco, 2003). Research supports the idea of validating experiences through encouragement,

affirmation, and support. Rendon, (1994) explains, “Validation is an enabling, confirming, and supportive process initiated by in- and out-of-class agents that fosters academic and interpersonal development” (p.44). It is through these validating experiences that students develop positive academic and personal growth (Nora & Crisp, 2007-2008; Rendon, 1994; Tenenzini, Springer et al., 1996). This theory is particularly important when considering students who may have experienced invalidation or lack of support during their previous academic experiences or who may have doubts about their abilities to succeed in college (Rendon, 2002, 2006). Rendon’s theory supports the constructs of self-efficacy: a heightened self-efficacy increases a student’s sense of commitment to tackling problems and overcoming obstacles (Bandura, 1977; Solberg et al., 1993).

The theory of validation (Rendon, 1994) has six elements that lend themselves well to the study of non-traditional, first-year community college students. The six elements to this theory are as follows: (1) institutions have the responsibility of initiating contact with students with institutional agents such as faculty and counselors; (2) through validation students feel capable of learning and have a sense of self worth and confidence in their abilities; (3) validation is a prerequisite to student development; (4) validation can occur in and out of class with multiple agents (e.g., faculty, staff, classmates, and peer mentors); (5) validation is a developmental process as opposed to an end itself; and (6) validation is needed early in the student’s college experience especially during the first year of college and the first weeks of class (Center for Community College Engagement, 2010; McClenney, 2009; Rendon, 1994). Because students often

“do not know what they don’t know,” it is important for the institution to provide opportunities for students to learn about the college and the expectations of a college student. Through this process, students begin to formulate questions based on individual needs. Academic and social integration will not occur if students lack self-confidence in their abilities or social efficacy. Positive feedback, support, and encouragement throughout the college experience promote academic excellence and personal growth (Bandura, 1977; Solberg et al., 1993, Solberg & Villareal, 1997).

Validation theory does not assume students can form institutional connections on their own behalf. Models of validation are supported by purposefully designed programs and services for which college faculty and staff take the initiative in reaching out to students (Center for Community College Engagement, 2009a, 2009b, 2010; Kuh et al., 2005; O’Banion, 1997; Rendon, 2002, 2006). Programs such as GEAR UP and TRIO provide a continuum of support for economically and educationally disadvantaged students. A key element to these programs is providing participants with validation and support throughout their college experience (Engle, 2007).

There are two types of validation. Academic validation occurs when in- and out-of-class agents take action to assist students to “trust their innate capacity to learn and to acquire confidence in being a college student” (Rendon, 1994, p. 40). Interpersonal validation occurs when in- and out-of-class agents take action to “foster students’ personal development and social adjustment” (Rendon, 1994, p. 40). Before underserved students can choose to be become actively involved

both academically and socially, their efforts and desires must first be validated, supported, and encouraged (Engle, 2007; Gandara & Moreno, 2002; Rendon, 2006; Taylor & Haynes, 2008).

The Puente Project, a twenty-year collaborative partnership between the California community colleges and the University of California, is among the most recognizable programmatic efforts targeting Hispanic community college students. Its goal was to increase the number of educationally underserved students who transferred from two-year to four-year institutions and earned degrees. An important documented component of the Puente project was how it addressed the unique needs of Hispanic students by affirming their ethnic identities and validating their experiences through curricular offerings (Gandara & Moreno, 2002). Puente was one of seven programs nationwide to offer three or more types of counseling services and the only program to use comprehensive personal enrichment and social integration strategies (Gandara & Moreno, 2002). Students were offered regular interaction with a Puente counselor as well as a community mentor who served as a positive role model. Approximately 50% of Puente students who completed the Puente program transferred to a four-year institution within three years (Gandara & Moreno, 2002). Programs that target early intervention, such as Puente, expose students to culturally validating environments, help in the success of their participants, and provide a template in designing programs geared toward increased persistence and transfer of Hispanic students.

Self-Efficacy Theory

Bandura (1994) claims, “People with a high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided” (p.1). Drawing from social cognitive theory, self-efficacy is related to a number of psychological and competence-based constructs. An important feature of self-efficacy is that it is domain specific meaning that self-efficacy judgments are specific to certain tasks in certain situations (Bandura, 1997). Self-efficacy can be operationalized and studied within a variety of domains: academic, social, career, and athletics areas (Bandura, 1997). Self-efficacy is believed to be an important factor contributing to high levels of intention to remain enrolled in college. Bandura (1997) states,

Efficacy beliefs influence the course of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles, and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with environmental demands, and the level of accomplishments they realize.

(p.3)

Self-efficacy is applicable to the study of college adjustment because the sources of self-efficacy expectations (e.g., mastery, persuasion, and physiological feedback experiences) (Bandura, 1986) can be incorporated within higher education intervention, first year transition, and outreach programming efforts (Gore et al., 2006; Solberg & Villareal, 1997). The link between self-efficacy and

college outcomes has been well documented (Lent, Brown, & Larkin, 1984; Multon et al., 1991), yet it was not until 1993 that self-efficacy was applied to the study of the personal adjustment of Hispanic college students (Solberg et al., 1993). Solberg and Villareal's study (1997) specifically focused on Hispanic college students and found that Hispanic students who perceived social support as being available had lower distress ratings than students who perceived social support as not available. Additionally, social support was found to moderate the relationship between stress and distress.

Student Success Initiatives

College success courses. Over the past two decades, literally thousands of first-year experience (FYE) courses/programs have been created to help increase student retention (Barefoot & Keup, 2005; Hunter & Linder, 2005; Porter & Swing, 2006). Results from a study by the study *Achieving and Sustaining Excellence in the First Year of College* reveal that 94% of accredited four-year colleges and universities offer a first-year seminar at their institutions (Barefoot & Kemp, 2005). Student success courses are designed to increase service and support to first-year students (Barefoot & Keup, 2005; Hunter, 2006). For many new students, college presents a foreign set of norms and traditions and a new language and environment; these courses serve to acquaint students with services and resources while at the same time providing students with opportunities to adjust to their new environment (Hunter, 2006; Porter & Swing, 2006). College students do not become successful college students simply by enrolling in college (Hunter, 2006). Student success requires intentional effort by the institution

(Hunter, 2006; Hunter & Linder, 2005). Barefoot and Keup (2005) found that participation in a first-year seminar has positive effects on both social and academic experiences while in college such as academic performance, student involvement, and retention. The concept of a first-year success courses can be compared to the armed forces basic training program designed to produce competent soldiers in that these courses provide students with tools and knowledge to help them be successful (Barefoot & Kemp, 2005; Hunter, 2006). Student success courses are typically designed to help students introduce students to the college environment so that they are able to successfully navigate their way through a college system and to increase self-awareness and personal effectiveness (Ellis, 2003; Hunter, 2006; Pascarella & Terenzini, 2005; Upcraft et al., 2005).

The use of the classroom has become central to the many efforts to promote first-year student success particularly since researchers have shown that students enrolled in student success courses on average earn higher grades in their other first-year courses and are less likely to be placed on academic probation (Barefoot & Keup, 2005). The classroom also provides opportunities for increased social integration (Barefoot & Keup, 2005). Research has been able to show the impact of participation in college success courses and persistence; however, our understanding of these courses is limited by the lack of research that disaggregates the many components of student success courses. It is not clear which course contents/competencies (e.g., explanation of campus policies and procedures, emphasis on campus resources, study skills or encouragement for

students to become involved) most contribute to increased persistence.

Understanding which aspects of a college success course have the greatest impact on persistence could inform faculty and student support staff about where to concentrate their efforts (Porter & Swing, 2006).

Mentoring

Traditionally, mentoring relationships have been defined in terms of age and hierarchy whereby a senior or elder imparts some form of important knowledge, guidance, and friendship to someone younger and less experienced (Jacobi, 1991; Kram, 1988). Mentoring relationships in a twenty-first century context are complex and undefined. In fact, there is not one single definition for a mentor, and often given definitions are inconsistent and conflict with each other (Nora & Crisp, 2007-2008; Budge, 2006). “The result of this definitional vagueness is a continued lack of clarity about the antecedents, outcomes, characteristics, and mediators of mentoring relationships despite a growing body of empirical research” (Jacobi, 1991, p. 505). Jacobi (1991) provides a literature review on mentoring and undergraduate academic success, which delineates 15 definitions of mentoring derived from education, management, and psychology. Mentoring appears to mean one thing to development psychologist, another thing to the business world, and a third thing to those in academic settings (Jacobi, 1991). Although Coles (2011) confirmed that there are over 50 different definitions of mentoring in the social science, common characteristics of mentoring have emerged in the literature (Eby, Rhodes, & Allen, 2007). These characteristics include a learning partnership between a more experienced and a

less experienced individual (Garvey & Alred, 2003), a process involving emotions (acceptance, support and friendship) and instrumental functions which include providing information, coaching and advocacy (Jacobi, 1991; Kram 1988).

Mentoring in higher education. Due to the prevalence and positive impact of mentoring on student development there has been an increase in recent research on its various dimensions (Coles, 2011; Nora & Crisp, 2007-2008). However, there is a lack of empirical research that focuses on outcomes instead of just process and there is still a need to clearly identify the links between mentoring and academic success particularly given the fact that mentoring is increasingly being looked at as a retention and enrichment strategy (Coles, 2011; Eby, Rhoades, & Allen, 2007; Jacobi, 1991; Nora & Crisp, 2007-2008).

Mentoring in higher education can take on many forms but generally falls into two categories, formal and informal relationships (Smith, 2008; Wallace, Abel, & Rosper-Huilman, 2000). Formal mentoring relationships develop through structured programs (similar to the one in study) in which students are intentionally matched with their mentor (Wallace et al., 2000). Formal mentoring relationships are typically limited in their duration and have specific goals and objectives that involved parties have agreed upon (Wallace et al., 2000). In contrast, informal relationships develop more spontaneously, oftentimes without specific goals and without a defined timeline. Informal relationships can be somewhat ambiguous since often they lack a specific objective (Wallace et al., 2000). The majority of research on mentoring has focused on assessing the impact of formalized mentoring programs on the academic success of student

participants. Although this research has identified many factors that overlap between different aspects of mentoring and integration and validation in the persistence research (e.g., academic involvement and validating students in and outside the classroom) mentoring research to date is limited to a small number of disconnected studies, is still fragmented, and without a firmly guided theory to support undergraduate academic success (Nora & Crisp, 2007-2008). Overall findings however, indicate that mentoring efforts, some how increase student retention rates (Nora & Crisp, 2007-2008; Smith, 2008; Wallace et al., 2000) and even though both types of mentoring serve different purposes students claim both informal and formal mentoring have value. Without additional research on both types of relationships; it is hard to determine the advantages of one over the other (Wallace et al., 2000).

Nora and Crisp (2007-2008) identified four dimensions associated with mentoring. The four major domains supported by the literature were identified as: 1) psychological or emotional support, 2) goal setting and career paths, 3) academic subject knowledge support, and 4) the existence of a role model.

Psychological or emotional functions in the college context refer to the personal and social development of students including levels of competency, self-efficacy, knowledge and skills to help them be successful in college. This construct also encompasses providing moral support by helping the student (mentee) to identify solutions to problems while developing a mutual understanding and link between the student and the mentor (Kram, 1988; Nora & Crisp, 2007-2008; Smith, 2008).

Educational/career goal-setting functions refer to the development of skills related to career efficacy including picking a major and developing an educational and career plan. This domain suggests that an assessment of the student's strengths/weaknesses and abilities be explored in order to assist students with academic/career goals and decision making (Nora & Crisp, 2007-2008; Smith, 2008).

Academic subject knowledge support, centers on the acquisition of necessary skills and knowledge aimed at advancing a student's knowledge relevant to their chosen field (Kram, 1988). It is within this construct that mentors encourage their mentees to have academic knowledge that is specific and necessary to attain a career goal and encourages students (mentee) to develop a comprehensive educational and career plan (Nora & Crisp, 2007-2008).

The last identified domain, role model, concentrates on the ability of the mentor to clearly share their own experiences with their mentee in a manner in which the mentee can learn from the mentor's present and past actions and achievements/struggles. In this dimension, emphasis is on the sharing of personal stories and life experiences. It is through this domain that the mentor tries to personalize the relationship between himself/herself and the mentee (Kram, 1988; Nora & Crisp, 2007-2008).

Peer mentoring. Several researchers make the assertion that peers are the most powerful influence on students' development in college (Astin, 1993; Chickering & Reisser, 1993; Swenson, Nordstrom, & Hiester, 2008). Astin (1993) suggests that students engage with each other at least twice as much as they

engage with faculty or student affairs professionals and claim that peer relationships are easier for students to maintain and establish due to the fact that they share common experiences both on and off campus (e.g., living with roommates, learning to budget their finances, long study hours). These common experiences help to facilitate the learning of students (Colvin & Ashman, 2010).

Pascarella & Tenenzini (2005) acknowledge that recent research, for the most part, has not defined the “precise nature” of peer mentoring relationships and influence on college (p. 418). Research, however has established that peer relationships are an integral portion of most students’ experiences in college indicating that peer mentors take on an “important role” because of the absence and lack of faculty mentoring (Pascarella & Terenzini, 2005, p. 103). Peer mentoring can provide an alternative way of providing students with a holistic support system (Nora & Crisp, 2007; Smith, 2008). Social integration and social support theory is relevant to mentoring because it acts a buffer and assists students in working through their academic, personal and social stresses (Jacobi, 1991). Jacobi (1991) argues that in the context of academic and social integration, mentoring impacts students’ academic progress and subsequent retention.

Connection link. Peer mentors serve as a connecting link to help less experienced students get connected to their institution both in and out of the classroom (Sanft, Jensen, & McMurray, 2008). Peer mentors can help students successfully transition from high school to college by offering a sense of consistency during this transition, in addition to helping them feel more connected and engaged on campus (Coles, 2011; Community College Survey of Student

Engagement, 2009). Upcraft (2005) speaks directly to the importance of developing effective programs for first-year students suggesting that these programs need to provide a family-like social and academic support system, a system which includes opportunities for more experienced students to be supportive of new students by helping them become more familiar and integrated to the campus environment. Students report wanting someone to help them feel comfortable on campus and want someone to teach them about campus resources and opportunities (Coles, 2011).

Peer leader. Peer mentors are often described as leaders who motivate and guide their mentees. Additionally, they encourage their mentees to get involved on campus, to study more efficiently, and to define their academic goals. Peer mentors are often described by mentees as having leadership qualities and a comprehensive understanding of how to navigate through the college experience thereby making them an example to all students not just their mentees (Coles, 2011; Colvin & Ashman, 2010). Peer mentors' provides mentees with hands-on, real-time assistance that can benefit students throughout the college-going experience.

Learning coach. Peer mentors are sometimes referred to as learning coaches or individuals who can help students identify their strengths and styles so that they can achieve their potential. Peer mentors also serve to teach students important academic and life skills (Sanft et al., 2008). The role of a learning coach is to encourage students to forge ahead and persist toward achieving their learning goals (Gandara & Mejorado, 2005; Colvin & Ashman, 2010). Mentors

should provide mentees with positive and encouraging feedback. Students who view their academic experiences as positive and feel they are valued members of the institution are more likely to persist compared to those students who do not have positive experiences (Nora & Crisp, 2007-2008; Rendon, 1994).

Student advocate. Students describe peer mentors as a liaison between the student and the instructor. Often time students don't feel comfortable going directly to an instructor when they perceive a problem or need additional guidance. Peer mentors provide students with an opportunity to discuss the issues prior to having to go directly to the instructor. This processing of information often provides the mentee with clarity and a greater understanding of the instructor's expectations or general college expectations (Colvin & Ashman, 2010; Gandara & Mejorado, 2005).

Trusted friend. The mentoring relationship often can transition to one of friendship, which might involve a deeper level of trust and exchange of personal information on the part of both the mentor and mentee. Depending on the length of the relationship and the level of connection between the mentor and mentee the working relationship can extend well beyond the originally defined timeline (Colvin & Ashman, 2010; Smith 2008). Colvin & Ashman (2010) found that female mentors focused on the actual relationship with their mentees whereas male mentors focused more on the outcomes of the relationship (i.e., improved grades and overall academic performance) not just for the students they worked but for themselves as well.

Impact of mentoring on college success. Studies suggest mentoring has a positive impact on students' persistence and academic achievement (Crisp & Cruz, 2009) and helps prepare students for successful careers (Schlosser, Knox, Moshovitz, & Hill, 2003). Minority college students who are mentored are twice as likely to persist and earn higher grade point averages compared to students who are not mentored. (Crisp & Cruz, 2009). Additionally, students who are mentored during their first year of college or while still in high school are more likely to return to college for a second year (Gandara & Mejorado, 2005; Terenzini, Pascarella, & Bliming, 1996). Outcomes of mentoring are dependent on effective practices and the quality of the services or programs offered. College administrators are encouraged to instill a process that involves dimensions of planning, mentor recruitment, training, service delivery and program effectiveness (Coles, 2011).

CHAPTER 3

RESEARCH METHODOLOGY

Action Research

Action research is relevant for improving practices in education because it provides a frame of reference that permits the researcher to be intimately familiar and involved with the phenomenon (Herr & Anderson, 2005; Stringer, 2007). The focus of action research is on specific situations and localized solutions; therefore, the results are not intended to be generalized explanations that might be applied to broader contexts (Stringer, 2007). Instead, this type of research specifically refers to a disciplined inquiry done by a practitioner/professional with the intent to increase the effectiveness of the work in which he/she is engaged by focusing on areas that need improvement (Stringer, 2007). The process behind action research is intended to be relatively short in nature and encourages education practitioners to make immediate changes to their environments based on their findings (Herr & Anderson, 2005; Stringer, 2007). As Coordinator of Student Success Programs at Estrella Mountain Community College (EMCC) in Avondale, Arizona, I am responsible for assessing the effectiveness and efficiency of campus-wide interventions designed to support first-year students with their transition to college. One of my institutional responsibilities is to continuously evaluate and measure the effectiveness of campus-wide programs supported by the Division of Student Affairs (Mills, 2003; Stringer, 2007). As an insider in the organization, I am positioned to collaborate with other insiders to improve the experience of

EMCC students through a continuous process of reflection, learning, change, and improvement (Herr & Anderson, 2005; Stringer, 2007).

The purpose of this action research was to evaluate the effectiveness of two course formats of a college success course: the first format uses support of a peer mentor(s) and the second format does not use support of a peer mentor(s) on developing the self-efficacy of first-year community college students. This study will help to determine the value of peer mentor's role as it relates to the confidence of community college students enrolled in college success courses. This study also serves as an opportunity to engage in collaborative discussions with my community of practice about the needs of first year college students and efforts to promote student success (Dick, 2002, 2006; Stringer, 2007). This data-driven approach was responsive to the situation and appropriate for this study since I wanted to determine the effectiveness of both class formats and their impact on students' beliefs in their abilities to successfully perform a variety of college related tasks, thereby contributing to increased retention and persistence rates (Stringer, 2007). My goal as the researcher and practitioner was to improve my own practice and to help provide students at EMCC with proven student success strategies. Action research is described as a regular cycle of planning, action, and review (Dick, 2002; Stringer, 2007). This method of research allowed EMCC and myself, as Coordinator of Student Success Programs, an opportunity to review the current peer mentor program, make necessary changes, and collect data representative of the changes to inform future improvements.

The peer mentor program at EMCC is currently funded by three highly competitive and limited campus funding sources that include Title V federal grant monies, Student Success Initiative funding from the Maricopa County Community College District (MCCCD), and International Student funding, a source directly absorbed by the institution. By gaining a better perspective of how the peer mentoring program was affecting students at EMCC, I was also able to assess the institutions' investment in the program (Stringer, 2007) and identify new and diverse strategies to better utilize and/or expand the peer mentor program in order to further increase the college's investment toward increasing student success (Herr & Anderson, 2005; Stringer, 2007).

Research Design

The purpose of the formal collection of data was to evaluate the impact peer mentoring had on developing the self-efficacy of first-year community college students. Two sets of data were included: (1) data from participants enrolled in a class format supported by a peer and (2) data from participants who were enrolled in a class format not supported by a peer mentor. Participants in this quantitative study received survey questions (see Appendix A) that were identical for each data set. The only difference in the two surveys was a statement included in the instructions which referenced the intervention (e.g., a student success course and/or peer mentor program) the instrument was administered in the second to last week of the spring semester in sections of CPD 150 in which the instructor had agreed to participate in the study (see Appendix B).

Non-Experimental Design

Because this research involved a setting where it was impossible to control for all the relevant variables except a few, a non-experimental design was selected as the methodology for this study (Gay et al., 2009; Pearson, 2010). I chose to use a comparative evaluation data analysis approach to determine whether peer mentoring had an impact on the college self-efficacy of those students enrolled in a college success course (CPD 150). Evaluation research allows the researcher to compare the effectiveness of a program that has the same objectives but different content by using the same set of outcome measures (Creswell, 2009; Weiss, 1997). Course content and competencies were the same for both course format models. The difference was that six course sections were supported by a peer mentor and six sections were not supported by a peer mentor. For purposes of this study, participants were enrolled in a CPD 150 course during the spring 2011 semester. A comparative evaluation was conducted by comparing survey data from those students who received support from a peer mentor with data from students who did not receive support from a peer mentor. My overall objective of this study was to determine the effectiveness of peer mentoring and college success courses on developing the self-efficacy of first-year community college students. Although the course objectives were the same in all courses, regardless of the format, the role of the peer mentor was to provide additional support in- and out-of-class by reinforcing course objectives and providing students with additional information and support as related to the broader college experience.

Survey Instrument: College Self-Efficacy Instrument

Solberg et al. (1993) were interested in examining the relationship between self-efficacy and college adjustment, specifically of Hispanic students. Their study was prompted by the large increase of Hispanic students enrolling in college and the large attrition rate of this specific population. Solberg and colleagues believed that in order to develop relevant programs to facilitate academic performance for Hispanic college students, research needed to identify the determinants associated with all aspects of Hispanic students' college adjustment (Solberg et al., 1993; Solberg & Villareal, 1997). Solberg et al.'s study (1993) supports the conceptual idea consistent with available models of Hispanic mental health that self-efficacy expectations are a determinant of Hispanic college adjustment. Vega, Hough, and Miranda (1985) postulate that self-efficacy may play a role as a coping mechanism in facilitation involving Hispanic students' mental health. Vega et al. (1985) describe Hispanic mental health has being the result of three broad interactive factors: background characteristics, stressors, and mediators. Results of their study suggest self-efficacy can serve as a type of mediator that could serve to facilitate college adjustment among students experiencing stress. The purpose of Solberg and Villareal's (1997) study was (1) to propose that self-efficacy theory plays an important role in understanding Hispanic college adjustment and (2) to validate a college efficacy instrument that would assess the degree of confidence Hispanic students have in their ability to successfully perform a variety of college-related tasks (e.g., taking notes, asking a question in class, etc.) (Solberg & Villareal,1997). The instrument used in this

study was the College Student Self-Efficacy Instrument (CSEI). CSEI serves as a measure of self-efficacy for the broader college experience and is often administered to first-year college students (Barry & Finney, 2009; Gore et al., 2006; Solberg et al., 1993; Solberg & Villarreal, 1997). The CSEI is a self-report instrument specifically designed to measure “the degree of confidence students have in their ability to successfully perform a variety of college-related tasks” (Solberg et al., 1993, p. 88). The CSEI was developed to more fully understand the impact of self-efficacy on students’ adjustment to college by encompassing self-efficacy for the academic, personal, and social domains of college. Solberg et al.’s (1993) findings suggest that self-efficacy theory is as an important determinant in Hispanic college students’ adjustment to college; the study also validated the College Student Self-Efficacy Inventory (CSEI) as an instrument for understanding the self-efficacy development of college students, particularly Hispanic college students (Solberg et al., 1993). Findings from Solbergs et al.’s study (1993) also indicated that comfort with the environment and a student’s self-efficacy beliefs, as measured by the CSEI, proved to be significant predictors of academic persistence intentions.

The CSEI was used to assess self-efficacy in the current study; this instrument is the only known self-efficacy instrument that recognizes that college students’ academic performance encompasses more than just academics.

Although past research has examined the association between self-efficacy and academic performance in a specific academic domain, the degree to which self-efficacy contributes to the overall academic performance and adjustment of

college students is still not fully known. The CSEI was designed to further understand the determinants of successful academic behaviors, as well as the interventions necessary to increase student retention (Solberg et al., 1993). The CSEI includes items that assess the respondent's self-efficacy for academic, social, and personal tasks and challenges that a college student is likely to encounter (Gore, 2006; Gore et al., 2006; Solberg et al., 1993). While the CSEI is theoretically broad, items on the survey retain sufficient specificity to be relevant to an assessment of college students' self-efficacy. For example, items ask respondents to indicate the degree to which they believe they can make new friends at college. Reliability of the CSEI was established for internal consistency using coefficient alpha. Internal reliabilities have been reported at .92 to .93 (Gore et al., 2006; Solberg & Villareal, 1997) as well as convergent and discrimination validity (Barry, & Finney, 2009; Gore et al., 2006; Solberg et al., 1993).

The survey is consistent with college student development theory (Astin, 1997; Solberg et al., 1993; Tinto, 1993, 1998), and findings from previous studies suggest that the broad measures of self-efficacy, and the CSEI in particular, are effective and at the appropriate level of specificity for assessing the association between self-efficacy and college students' academic performance (Gore, 2006; Lent et al., 1984; Solberg et al., 1993). There are two reasons the college self-efficacy items were designed to address episodes common to all students. First, much of the episodic experiences at college are not culture-specific but are expected to play a role in college adjustment. For example, all college students, regardless of individual backgrounds and experiences, will at some point in their

college career complete an exam, be expected to engage in classroom discussions, or interact with college personnel on some level. Second, developing a pool of items that address common episodes allows future research to have the flexibility needed to address the role of college self-efficacy within the culture of any given institution (Solberg et al., 1993). The principle components of the 20-item instrument for this study yield three subscales: academic (or course) self-efficacy, social self-efficacy, and social integration efficacy (See Appendices G, H & I). Academic or course efficacy pertains to course performance. Social efficacy is related to interpersonal and social adjustment including speaking in a class or to school personnel. Social-integration efficacy refers to connection to the institution. The 20-item instrument survey took approximately 10 minutes to complete (see Appendix A). Items on the survey were phrased to follow the statement: “How confident are you that you could successfully complete the following tasks: . . . ” and were rated on a 10-point scale ranging from 0 (*not at all confident*) to 10 (*extremely confident*).

Because Estrella Mountain Community College’s student body is 34% Hispanic, the CSEI survey instrument was ideal in assessing the principle factors considered to be important to student persistence: academic self-efficacy, social self-efficacy, and roommate efficacy. Solberg et al.’s study was originally designed to measure roommate efficacy (e.g., socializing with roommates, dividing apartment space). For purposes of this study, questions pertaining to having a roommate and /or other residential living were omitted since EMCC is a commuter campus and does not offer living accommodations. A social

integration-efficacy sub-scale replaced the roommate-efficacy sub-scale in order to capture self-efficacy factors directly related to EMCC's student body.

Setting of action. Estrella Mountain Community College (EMCC), the community college in this study, is one of ten colleges, two workforce skill centers, and multiple service centers that make up the Maricopa Community College District in Arizona. EMCC, founded in 1992, provides educational opportunities, workforce training, and community education programs for the entire western Phoenix metropolitan population. Located in one of the fastest growing regions of the county, EMCC enrolls approximately 13,000 students annually and is master planned to be a large comprehensive Learning College of more than 40,000 students by the year 2020.

Participants. The recruitment process began by inviting the cooperation of all Spring 2011 CDP 150 course instructors via campus email. Faculty members who agreed to allow their classes to take part in the study responded via email agreeing to cooperate with administering the study. Potential participants of this study were students enrolled in a face-to-face college success course during the time period of January 17, 2011 through May 13, 2011. The original sample was drawn from the 270 students (198 enrolled in a course format supported with a peer mentor (s), 82 two students were enrolled in a course format not supported with a peer mentor(s)) enrolled in twelve section offerings of the course during the spring 2011 semester.

Operational definitions. The treatment for this study was college success courses and the support of peer mentors. Although CPD 150 is often referred to as

a freshman or first-year experience course, it is not limited to first-year students only. There are no prerequisites; therefore, students who enrolled in the course had varied degrees of academic abilities and post-secondary experiences. This class focused on increasing student success through college orientation and personal growth, study skills development, and educational and career planning (for the syllabus see Appendix C). In 2008, the Maricopa County Community College District (MCCCD) began implementing required steps for enrollment for new, first-time, full-time degree seeking students. These steps required students to 1) take the assessment placement test, 2) receive academic advisement, and 3) participate in new student orientation. As a part of the EMCC process, students who placed in one or more developmental education courses were *strongly advised* to take CPD 150. As a result, CPD FTSE (full-time student equivalency) increased from 12.4 in Fall 2007 to 118.9 in Fall 2010. This represents an increase of over 800% in students taking college success courses. CPD 150 ranked seventh among EMCC's Top 25 Courses for the 2009-2010 school years (Estrella Mountain Community College, 2011). Due to this district-wide student success initiative, college personnel (advisors, counselors, and enrollment staff) were highly encouraged to recommend CPD 150 to students who met the defined parameters. This recommendation was not mandated at the time, meaning students were not forced to enroll in a college success course or denied specific enrollment abilities if they chose not to enroll.

Due to costs associated with the peer mentor program (i.e., student payroll, faculty training) peer mentors had not been integrated into all CPD 150

sections. In the schedule of courses, individual course sections are not identified as including peer mentor or not including it, so students do not have the opportunity to select a particular section based on the support, or lack, of a peer mentor. Prior to the beginning of each semester, CPD 150 faculty section assignments were made (these assignments included both residential and adjunct faculty). The placement process used at the time of the study allowed CPD 150 faculty members to choose whether or not they wanted a peer mentor to support their class. Peer mentors were placed into sections based on their work availability. A faculty member of the counseling department served as the program facilitator thereby making peer mentor course section assignments. On the first day of class, faculty members made an announcement introducing the peer mentor and the program objectives. At this time, students were given the opportunity to withdraw from the section. Otherwise all students enrolled in the particular section were expected to fully participate. Few students withdrew from CPD 150 sections after the announcement regarding the peer mentor. Students choosing to remain in the course section were required to sign a contract agreeing to participate and abide by all program expectations.

Data collection. This study occurred in two phases. Phase one was the pilot study; phase two was the dissertation study. The pilot study served to evaluate the College Student Self-Efficacy Inventory (CSEI) to determine if adapting this tool to the community college setting was feasible. The pilot study examined the implementation process of the survey specifically to determine if the instructions to the survey were clearly written and if participants could easily

understand the questions. Participants from the pilot study were drawn from students who had completed a college success course (CPD 150) at Estrella Mountain Community College in Fall 2010. The sample was a convenience sample of three students with whom I had a professional relationship and believed would be willing to take the survey and provide candid feedback on the survey experience. The pilot study was administered after receipt of IRB approval from both Maricopa Community College District and Arizona State University (See Appendix J). Based on the feedback received from the pilot study, modifications to the process of administering the survey and/or survey instrument were made.

The purpose of the formal collection of data, or the dissertation study, was to create a systematic process to collect and analyze data specific to the two course format models in order to evaluate the effect peer mentoring and a college success course had on developing the self-efficacy of first-year community college students. It was assumed that understanding the relationship between the two course formats and development of students' self-efficacy would provide useful insight into the effectiveness, merit, or value of the course, support programs (peer mentor), and overall student success and retention rates of students in a CPD 150 course. The study included two data sets: (1) data from students enrolled in a course supported by a college sponsored peer mentor and (2) data from students who were enrolled in a course section not supported by a peer mentor. The same survey instrument was administered to both groups in the study: those CPD 150 students who *were* supported by a peer mentor and those students who *were not* supported by a peer mentor enrolled in a CPD 150 course.

Survey questions were identical; the only difference in the two surveys was a statement included in the instructions (See Appendix A). For those students enrolled in a section supported by a peer mentor, the instructions read, “Using the scale below, please indicate how confident you are now that you have *taken CPD 150 and have been supported by a peer mentor* at Estrella Mountain Community College” For those students enrolled in a section not supported by a peer mentor, the instructions read “Using the scale below, please indicate how confident you are now that you have *taken CPD 150* at Estrella Mountain Community College”

The CSEI was administered in the second-to-last week of the spring semester in sections of CPD 150. Faculty members from twelve of the fourteen sections agreed to participate in the study. The courses under study were 16 weeks in length. Administering the instrument in the 14th or 15th week assumed that if the intervention of the peer mentor and/or the CPD 150 had some level of effect on the students’ self-efficacy as it related to college tasks, that effect would be apparent by that point in the semester. Bandura (1997) wrote that prior experiences build self-efficacy toward future tasks. The more a person believes in his/her ability to successfully perform specific tasks the more motivated he/she will be to engage in the task, indicating that students’ experiences with a peer mentor and CPD 150 course would positively contribute to self-efficacy development. Based on the findings of this research, EMCC may choose to administer a pre-test measure followed by the treatment (peer mentor and/or CPD 150) and a post-test in future course sections in order to capture another set of

data as it relates to self-efficacy of first-year students (Creswell, 2009; Pilkington, 2009).

Faculty were asked to administer the survey by paper in class, as opposed to online, because this approach typically increases the chance of producing a sample size of at least 25% or, for this study, at least 70 out of the 141 surveys for the students who participated (Pearson, 2010). Administering the survey in person or to a captive audience, in this case during regular class time, may have produced a greater rate of return than if the surveys had been mailed or emailed to students once the semester had concluded (Gay, Mills, & Airasian, 2009). Since faculty members facilitated the distribution and administration of the survey, participants were not inconvenienced or made to feel uncomfortable by having an outsider interrupt class and ask for their participation.

The CSEI was chosen due to a variety of factors including cost, time, simplicity, and convenience. Administering the surveys in the classroom eliminated the need for postal related costs, and surveying on-campus was relatively inexpensive; the only cost incurred consisted of printing the surveys and buying individual envelopes for each course section. This method eliminated the need to contact potential participants on an individual basis; instead, the research project was announced to the entire class during a regularly scheduled class session. This process saved time, and there was no need to send reminder notices to potential participants.

One week prior to the date the survey was scheduled to be administered, I supplied all cooperating faculty members with a sealed envelope that included a

written script to be read to their classes explaining the study. They also received a brief summation of the timeline involved in the study. This timeline included a suggested timeline for administering the survey and a timeline for returning the surveys. This information was clearly written directly on the envelopes containing the surveys and other information. The envelope was marked with the appropriate course section number and faculty member's name. Students' names were not collected as part of the survey to ensure the identity of the participants remained anonymous. Additional enclosures included the survey questionnaires (CSEI) and student informed consent letters (students did not sign consent forms in order to protect their identity) (see Appendix D). A returned survey served as their consent to participate in the study. Participants were informed that their participation was voluntary and they had the choice not to complete the survey. Students' performance in the course was not affected (via penalty or incentive) in any way. Participants were asked to use a number-two pencil as survey results would be read by an electronic scantron.

Although students' identities were protected, the questionnaire was designed to capture pertinent demographic (i.e., gender, age group, educational background, future intent, ethnicity, and family educational level) data on participants (Gay et al., 2009; Pearson, 2010). The objective of this study was not intended to be generalizable, but the survey data can be used to determine whether information acquired from the sample of this study is relevant to other individuals or groups, particularly those of other two year colleges interested in studying the

effectiveness of peer mentoring and college success courses and their connect to the success of first-year students (Stringer, 2007).

Participating faculty members all agreed to administer the survey at the beginning of the class period. This process allowed for few interruptions during the time students were completing the survey. This created consistency in the delivery of the survey amongst the different course sections. Seven instructors administered the instrument in one course meeting during the second to last week in the semester of their section of CPD 150. The survey was administered in each section only once (absent students were not given another opportunity to participate in the study). Three instructors administered the survey in multiple sections. When students completed the instrument, the faculty member returned the completed surveys to the envelope provided and returned all materials to me either by dropping the surveys off at my office or via campus mail.

Data collected was intended to capture the participants' perceptions and was not intended to be generalizable (Gay et al., 2009; Mills, 2003; Stringer, 2007). The data was analyzed to discern the sample perceptions' of their self-efficacy development based on their experiences of the course format in which they were enrolled. Data was aggregated into two data sets: (1) those participants enrolled in a course format supported by a peer mentor(s) and (2) those participants enrolled in a course format not supported by a peer mentor(s).

Data analysis. The CSEI provided a post-hoc summation of each sample-participant's perception of college self-efficacy after having completing 14 of the 16 weeks of the college success course. Post-hoc summation is when the

researcher reviews the data after the experiment or treatment (in this case, two course formats of CPD 150) and then analyzes the data. The assumption is that the intervention may have an effect on the outcome, which in this study is the samples' perception of self-efficacy. A data analysis was conducted once all surveys had been returned. Faculty names and course sections were included on each envelope in order to help the researcher track the return of surveys. Although survey packets were marked with instructors' names and course sections, it was not the researcher's intent to determine whether non-controlling factors such as individual faculty members had an influence on the overall findings. Additionally, data was not analyzed for an individual course section, nor was data associated with a specific instructor or specific peer mentor. The researcher acknowledges that there were several non-controlled variables that could have had a major effect on the findings. They include: (a) whether or not the faculty member was residential vs. adjunct, (b) faculty member selection of course format, (c) process of assigning peer mentors to course sections, (d) time of day course was offered, (e) process in which student enrolled in the course, (f) whether the student and/or advisor selected the CPD section based on time of offering vs. a prescribed intervention, and (g) if the course section was identified (or not) as being supported by a peer mentor.

Remark® Office Optical Mark Recognition (OMR) scanning software was used to tabulate and analyze data from the plain paper survey forms. The scanning software helps minimize potential hand tabulated data recording errors. Student survey item response frequencies, produced through *OMR*, enabled the researcher

to explore response patterns pertaining to the three principal components of analysis (academic self- efficacy, social self-efficacy, and social integration efficacy). Response data revealed a majority (98%) of the surveys were completed in their entirety. Four individual sample-participants failed to fully complete one demographic item. The absent demographic data was not part of the College Self-Efficacy Inventory. It was determined that because the missing individual information did not detract from, nor alter, the intent of the measured variable items, the surveys were considered in the analyses.

How confident are you that you could

- successfully make new friends at college?
- seek assistance from college staff members?
- get along with students in your classes?
- socialize with others outside of class?

The survey data scanning by OMR also provided student response means for individual question items. An overall descriptive statistics analysis was completed to allow for description and summary of the data (Pearson, 2010). Data was presented in a raw/frequency/relative frequency format in order to summarize the distribution of the values in the sample (Green & Salkind, 2008; Pearson, 2010).

The first stage of analysis indicated the mean, standard deviations, and range of scores for all 20 items listed on the survey (Creswell, 2009; Pearson, 2010). It was at this point that survey participants who did not meet the definition of first-year student were removed from the study sample. The second stage of

analysis compared the two class formats, comparing students who had been supported by a peer mentor with students who had not been supported by a peer mentor on individual survey items so that the researcher's community of practice could better understand the value of both course formats as it related to the development of self-efficacy of first year-community college students.

Additionally, this part of the evaluation was designed to help determine the value of each course format by determining the impact each format had on students' beliefs in their abilities to successfully perform a variety of college related tasks.

The third stage of analysis was created by using the Statistical Package for the Social Sciences (SPSS) and aimed to determine the analysis of variance (ANOVA) of the three principle factors (e.g., academic self-efficacy, social self-efficacy, and social integration self-efficacy) as well as each demographic question. This analysis helped to describe the differences for each factor based on whether a particular student was or was not supported by a peer mentor. Student demographic data collected through this survey was included in this ANOVA in order to help my community of practice understand backgrounds (i.e., ethnicity, gender, educational backgrounds, and future aspirations) and educational goals of students enrolling in CDP 150 courses.

The final stage of analysis compared the two course formats, comparing results of those who had been supported by a peer mentor with results of those who had not been supported by a peer mentor on individual survey items so that the researcher's community of practice could better understand the value of and outcomes of the two course format models on the effectiveness of developing

students' self-efficacy, in other words their beliefs in their ability to successfully perform a variety of college related tasks.

CHAPTER 4

FINDINGS AND ANALYSIS

Overview

The purpose of this study was to evaluate the effectiveness of two course formats of a college success course on developing the self-efficacy of first-year community college students; one format using support of a peer mentor(s) and the other format without support of a peer mentor(s). Effectiveness of each course format was determined by student responses on the College-Self-Efficacy Instrument (CSEI). The purpose of the study was twofold: (a) to compare the outcomes of both course format models on first-year students' development of self-efficacy and (b) to establish baseline data from which to measure growth of the self-efficacy of first year students enrolled in either course format.

In this chapter, the data set created from the measured variables is described. A descriptive summary of the research results and statistical methods used in this study are also presented. The results of the statistical analyses conducted on the data addresses the relationships underlying the research questions posed. The research questions that guided this study were:

1. How effective is peer mentoring in a college success course on developing the self-efficacy of first-year community college students?
2. How effective is a first-year college success course on developing the self-efficacy of first-year community college students?

The initial discussion provides a description of the sample by providing background information to describe the sample. This information is followed by

specific data describing sample demographics representing both class formats. An analysis of three sub-scales of self-efficacy representing the entire sample is then described followed by a one-way ANOVA (analysis of variance) describing a series of between subject tests for significant differences amongst the three principle sub-scales: academic self-efficacy, social self-efficacy, and social integration efficacy. The final stage of analysis compares the two class format models of a college success course. All peer-mentored course sections and all non-peer supported course sections are examined for individual survey items including mean scores for the twenty questions included on the questionnaire.

Sample

The sample drew from 294 students enrolled in two different course format models of a college success course at Estrella Mountain Community College during the Spring 2011 semester. At the time of the study, there were eight faculty members teaching 12 total CPD 150 courses, out of which 11 course sections taught by seven faculty were included in this study; six course sections were supported by a peer mentor, and five course sections were not supported by a peer mentor. The majority of the 270 potential participants (57%) were enrolled in course sections supported with a peer mentor; 42% of the participants were enrolled in non-peer supported sections. One-hundred-forty students (48%) chose to participate in the study; 54% received the support of a peer mentor, and 46% did not receive the support of a peer mentor. Because the questionnaire was administered to 11 separate course sections, the sample drew from a diverse group of students representing mixed gender, different age groups, multiple ethnicities,

various educational backgrounds, varieties of educational majors, and assorted degree completion goals.

This research study was specifically interested in the development of self-efficacy in first year students. The problem with defining first-year students is that the college's student information form (enrollment application) does not have a question (or entry) addressing whether a student is a first-year student. Students are asked to report previous college information by checking a box that indicates their highest level of education completed (i.e., associate degree, bachelor degree, master degree or higher, no college or university, some college/university, no degree). If a student chooses the category "no college or university," he or she is considered as being new to college since he or she has no previous college experience. Data specific to the number of previously earned credits is not captured. The college determines a student's grade level by the number of college credits earned specifically at this institution. Students who have earned less than 30 college-level credit hours are classified as first-year students (freshman). For purposes of this study, the number of credit hours earned was not used to define a first-year student. Students instead were asked to identify when they began college by answering, "When was your first semester of college?" and "What year did you first enroll in college?" First-year students were defined as students attending their first or second semester of college (having begun in Fall 2010 or Spring 2011). Based on responses to this question, 79 out of the 140 (63%) who completed the survey were categorized as first-year students. Sixty-two

participant surveys were not included in the sample since they did not meet the definition of a first-year student.

Of the 79 total first year students, 43 members (54%) of the sample were enrolled in a peer-supported course; the other 36 members (46%) of the identified first-year sample were enrolled in a non-peer mentor section. Data reflecting sample-participants in a non-peer supported section indicated that 22 students (61%) had not graduated from high school. This reflects the fact that the CSEI was administered in a course section that represented a cohort class mainly consisting of currently enrolled high school students who were co-enrolled in college courses. Many of the students enrolled in this particular section represented a partnership with a local early-college charter high school. Specific demographic data related to co-enrolled high school students was not collected for this study.

Table 3

Sample as Represented by Population

	Total Spring 2011 CPD 150	% of total	Total in Sample	% of total
Students	294	100%	79	63%
Sections w/Peer Mentor	6	50%	43	30%
Sections w/o peer mentor	6	50%	36	34%
Faculty	8	100%	7	88%

Demographic data. A basic demographic questionnaire consisting of 10 questions was developed to collect gender, age range, ethnicity, educational background, and data pertaining to the participants' educational goals and enrollment history (See Appendix E). The survey revealed that 58% of the sample self-identified as female, a figure that is slightly under the college's overall female enrollment of 62% (Integrated Postsecondary Education Data, 2011), and 42% of the sample self-identified as male. A majority of the sample (69%) reported having earned a high school diploma. In addition, 29% indicated that they had not earned a high school diploma, and 2% reported having earned a General Equivalency Diploma (GED). The college's admission policy does not require a student to provide documentation supporting previous educational attainment (e.g., high school diploma, GED, or no earned diploma, etc.); data collected on CSEI represents self-reported information and was not compared to the college enrollment application since student's identity was protected.

Age. Age groups were categorized into six separate groups and were designed to match institutional categories used for data collection (e.g., 15-19, 20-24, 25-29, 30-39, 40-49 and over 50). Demographics indicated that 67% of the sample identified themselves as part of the 15-19 age group. As reported by Integrated Postsecondary Data (IPEDS, 2011), 41% of the college's total student body is represented by this age category. Sixteen percent of the sample from this study was between the ages of 20-24, also the second largest (23%) age category representing the college's total student body. The remaining 15% of the

participants were 25 years old or older, a group representing 35% of the College's total student body (Integrated Postsecondary Education Data System, 2011).

Ethnicity. It was expected that a large number of participants would identify themselves as being of Hispanic descent since the college is designated as a Hispanic Serving Institution (HSI). According to the 2009-10 IPEDS report, Hispanic students represented 34% of the college's student body during the Fall 2009 semester. The two largest ethnic groups represented in this study were Hispanic and Whites (not Hispanic). Thirty-four (44%) of the participants identified themselves as Hispanic, and thirty-one (40%) identified themselves as being White. IPEDS data reports Whites made up 39% of the college's study body indicating participants from this study closely represented the student body of the college.

First generation. When sample-participants were asked if they were the first in their family to attend college, 29% reported they were and 70% reported they were not. First-generation college students (FGCS) are coded through the college student information system when students apply to the college. The college in this study defines a FGCS as someone belonging to a family where neither parent has earned a bachelor's degree. The college's institutional records indicate 65% of the student body was FGCS during the time of this study (Estrella Mountain Community College, 2011). This inconsistency might be represented by the fact that the college enrollment form provides applicants with a definition of an FGCS (listed on the enrollment form); the demographic question in this study

did not provide participants with a definition. Additionally, this study looked at first-year students only.

Students attend community college for many reasons: to earn a degree or certificate, to prepare to transfer to a four-year institution, to gain job readiness skills, and in some cases for personal enjoyment (Kuh et al., 2006). CPD 150 is a course typically taken by students wanting to earn a degree, whether an associate or bachelor's degree. All students new-to-college are encouraged to enroll in CPD 150 to help support their transition to college. One of the objectives of CPD 150, and of the peer mentor program, is to help students identify a major and career path. The CPD course syllabus indicates that three weeks (out of the sixteen-week semester) are dedicated to helping students define career goals. This is accomplished by embedding required one-on-one advisor appointments into the curriculum as well as inviting advisors into the classroom to discuss the importance of developing an educational plan and choosing a major. Students enrolled in both course formats were also highly encouraged to complete an on-line career assessment with the support of the Career and Transfer Center.

College goals. The descriptive analysis data indicated that participants from both course format models appeared to be goal oriented and motivated in pursuing a college education. Fifty-nine percent indicated they had declared a college major, while 64% planned to earn a degree from the college and 60% planned to pursue a bachelor's degree. Twenty eight percent aspired to attend graduate school.

Analysis of Variance for the Three Subscales

Data was analyzed using Statistical Package for the Social Sciences (SPSS) Version 15.0. A series of between-subjects ANOVAS were calculated to test for significant differences amongst the three subscales—academic self-efficacy, social self-efficacy, and social integration efficacy—and the demographic data. All results were evaluated against an *alpha* criterion of .05. The hypothesis was that each self-efficacy subscale had the same population mean score. An omnibus test, which tested the hypothesis that all of the subscales had the same mean score, was used to understand the statistical data (Green & Salkind, 2008). A statistically significant result would mean that the items within each subscale were different in terms of mean scores. This analysis does not provide an explanation for the mean differences amongst the subscale items, only that they are different. Only one survey was collected from this particular section. All other findings appeared to be valid. Because the p-value resulted in less than the level of significance ($\alpha=.05$) there was no sufficient reason to think that all of the subscales were different even though there was no immediate indication which subscale (or subscales) might be different. No additional testing was conducted given the fact that only one of the ANOVA tests resulted in a significant result.

Self-efficacy development by demographic. Results indicate one item within the subscale of social self-efficacy for the entire sample as having a statistically significant difference at $\alpha=.05$ level; $F(1, 76) = 4.96, p=0.03$. Data was gathered by asking participants, “How confident are you that you could

successfully choose a major or career?” This question speaks to sample-participants’ confidence in their abilities to perform college related tasks under the social self-efficacy sub-scale; analysis includes both course formats (See Table 4). Findings indicate that sample-participants who had the confidence to declare a major had higher confidence in their abilities to perform college related tasks under the social self-efficacy sub-scale.

Table 4

Social Self-Efficacy

Major or Career	Count	Mean	SD
Yes	47	7.75	1.26
No	31	6.96	1.87

No significant differences appeared among demographic groups in either of the other two subscales: academic self-efficacy and social integration self-efficacy. Additional examination also indicated no statistically significant difference between first semester students and second-semester students despite second semester students who may have had a full semester of college experience.

Although not statistically significant, overall analysis indicated students of American Indian descent (5%) had the lowest college going self-efficacy with a total mean score of 7.14. Hispanic participants (43%) had an average mean score of 7.52, followed by African American participants (9%) with 7.76. Total college going self-efficacy mean score averages for White students was 8.12. Students ranging in ages 25-29 reported the highest level of confidence in all three sub-factors. Reported means for this age group were social self-efficacy, 8.37; social

integration, 8.29; and academic self-efficacy, 8.61. The younger students (ages 15-24) reported the lowest self-efficacy in all three subscales. The lowest reported subscale for this group was social self-efficacy; the lowest reported subscales for 20-24 years were academic self-efficacy.

Self-efficacy by course formats: Peer-mentored and non-peer

mentored. Although not statistically significant, sample-participants who enrolled in a course section supported by a peer mentor had a higher mean value on 13 of the 20 questions (65%) included on the College Self-Efficacy Instrument (CSEI) compared to sample-participants enrolled in non-peer supported course sections. Students enrolled in course sections supported by a peer mentor reported having higher overall levels of confidence in their abilities to perform college-related tasks compared to those students that were not supported by a peer mentor. For the sample of 79 first-year students, *t*-tests were run on the scores for each of the 20 questions, comparing the mean score of the peer-mentor group to the mean score of the non-mentor group, assuming equal variances. From an investigation of the score standard deviations (See Tables 5, 6, and 7) this assumption was justified, meaning the variances were close and within the standard test for assuming equal variances (the ratio of the larger to the smaller was less than 2 in all cases). The differences in mean scores were not statistically significant (at the $\alpha = .05$ level) for any of the 20 questions. Results of the ANOVA could not be trusted when comparing differences between the 11 individual sections of CPD 150 because of a small size of one of the sections. Only one student from this particular section completed a survey.

The subscale academic social-efficacy measurement included seven questions directly related to course performance. Students supported by a peer mentor reported an overall higher mean score on five of these seven questions. These questions included: *How confident are you in your ability to: manage time effectively?; use library services?; do well on exams?; develop effective study strategies?; use technology?* Sample-participants enrolled in non-peer-supported course sections reported higher mean scores on the remaining two questions in the academic self-efficacy sub-scale: *How confident are you in your ability to: take good class notes and keep up to date on assignments?* Questions which garnered the highest confidence levels between both class formats spoke directly to the use of technology and library services with combined means of 8.70 and 8.40, respectively. Participants from both groups appeared to use these services with confidence (See Table 5).

Table 5

Sub-Factor Analysis, Academic Social-Efficacy

Question	With PM (N=43)	SD	Without PM (N=36)	SD	Mean Difference (w/PM - w/o PM)
Manage time effectively	7.28	2.32	6.64	2.33	.64
Use library services	8.40	1.58	8.25	1.99	.15
Do well on exams	7.93	1.59	7.92	1.95	.01
Develop effective study strategies	7.40	2.05	7.14	1.62	.26
Take good class notes	7.70	1.91	7.78	2.10	-.08
Keep up to date on assignments	7.64	2.02	7.83	2.01	-.19

Use technology	8.70	1.82	8.36	1.85	.34
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note w/PM = with peer mentor; w/o PM = without peer mentor

The subscale social self-efficacy yielded 10 questions directly related to interpersonal and social adjustment. These questions consider the degree of confidence students have in their ability to successfully perform a variety of college-related tasks, specifically tasks that required students to interact with faculty, staff, or other peers. The condensed item analysis indicated that students enrolled in a peer-supported course format had a higher self-efficacy mean score in six of the ten questions. These items were related to students' confidence levels in *seeking assistance from a staff member, asking a question in class, developing an educational plan, asking an instructor a question, asking a tutor for help, and developing strategies for coping*. Students enrolled in non-peer supported course sections reported higher levels of confidence when it came to *choosing a major* and *participating in a class discussion*. Students enrolled in peer supported sections reported a lower confidence level (7.77) when it came to choosing a major compared to the confidence level of those students enrolled in non-peer supported course sections (8.64). The item "*How confident are you that you could successfully choose a major or career?*" garnered the highest mean score of all the items within the social self-efficacy factor.

Student participants enrolled in a course format supported by a peer mentor reported a higher confidence score when it came to successfully seeking out the help of a tutor. The reported mean score in seeking out the help of a tutor

for this group was 7.09, whereas students enrolled in a non-peer supported course format reported a mean score of 6.61.

Findings indicate participants enrolled in peer supported course sections are more confident in their abilities that require them to interact with faculty, staff, or other peers compared to participants who were enrolled in non-peer supported course sections (See Table 6).

Table 6

Sub-Factor Analysis, Social Self-Efficacy

Question	With PM	SD	Without PM	SD	Mean Difference (w/PM-w/o PM)
Choose a major	7.77	2.32	8.64	1.87	-.87
Seek assistance/ staff member	7.48	2.25	6.86	2.33	.62
Ask a question in class	7.79	1.98	7.69	2.33	.1
Participate in class discussion	7.70	2.03	7.94	2.38	-.24
Develop an educational plan	7.84	1.95	7.00	2.27	.84
Ask an instructor a question	8.02	1.83	7.67	2.53	.35
Ask a tutor for help	7.09	2.52	6.61	2.78	.48
Develop strategies for coping	7.49	2.14	6.81	2.36	.68
Socialize w/ peers out of class	7.58	2.10	8.26	2.11	-.68
Study w/ a peer outside of class	6.72	2.56	6.78	2.43	-.06

note: w/PM = with peer mentor; w/o PM = without peer mentor

Lastly, the subscale social integration efficacy included three questions directly related to students' connection to the institution. This subscale tells a unique story. Regardless of whether a participant was enrolled in a course section

supported by a peer mentor or enrolled in a non-peer supported section, both groups reported a high self-efficacy for the item “How confident are you that you could successfully get along with students in your class?” with mean scores well above average: 9.02 for those peer mentored and 8.66 for non-mentored.

Participants from both groups also exhibited a level of confidence in their abilities in making new friends at college with mean scores of 7.43 (mentored) and 7.39 (non-mentored).

However, neither group reported a high level of self-efficacy when it came to joining a club or organization on campus; in fact, this question garnered the lowest mean score of all 20 questions on the survey. Students enrolled in peer supported course sections reported a confidence level of 5.0, whereas students enrolled in non-peer supported course sections reported a confidence level of 6.19 (See Table 7).

Table 7

Sub-Factor Analysis, Social Integration Efficacy

Question	With PM	SD	Without PM	SD	Mean Difference (w/PM-w/o PM)
Make new friends	7.43	2.35	7.39	2.33	.04
Get along w/ students in classroom	9.02	1.32	8.66	1.51	.36
Join a student organization or club	5.00	2.87	6.19	2.49	-1.19

note: w/PM = with peer mentor; w/o PM = without peer mentor

Limitations

This study saw several limitations, which should be considered when evaluating the implications of the findings.

1. This non-experimental study had no true control group or means to account for non-controllable factors (e.g. whether or not the faculty member was residential vs. adjunct, faculty members selection of peer mentor support, process of assigning peer mentors to course sections, time of the day the course was offered, process in which the student enrolled in the course, whether or not the student and/or advisor selected the CPD section based on time of offerings vs. a prescribed intervention, if the course section was identified (or not) as being supported by a peer mentor). While comparisons can be drawn between the two course formats, it is difficult to determine the extent of the effectiveness of the two formats as interventions: a college success course and peer mentoring.
2. Self-report designs can cause participants to overestimate their abilities and or perceptions. The CSEI was a cross-sectional survey which was intended to measure participants' perceptions at one point in time. Sample perceptions' during the time the survey was administered could have been affected by uncontrollable factors (e.g. mood of the student) (Stringer, 2007).
3. Since this was a post-hoc summary study and not a follow-up study (pre/post survey) with a previously studied population the author was not able address development or change reflective of the interventions.
4. Age of the participants was not controlled for in this study. Fifty-three participants were between the ages of 15-19 and included students who were co-enrolled in high school and in college. The level of maturity and

or academic commitment levels of the participants was not considered. The literature speaks directly to the relationship of perceived self-efficacy and emotional behavior changes that occur with age. For this age group (15-19) self-efficacy development is highly dependent upon peer association, peer groups can alter the direction of personal development (Bandura, 1991). Chickering's seven major "dimensions of development" (competence, emotions, autonomy, identity, interpersonal relationships, purpose, and integrity) help to support this limitation (Chickering & Reisser, 1993). According to Chickering, college students develop three kinds of competence while in college-intellectual competence, physical and manual skills, and interpersonal competence. The development of these three competencies increases as students learn to trust their abilities, receive feedback from others, and integrate their skills into a stable self-assurance.

5. The course under study (CPD 150) was a course offered to all students. Factors related to age, experience, and educational goals were not controlled for in this study. Although CPD 150 is often thought of as a freshman course the reality is, this course is not limited to first-year students. This diversity could have had an impact classroom dynamics particularly in regard to self-efficacy development and personal experience.
6. A recent report, by the National Center for Educational Statistics, *The Condition of Education* (2011), showed the number of degrees conferred

by public two-year institutions decreasing over the years 1998-99 to 2008-09 from 80 to 67%. The college's graduation rate for full-time, first-time degree or certificate seeking students during 2010 was 14% (Integrated Postsecondary Education Data System, 2011). It is impossible to account for all possible variables associated with successful degree completion (e.g., students' academic backgrounds, students' enrollment status, financial responsibilities, and students' levels of college knowledge or cultural capital). While this study presumes a relationship between self-efficacy and student success/retention, the data collected and analysis of that data did not provide for a description of that relationship or an explicit correlation between self-efficacy development and student retention.

Summary

This study attempted to evaluate the effectiveness of two course formats of a college success course on developing the self-efficacy of first-year community college students. The results of the statistical analysis conducted indicated course formats supported by a peer mentor(s) reported higher mean scores on 13 of the 20 items include on the CSEI. Participants from both course format models reported at least an average mean scores (5 on a 10 point Likert scale) on all 20 items, yet findings indicate that regardless of whether or not students were supported by a peer mentor, those students who had declared a major had a higher self-efficacy compared to students who had not declared a major. Chapter five presents a discussion of the study results along with conclusions, implications for practice, and recommendations for future research.

CHAPTER 5

CONCLUSION

Introduction

Postsecondary student success is often measured by quantifiable student attainment indicators such as grades, year-to-year persistence rates, program completion, and degree attainment. Demonstrating student success in community colleges has been difficult partly because not all students who attend community colleges do so to earn a degree. Because of this, many community college administrators believe it is imperative that other non-traditional measures of student success be considered. For instance, the degree to which students are satisfied with their experiences and feel comfortable, confident, and connected in the learning environment are important and viable constructs of student success within the community college context. This study was designed to more fully understand the impact college success courses and peer mentoring within college success courses have on the development of self-efficacy on students' adjustment to college or, in other words, the degree to which students feel confident in their abilities to successfully engage in the broader college experience.

Summary of the Study

The purpose of this study was to evaluate the effectiveness of two course format models of a college success course—one format uses support of a peer mentor(s) and the other format does not use support of a peer mentor(s)—on developing the self-efficacy of first-year community college students. Self-efficacy serves as the theoretical framework undergirding this study, which

suggests that self-efficacy is an important determinant in personal adjustment and performance accomplishment (Bandura, 1977, 1997). A strong sense of self-efficacy enhances human accomplishment and personal wellbeing in many ways, including academic and personal success. Studies show that students with higher levels of self-efficacy tend to be more motivated, use more study strategies, and have higher achievement than individuals with lower self-efficacy (Gore, 2006; Solberg & Villareal, 1997).

This research focused on measuring the development of self-efficacy of first-year community college students in a college success course, assuming such development contributes to their academic success and college persistence (Gore, 2006; Solberg & Villareal, 1997). Although absent of positive quantifiable measures of academic achievement (i.e., grades, course completion, or persistence rates), students' levels of development were consistently above average (i.e., mean score of 5) suggesting a positive relationship between the intervention and self-efficacy. Despite the high mean scores, the lack of statistical significance suggests that this relationship still needs further investigation.

The high mean scores coupled with my own personal and informal observations of both the peer mentoring program and college success courses at Estrella Mountain Community College lead me to believe that both interventions provide first-year students with much needed support, encouragement, and guidance. Because community colleges serve such a diverse population, it is difficult to know and understand the personal needs of each individual student, yet interventions such as the peer mentor program and college success course

serve as opportunities to more effectively address individual background characteristics and academic needs of the students who participate in these experiences. Both course formats described in this study served as opportunities to contribute to the development of the self-efficacy of first-year community college students. Although course competencies are not necessarily designed to intentionally develop self-efficacy, the learning outcomes of the course were found to be closely aligned with those of self-efficacy. Self-efficacy therefore has the potential to serve as an indicator for measuring students' development toward college student success in this community college environment.

Discussion: Self-Efficacy Development by Demographic

Value of course for first-year students. When comparing demographic data along the three sub-scales of: self-efficacy, academic, social self, and social integration, several interesting points were discovered. First, the sample in this study included students who indicated that Spring 2011 was their first semester of college; others indicated Fall 2010 was their first semester of college. Findings indicate that there was no statistical difference in the confidence levels between the more experienced students. The lack of significance may support the importance of positive early college experiences and their connection to student success. Correspondingly, it may suggest that the course has a similar impact on students' self-efficacy regardless of when they take the course during their first year. To better understand if there is a relationship between the impact of the two course formats on students' development in the first year of college, Estrella Mountain Community College may want to consider conducting a study that

compares those students enrolled in either type of CPD 150 course format in their first year with those students who do not enroll in a CPD 150 course their first year. It may also be useful to look at the data collected for this study of participants not included in the sample (i.e., surveys by students who did not meet the first-year criteria for inclusion in the sample). Research gathered from the proposed future research would be useful in determining the best time for students to enroll in the course, which would be useful for advisors, course and program coordinators, faculty, and peer mentors. In doing so, college policies could further contribute to greater student persistence and retention rates by providing students with the support, tools, and knowledge needed to successfully transition into college when they need them.

Influence of age on self-efficacy. Similar to other studies (DeWitz, Woosley, & Walsh, 2009; Gandara & Mejorado, 2005), demographic findings indicate there could be a relationship between age and development. Students ranging in ages 25-29 (9%) reported the highest level of confidence in all three sub-factors. The younger students (ages 15-24), however, reported the lowest self-efficacy mean in all three subscales. This lower level of confidence could be related to maturity levels, or lack thereof, of both personal and academic experience. College success courses are required for co-enrolled high school cohorts. The college may want to consider implementing the course format that includes peer mentoring particularly in sections where high enrollment of younger students is anticipated. The literature suggests that young students who are mentored during their first year of college or while still in high school are more

likely to return to college for a second year (Gandara & Mejorado, 2005; Terenzini, Pascarella, & Bliming, 1996). Chickering's seven major "dimensions of development" (competence, emotions, autonomy, identity, interpersonal relationships, purpose, and integrity) help to support this recommendation (Chickering & Reisser, 1993). By taking a closer look at dimensions specific to the younger student, interventions such as the peer mentor program and the college success course can be designed to support the development of the younger student. For instance, peer mentors can be trained to help students (mentees) learn to trust their abilities, receive constructive feedback from others, and integrate their skills into a stable self-assurance. This early support and guidance could prove to contribute to greater academic success.

Findings related to older students indicate they have a more developed self-efficacy; therefore, a non-peer mentored CPD 150 section may provide adequate support. Outcomes of mentoring and the student success course are dependent on effective practices and the quality of the services offered. With this in mind, the suggestion for both course formats in general would be to develop student-centered learning outcomes specific to bolstering students' self-efficacy regardless of age.

Discussion: Comparison of Course Formats

Course enrollment and demographics. Currently, the EMCC students interested in enrolling in the CPD 150 course are not made aware of which of the two CPD 150 course formats, with or without a peer mentor, they sign up for until after the course is in session. The online course bank or printed course schedule

does not distinguish the two formats. The course is simply listed as CPD 150, and the description of the course reads: “this course focuses on increasing student success through college orientation, and personal growth, study skills development, and educational and career planning” (Estrella Mountain Community College, 2011). Nowhere in the course description is the peer mentoring program mentioned. Academic advisors do not have means to identify the different course formats. Because of this practice, sample demographic data (i.e., age, gender, ethnicity, educational backgrounds, and college aspirations) in both course formats was unrelated to the course format itself. Students were not purposely enrolled into a section supported by a peer mentor or in a section not supported by a peer mentor. In addition, students who have perceived lower levels of self-efficacy development (e.g., by themselves, advisors, faculty) are not advised or directed into one course section over the other. Therefore assignment to either the sample supported by a peer mentor or the sample not supported by a peer mentor was random for the purposes of this study.

Demographic findings indicated that one particular non-peer supported section reported having a large number (22 out of 25) of students who had not earned a high-school diploma and who reported being between the ages of 15-19. This could partly be due to the fact that the majority of the students enrolled in that section were part of a co-enrolled high school cohort. The college’s practice for co-enrolled high school students has been to mainstream these students thereby allowing them exposure to real college experiences instead of creating separate contained cohort sections for these students. Faculty and instructors are

not even made aware as to the presence of co-enrolled high school students in their course sections. Because the identities of the sample-participants were anonymous, co-enrolled high school students were not identified in this study and, therefore, remained part of the sample if they met the definition of a first-year student (first semester of enrollment being Fall 2010 or Spring 2011).

Student choice in course format selection. While there was no statistically significant difference between the two course formats, the college may want to reconsider the current practice of how students enroll in the two different course formats and instead consider a process that includes the mentee in the assignment process. It might prove beneficial to at least provide upfront information about the two different course formats so that students are aware of the structure prior to enrolling in a class. This process could provide advisors with opportunities to further guide and prepare students when discussing the benefits of a college success course. An advisor, for example, might determine through a one-on-one advising session that a student could benefit from the support of a peer mentor. Course format information would allow the advisor to explain the two course formats to the student thereby allowing the student to make an informed decision prior to the first day of class. This type of procedure would also allow the college to offer course sections/formats specific to enrollment status (e.g., sections designed specifically for students who have earned less than 30 credit hours) or other identified elements such as course sections specifically for those students who test into developmental level courses. This process would also allow students to become actively engaged in the early

stages of their college experience by allowing them to make an informed decision. Additionally, the literature supports the idea of purposefully matching mentors with mentees particularly when considering similar backgrounds (e.g., gender, ethnicity, college major) suggesting perceived common interests or similarities contributes to the mentoring experience (Coles, 2011; Lian, Tracey, Kauh, Taylor, & Williams, 2006). Although this study does not delve into the actual relationship between mentor/mentee, it is possible that the relationship itself could affect the development of self-efficacy. Some students may welcome the assistance of a peer mentor whereas others may not like the idea of having additional responsibilities to fulfill (Colvin & Ashman, 2010). Since self-efficacy theory speaks directly to the idea that behavior is a reflection of one's thoughts and feelings, the peer mentor relationship has the ability to transform the mentee's behavior either positively or negatively depending on the type of engagement and feedback between both individuals.

Identifying a major. One of the objectives of CPD 150, and of the peer mentor program, is to help students identify a major and a career path. The CPD course syllabus dedicates nearly 20% of the sixteen-week semester to helping students define career goals. This is accomplished by embedding required one-on-one advisor appointments into the curriculum as well as inviting advisors into the classroom to discuss the importance of developing an educational plan and choosing a major.

The descriptive analysis indicated that participants from both course format models appeared to be goal-oriented and motivated in pursuing a college

education. Fifty-nine percent of the total sample indicated they had declared a college major. However, of the students enrolled in a course format supported by a peer mentor, seventy percent indicated that they had declared a college major, compared to forty-seven percent of sample-participants who reported having a declared major and were enrolled in a non-peer supported section. The significance of this difference could be contributed to the support of the peer mentor and conversations outside the classroom specific to career development. One of the important constructs of the peer mentor program is that mentors are to encourage their mentees to use campus resources (i.e., the Career and Transfer Center) in addition to helping mentees define their academic goals.

A series of between-subjects ANOVAS were calculated to test for significant differences amongst the subscales: academic, social, and social integration self-efficacy. The only subscale that reported a statistical difference was the subscale of social self-efficacy. The item of interest was directly related to the confidence level of sample-participants' abilities to successfully choose a major or career. Contrary to what was discovered in the demographic descriptive analysis, the ANOVA found that students enrolled in peer-supported sections reported a lower confidence level when it came to choosing a major compared to the confidence level of those students enrolled in a non-peer supported course section.

Findings did indicate that more students supported by a peer mentor had declared a major; however, this same group of sample-participants reported a lower confidence level in their abilities to choose a major. Although it is difficult

to speculate why this is so, it begs the question if students supported by a peer mentor “just declare a major” because peer mentors encourage them to do so, but in doing so they are not actually committed to their decision. Because academic advising is one of the major academic and social domains of the college experience that affects student decisions to persist or leave, EMCC may want to consider increasing the role of the peer mentor to include serving as a trained para-professional capable of guiding students toward defining their educational and career goals (Tinto, 1993). Students enrolled in a non-peer supported course reported a confidence level (8.64) in their abilities to choose a major, yet only 40% actually had declared a major.

Although the ANOVA analysis does not provide an explanation for the mean difference amongst the subscale item, it is important to address students’ abilities to choose a college major. In order to get a more comprehensive understanding of the ANOVA analysis, I would recommend a follow-up study to include a pre-post CSEI survey so that faculty and program administrators can better understand the influences peer mentoring and college success courses have on the development of all three subscales of self-efficacy, particularly as related to choosing a college major. Additional findings could provide the college with data to suggest that one intervention contributes to the development of self-efficacy more than the other (i.e., peer mentoring, student success course) or that both interventions could place greater emphasis on helping students choose a major or identify a career path of interest. Another valuable data collection technique to consider would be the use of focus groups that would include both

mentors and mentees. These individuals could contribute to the understanding of the decision-making process of choosing a college major. This suggestion is particularly important since the literature supports the importance of declaring a major and its direct connection to student retention (O'Banion, 1996).

The literature provides educators a series of conditions that foster student success, and effective academic advising has been identified as a key element tied to student success (O'Banion, 1996). Goal identification is considered a motivator in student retention and persistence; students who declare a major have a defined sense of purpose and direction and ultimately persist at higher rates than those students without declared majors; therefore, early identification (first year) is important (O'Banion, 1997; Valencia College, 2011). On the other hand, students who lack academic direction tend to lack academic motivation and purpose, two factors directly connected to student attrition (Kuh et al., 2006; Upcraft et al., 2005). Because declaring a major is directly connected to degree completion, it is important that learning outcomes of either course format (with the support of a peer mentor or without the support of a peer mentor) ensure students are able to 1) identify career interests, 2) set academic goals, and 3) create an educational plan.

Academic subscale of self-efficacy. Although not statistically significant, reported findings indicate that sample-participants enrolled in a course section supported by a peer mentor had a higher mean score on 13 of the 20 questions included on the CSEI. Within the academic sub-scale of self-efficacy, sample participants supported by a peer mentor had a higher mean score on five areas

which included: 1) ability to manage time effectively, 2) use of library services, 3) performance on exams, 4) development of effective study strategies, and 5) use of technology. These findings could suggest that peer mentors had an impact on students' academic self-efficacy by encouraging mentees to use campus resources and develop study skill strategies. Questions which garnered the highest confidence levels between both class formats spoke directly to the use of technology and library services. These findings could be reflective of the fact that all CPD 150 course sections are supported by the course management system, Blackboard. In addition to becoming familiar with Blackboard, CPD 150 curriculum requires students to learn how to access the on-line Writing Center as well as many of the electronic resources supported by the library.

Social scale of self-efficacy. The subscale social self-efficacy yielded 10 questions related to interpersonal and social adjustment within the college environment. Again, while not statistically significant, sample participants enrolled in a peer-supported course format had a higher self-efficacy score on the majority of the questions (6 out of 10). Peer supported students reported feeling more confident in their abilities to interact with both staff and faculty members compared to those students in non-peer supported course sections. These findings are supported by the literature, which indicates peer mentors serve as connecting links to help less experienced students get connected to their institution both in and out of the classroom (Sanft, Jensen, & McMurray, 2008), functions that CPD 150 alone may not be able to provide.

Social integration scale of self-efficacy. The subscale social integration self-efficacy speaks directly to Tinto's (1993) interactionalist theory of student persistence and retention asserting that how well a student becomes engaged socially is a prime predictor of persistence. Findings from this study indicate that students from both course formats feel relatively confident in their abilities to get along with other students in their classes as well as their abilities to make friends on campus. The reported area where both groups felt the least confident in their abilities was related to joining a club or organization on campus. These findings could be attributed to the idea that students do not feel comfortable joining a club or organization on campus or to the fact that commuter students (i.e., community college students) often times have responsibilities off campus that might preclude them from taking part in certain educational activities. Because of the later, Tinto (2005) suggests creating more opportunities for social engagement within the context of the course or, in other words, embedding social engagement opportunities into the curriculum. Although Estrella Mountain Community Colleges' Student Life and Leadership Division supports over forty clubs and organizations, the level of student participation remains a challenge. One of the greatest challenges for the college has been the college's inability to effectively market upcoming events and opportunities to students. Current marketing avenues are limited to the poster system and a few digital information screens located around campus. Since student engagement plays a key role in how students develop socially and professionally, I would recommend increased collaboration between Counseling Faculty and the Student Life & Leadership

Office to determine how student engagement development might be embedded into the student success course curriculum as well as the peer mentor program objectives.

Summary. As suggested by the literature, structured interventions like the peer mentor program and college success course described in this study can contribute to developing a positive culture in a student's first year given that perceived social support has been associated with academic achievement in the first year (Kuh et al., 2008). Institutional analysis indicate that participants enrolled in a course section supported by a peer mentor(s) did not produce greater academic results (i.e., greater success, persistence, or retention rates) when compared with participants enrolled in non-peer supported course sections. While not conclusive, this study suggests that further investigation is required to understand the real impact of the two course formats. These findings suggest there may be a positive impact of the peer mentoring program that is not evident when looking at the persistence data alone. However, the nature and magnitude of the impact remains unclear. Since peer mentoring did not take place in isolation of the student success course, it is assumed that both interventions may have contributed to the development of the sample-participants' self-efficacy.

Previous studies indicate that validating students and facilitating a connection with the college culture is a key to the success of underdeveloped, underrepresented, and first-year students (Kuh et al., 2006; Rendon, 1993). Validation theory shifts the responsibility and initiative of students to faculty and staff to reach out and assist students in becoming a part of the college community.

Actions by faculty and staff encouraging students to learn more about the college and to believe in themselves as learners can ultimately contribute to helping create a more positive college experience (Coles, 2011; Rendon, 2006). This indeed seems to be the case for the CPD 150 course and peer mentoring program at EMCC. Strengthening the commitment to improving student learning cannot be accomplished unless students feel valued first as individuals and then as learners. This commitment is central to the objective of both the student success course and peer mentoring program.

Implications for Future Research

A longitudinal college experience study following this student cohort through to graduation and beyond would provide a rich data set reflecting both academic progress (i.e., grades, time to earn degree) and individual student perceptions (i.e., personal experiences). Such data has the potential to reveal any quantifiable long-term effects of the two course format models on college related self-efficacy development and the college experience itself. Qualitative data that captures individual students' perceptions of their experiences in either course format would likely provide rich descriptive data in understanding the effects of the course formats on their development and consequently assist in identifying specific efforts to better support individual student development and college success. Another means of acquiring data to help better understand the phenomenon of student self-efficacy is focus groups, particularly since participants in a focus group or group interview are typically encouraged to describe their experiences and present their perspective on the issues discussed

(Stringer, 2007). Since institutional decisions and policies are based on the needs of the student it is essential that the institution provide a platform for students to relay their message and individual perspectives. Focus groups would provide such an opportunity.

Since findings from this study did not identify the reasons why students reported the confidence levels that they did, another recommendation would be to develop a process to better capture semester to semester evidence to better understand the different course formats and their direct correlation to students' development of self-efficacy. Although course evaluations serve to capture the students' levels of satisfaction of the course or experience, it might be beneficial for the college to analyze narrative data captured by both peer mentors and mentees throughout the semester (i.e., reflection papers, appointment notes). This qualitative data is particularly important when considering program effectiveness and cost-benefits of investing in the course format supported by a peer mentor(s) since this format incurs additional costs for the college.

Implications for Future Practice

Lessons learned from this research include the claim that a high self-efficacy is directly connected to students' motivation and their abilities to confidently complete college-related tasks necessary for student success. This study is also directly linked to the college's direction of maximizing student success and the college's goal to create and expand learning-centered programs and strategies that ensure success of underprepared students and maximize programmatic access to students. The student success course formats described in

this study seek to increase the quality of new, first-time students' educational experiences at the college and has been designed to meet students where they are by building rapport and connectedness to the institution. This research has provided me with a greater understanding of the importance of the development of student self-efficacy. The three subscales of self-efficacy—academic self-efficacy, social self-efficacy, and social integration self-efficacy—all play an integral role in helping students achieve their educational goals. Students with a low sense of self-efficacy in any given domain shy away from difficult tasks; additionally, these types of students have low aspirations and weak commitment to the goals they choose to pursue. On the other hand, students with a strong sense of self-efficacy approach difficult tasks as challenges to be mastered; these students set challenging goals for themselves and maintain strong commitment to them thereby increasing their chances of persistence and academic success (Bandura, 1991; Gore, 2006; Solberg & Villareal, 1997). Having completed this action research, I now have the responsibility of sharing my findings and recommendations with my community of practice as this information has the potential to contribute to the solution and continued development of interventions that positively affect first-year student matriculation.

Conclusion

The purpose of the study was twofold: (a) to compare the outcomes of both course format models on first-year students' development of self-efficacy and (b) to establish baseline data from which to measure growth of the self-efficacy of first-year students enrolled in either course format. Findings from this

study serve as a reminder to my community of practice; although students are ultimately responsible for their educational choices, final responsibility lies in the hands of the college, for students depend on educators to show them how to be successful. As community college educators, we must be mindful of the fact that not all students come to us as fully prepared confident learners. It is incumbent on faculty and staff to create environments in which we intentionally meet students where *they* are personally, academically, and emotionally and stop insisting that they meet us where *we* are.

Findings from this study validate my own educational journey. Thirty years ago I stepped foot onto one of the Maricopa Community Colleges with the *hope* of one day earning a college degree. Although I knew very little about college, I had a strong internal desire and level of confidence that I would somehow accomplish my goal. Having grown up in a family of nine, I was well aware that my financial future depended on my ability to successfully earn a college degree. I often share my story with the students I serve, and I proudly affirm that I, too, am a product of a community college. In doing so, I remind students that they are not alone, nor are they expected to know everything about college. Without the support, validation, and guidance of both faculty and staff I received thirty years ago, I doubt I would be writing this dissertation today. My experience at Mesa Community College ultimately helped define my professional purpose and academic destiny.

REFERENCES

- Achieve, Inc. (2010). Achieve report shows high school diploma more meaningful today than four years ago. Retrieved from <http://www.achieve.org/node/1070>.
- Achieving the Dream Community Colleges Count. (2009). *Field guide for improving success*. Silver Spring, MD: Lumina Foundation for Education. Retrieved from http://www.achievingthedream.org/docs/Field_Guide_for_Improving_Student_Success.pdf
- ACT. (2010). College Retention and Graduation Rates. Retrieved from <http://www.act.org/research/policymakers/reports/graduation.html>
- Adelman, C. (1999). *Answers in the toolbox: Academic integrity, attendance patterns, and bachelor's degree attainment*. Washington, DC: U.S. Department of Education.
- American Association of Community Colleges. (2008). The American graduation initiative: Stronger American skills through community colleges. Retrieved from <http://www.aacc.nche.edu/Advocacy/aginitiative/Pages/obamafactsheet.aspx>
- American Association of Community Colleges (2010, October 5). *Community Colleges Issues Brief*. Retrieved from <http://www.aacc.nche.edu/ABOUTCC/WHSUMMIT/Pages/default.aspx>
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Astin, A. W. (1996). Involvement in learning revisited: lessons we learned. *Journal of College Student Development*, 37(2), 123-134.
- Astin, A. W. (1997). *Preventing students from dropping out*. San Francisco, CA: Jossey-Bass.
- Bailey, T., Jeong, D. W., & Cho, S. W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. *Economics of Education Review*, 29(2), 255-270. doi:10.1016/j.econedurev.2009.09.002
- Bailey, T. R., & Alfonso, M., (2005). Paths to Persistence: An analysis of research on program effectiveness at community colleges. *Community College Research Center, Teachers College, Columbia University*, 6(1), 1-37.

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-125.
- Bandura, A. (1986). *Social foundations of thought and action: A cognitive theory*: Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4), (pp. 71-81). New York, NY: Academic Press.
- Bandura, A. (1997). *Self efficacy: The exercise of control*. New York, NY: W. H. Freeman and Company.
- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goals effects revisited. *Journal of Applied Psychology*, 88(1), 87-89.
- Barefoot B., Gardner J., Cutright M., Morris L., Schroeder C., et al. (2005). *Achieving and sustaining institutional excellence for the first year of college*. San Francisco: Jossey-Bass
- Barefoot, B., & Keup, J. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of the First-Year Experience and Students in Transition*, 17(1), 11-47.
- Barbatis, P. (2008). *Perceptions of underprepared community college students regarding their educational achievement*. Florida International University. Retrieved from ProQuest Dissertations and Theses.
- Barry, C. L., & Finney, S. J., (2009). Can we feel confident in how we measure college confidence?: A psychometric investigation of the college self-efficacy inventory. *Measurement and Evaluation in Counseling and Development*, 42, 197-220.
- Bean, J. (1990). Using retention research in enrollment management. In D. Hossler, J. Bean, & Associates (Eds.), *The strategic management of college enrollments* (pp. 170-185). San Francisco, CA: Jossey-Bass.
- Bernier, A., Larose, S., & Soucy, N. (2005). Academic mentoring in college: The interactive role of student's and mentor's interpersonal dispositions. *Research in Higher Education*, 46, 29-51.
- Bok, D. (2005). *Our underachieving colleges: A candid look at how much students learn and why they should be learning more*. Princeton, NJ: Princeton University Press.

- Boswell, K., Wilson, C. D., League for Innovation in the Community College (U.S.), & Education Commission of the States. (2004). *Keeping America's promise: A report on the future of the community college: a joint project of the Education Commission of the States and the League for Innovation in the Community College*. Boulder, CO: ECS.
- Bourdieu, P., & Passeron, J. C. (1977). *Reproduction in Education, Society, and Culture*, London, England: Sage.
- Boylan, H. R. (2001). The case for developmental education, *Research in Developmental Education*, 12(2), 1-4.
- Bragg, D. D. (2001). Community College access, mission, and outcomes: Considering intriguing intersections and challenges. *Peabody Journal of Education*, 76(1), 93-116.
- Braxton, J. (Ed.). (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt University Press.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and Reducing College Student Departure*. ASHE-ERIC Higher Education Report, 30. No. 3. Washington, DC: The George Washington University, School of Education and Human Development.
- Breland, H., Maxey, J., Gernand, R., Cuning, T., & Trapani, C. (2002, March). Trends in College Admission 2000: *A Report of a National Survey of Undergraduate Admission Policies, Practices, and Procedures*. Alexandria, VA: National Association for College Admission Counseling.
- Budge, S. (2006). Peer mentoring in post-secondary education: Implications for research and practice. *Journal of College Reading and Learning*, 37, 73-87.
- Burley, A., Cejda, B., & Butner, B., (2001). Dropout and Stopout Patterns Among Developmental Education Students in Texas Community Colleges. *Community College Journal of Research and Practice*, 25 (10): 767-782.
- Cabrera, A., Nora, A., & Castaneda, M. (1993). College persistence: Structural equation modeling test of an integrated model of student retention. *Journal of Higher Education*, 64, 123-130.
- Carnevale, A., Smith, N., & Strohl, J. (June 2010). *Help wanted. Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University, Center for Education and the Workforce.

- Carnelvale, A., & Desrochers, D. (2003). *Standards for what? The economic roots of K-16 reform*. Princeton, NJ: Educational Testing Services.
- Carver, L. & Katz D., (2004). Teaching at the boundary of acceptable practice: What is a new teacher mentor to do? *Journal of Teacher Education*, 55, 449-462.
- Center for Community College Engagement. (2007). 2007 SENSE National Report. *Starting Right: A first look at Engaging Students*. Preliminary Findings. Austin, TX: The University of Texas at Austin Community College Leadership Program.
- Catalano, R.F., Hawkins, J.D. Berglund, L.M. Pollard, J.A. & Arthur, M.W. (2002). Prevention science and positive youth development: Competitive or cooperative frameworks. *Journal of Adolescent Health*, 31, 230-239.
- Center for Community College Engagement. (2007). 2007 SENSE National Report. *Starting Right: A first look at Engaging Students*. Preliminary Findings. Austin, TX: The University of Texas at Austin Community College Leadership Program.
- Center for Community College Engagement. (2009a). *Making Connections: Dimensions of Student Engagement (2009 CCSSE Findings)*. Austin, TX: The University of Texas at Austin Community College Leadership Program.
- Center for Community College Engagement (2009b). *Benchmarking & Benchmarks: Effective Practice with Entering Students*. Austin, TX: The University of Texas at Austin Community College Leadership Program.
- Center for Community College Engagement. (2010). *The Heart of Student Success: Teaching, Learning, and College Completion (2010 CCCSE Findings)*. Austin, TX: The University of Texas at Austin, Community College Leadership Program.
- Center for Higher Education Policy Analysis. (2009). *Mentoring scaffoldings: Do they promote college access?* Los Angeles: Rossier School of Education, University of Southern California.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Choi, N. (2005). Self-efficacy and self-concept as predictors of college students' academic performance. *Psychology in the schools*, 42(2), 195-205.

- Cole, J. R. (2010). *The great American university: Its rise to preeminence, its indispensable national role, and why it must be protected*. New York, NY: Public Affairs.
- Coles, A. (2011, Spring). *The role of mentoring in college access and success*. Washington, DC: Institute for Higher Education Policy. Retrieved from http://www.ihep.org/assets/files/publications/mentor/THE_ROLE_OF_MENTORING_IN_ACCESS_AND_SUCCESS_FINAL_Spring_2011.pdf
- Collins-Shapiro, C. (2006). Mentoring and leadership development. *Leadership Insights and Application Series* (Vol. #21). College Park, MD: National Clearinghouse for Leadership.
- Collins-Shapiro, C. (2006). *Mentoring and leadership development. Leadership Insights and Application Series* (Vol. 21). College Park, MD: National Clearinghouse for Leadership.
- Colvin, J.W., Ashman, M. (2010). Roles, risks and benefits of peer mentoring relationships in higher education. *Mentoring & tutoring: Partnerships in Learning*, 18(2), 121-134. doi: 10.1080/13611261003678879
- Community College Survey of Student Engagement. (2008). *High Expectations and High Support, Austin, Texas: The University of Texas at Austin, Community College Leadership Program*.
- Community College Survey of Student Engagement. (2009). *Making Connections; Student Engagement. 2009 Findings*. Austin, TX: Center for Community College Student Engagement.
- Conklin, K. D., Curran, B. K., & Gandal, M. (2005). 2005 National Education Summit on High Schools: An action for improving America's high schools. Retrieved from [http://www.achieve.org/dstore.nsf/Lookup/actionagenda2005/\\$file/actionagenda2005.pdf](http://www.achieve.org/dstore.nsf/Lookup/actionagenda2005/$file/actionagenda2005.pdf)
- Conley, D. (2005). *College knowledge: What it really takes for students to succeed and what we can do to get them ready*. San Francisco, CA: Jossey-Bass Education Series.
- Conley, D. (2008). College readiness and high school-to-college success. Retrieved from http://epiconline.org/college_ready_services.
- Complete College America, 2010. Boosting Completion at Community Colleges: Time, Choice, Structure and the Significant Role of States. Retrieved from http://www.aacc.nche.edu/AboutCC/whsummit/Documents/ConferencePapers_Booklet.pdf#page=37

- Creed, P. A., & Patton, W. (2003). Predicting two components of career maturity in school based adolescents. *Journal of Career Development, 29*(4), 277-290.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Crisp, G. & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990 and 2007. *Research in Higher Education, 50*, 525-545.
- Dennis, J., Phinney, J., & Chuateco, L. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development, 46*(3), 223-236.
- DeWitz, M., Woosley, L., & Walsh, B., (January/February, 2009). College student retention: An exploration of the relationship between self-efficacy beliefs and purpose in life among college students. *Journal of College Students College, 50*(1), 19-34. doi: 10.1353/csd.0.0049.
- Dick, B. (2002). Postgraduate programs using action research. *The Learning Organization, 9*(4), 159-170.
- Dick, B. (2006). Action research literature 2004-2006: Themes and trends. *Action Research, 4*(4), 439-458. doi: 10.1177/14750306070105
- Downing, S. (2001). *On course: Strategies for creating success in college and in life*. Boston, MA: Houghton Mifflin.
- Dwyer, C., Millett, C., & Payne, D. (2006). A culture of evidence: Postsecondary assessment and learning outcomes. Recommendation to policymakers and the higher education community. Retrieved from http://www.ets.org/Media/Resources_For/Policy_Makers/pdf/cultureofevidence.pdf
- Eby, L. T., Rhodes, J. E., & Allen, T. D. (2007). Definition and evolution of mentoring. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell Handbook of Mentoring: A Multiple Perspectives Approach* (pp. 7-20). Sussex, UK: John Wiley and Sons.
- Ellis, D. (2003). *Becoming a master student* (10th ed.). Boston, MA: Houghton Mifflin company.
- Engle, J. (2007). Postsecondary access and success for first generation college students. *American Academic, 3*. Retrieved from <http://www.aft.org/pdfs/highered/academic/january07/Engle.pdf>

- Estrella Mountain Community College. (2011). Retrieved from <http://www.estrellamountain.edu/about/annual-report>
- Falchikov, N. (2001). *Learning together: Peer tutoring in higher education*. New York, NY: Routledge Farmer.
- Ferrenace, Eileen. (2000). LAB a Program of the Education Alliance at Brown University. *Action Research*. Retrieved from http://www.alliance.brown.edu/pubs/themes_ed/act_research.pdf.
- Fischer, K., & Parry, M. (2009, July 20). How Obama's \$12-billion plan could change 2-year colleges: An in-depth look at ways the president's proposal might play out. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/How-Obamas-12-Billion-Plan/47081/>
- Forebess, U. (2007). Peer mentoring for at-risk community college freshman: An evaluative case study. (Unpublished doctoral dissertation). Walden University, Minnesota.
- Frankel, V. E. (1985). *Man's search for meaning* (Rev. ed.). New York, NY: Washington Square Press.
- Frankel, V. E. (1988). *The will to meaning: Foundations and applications of logotherapy*. (Expanded ed.). New York, NY: Meridian.
- Gaither, G. (2005). *Minority retention: What works?* San Francisco, CA: Jossey-Bass.
- Galbraith, M. W., & James, W. B. (2004). Mentoring by the community college professor: One role among many. *Community College Journal of Research and Practice*, 28, 689-701.
- Gandara, P., & Mejorado, M., (2005). Putting your money where your mouth is: Mentoring as a strategy to increase access to higher education. In W.G. Tierney, Z.B. Corwin, & J.E. Colyar (Eds.), *Preparing for college: Nine elements of effective outreach*. Albany, NY: State University of New York Press.
- Gandara, P., & Moreno, J. F. (2002). *The Puente Project: Issues and perspectives on preparing Latino youth for higher education*. Thousand Oaks, CA: Corwin Press.
- Garvy, B., & Alred, G. 2003). An introduction to the symposium on mentoring: Issues and prospects. *British Journal of Guidance and Counseling*, 31, 1-9.

- Gates Foundation. (2008). Postsecondary success. Redmond, WA. Retrieved from <http://www.gatesfoundation.org/postsecondaryeducation>.
- Gay, L. R., Mills, G., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications* (9th ed.). Upper Saddle River, NJ: Pearson.
- Giuseppe, I. (2005). Survey management: An overview. In *Power of survey design: A user's guide for managing surveys, interpreting results, and influencing respondent*. Washington, DC: World Bank Publications.
- Gonzalez, J. (2010, October 27). Uncertain finances threaten community colleges' ability to help meet Obama's graduation goal. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Uncertain-Finances-Threaten/125100/>
- Gore, P. A. (2006). Academic self efficacy as a predictor of college outcomes: Two incremental validity studies. *Journal of Career Assessment*, 14, 92-115.
- Gore, P. A., Leuwerke, W. C., & Turley, S. E. (2006). A psychometric study of the college self efficacy inventory. *Journal of Career Assessment*, 14, 276-282.
- Green, S., & Salkind, N., (2008). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data*. Pearson/Prentice Hall.
- Hair, J. E., Jr., Anderson, R. E., Tatham, R. L. & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hamm, R. E. (2004). Going to College: Not What It Used to Be. *Keeping America's Promise*. A joint publication of Education Commission of the States and League for Innovation in the Community College. Denver, CO: Education Commission for the States.
- Hanford, E. (2011). The Value of a College Degree. American Public Media. Retrieved from <http://americanradioworks.publicradio.org/features/tomorrows-college/dropouts/value-of-college-degree.html>
- Harvey-Smith, A. B. (2002, November). An examination of the retention literature and application in student success. *Promoting Inclusion*, 5, 14-26.
- Herr, K., & Anderson, G. L. (2005). *The action research dissertation: A guide for students and faculty*. Thousand Oaks, CA: Sage.

- Horn, L., & Berger, R. (2004). *College Persistence on the Rise? Changes in 5-Year Degree Completion and Postsecondary Persistence Rates Between 1994-2000*. (NCES 2005-156). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Horn, L., Nevill, S., & Griffith, J., (2006). Profile of Undergraduates in U.S. Postsecondary Education Institution, 2003-04: With a special analysis of community colleges. *Statistical Analysis Report*, NCES, 2006-184. Retrieved from http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICEExtSearch_SearchValue_0=ED491908&ERICEExtSearch_SearchType_0=no&accno=ED491908
- Hossler, Bean, & Associates (1990). *The strategic management of college enrollments*. Thousand Oaks, CA: Sage.
- Hughes, A., & Fahy, B. (2009). Implementing an undergraduate psychology mentoring program. *North American Journal of Psychology*, 11(3), 463-469.
- Hunter, M.S. (2006). Fostering student learning and success through first-year programs. American Association of College and Universities, *Peer Review*, 8(3), 4-7.
- Hunter, M.S., & Linder, W.L. (2005). First Year Seminars, In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 275-291). San Francisco, CA: Jossey-Bass.
- Integrated Post Secondary Education Data System. (2011) Retrieved from <http://nces.ed.gov/ipeds/>
- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research*, 61(4), 505-532. doi: 10.1177/1468794106065010
- Jaschik, S., (2009). "Turning" college degrees, *Inside Higher Education*, 8 April 2009. Retrieved from <http://www.insidehighered.com/news/2009/04/08/tuning>
- Jenkins, D., & Bailey, T. (2009, October 13). How community colleges can reach Obama's goals. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com>
- Joachim, S. (2009, July 15.) The Obama plan. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com>

- Johnson, J., Rochkind, A., Ott, A., & DuPont, S. (2009). With their whole lives ahead of them: Myths and realities about why so many students fail to finish college. *Public Agenda*. Retrieved from <http://www.publicagenda.org;TheirWholeLivesAheadofThem>
- Karp, M., Hughes, K., & O’Gara, L. (2008). An exploration of Tinto’s integration framework for community college students. *Journal of College Student Retention: Research, Theory and Practice*, 12(1), 69-86.
- Kram, K. E. (1988). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott, Foresman & Co.
- Kirst, M. W., & Venezia, A. (Eds.). (2004). *From high school to college: Improving opportunities for success in Postsecondary Education*. San Francisco, CA: Jossey-Bass.
- Kirwin, W. E. (2007). How the University System of Maryland Responded. *Change*, 39(2), 21-25. Retrieved from Alt-Press Watch. doi:1241830501
- Koljatic, M. & Kuh, G. (2001). A longitudinal assessment of college student engagement in good practices in undergraduate education. *Higher Education*, 42(3), pp. 351-371.
- Komives, S. R., & Dugan, J. P. (2005). *Multi-institutional study of leadership: Participating school guidance part I*. College Park, MD: National Clearinghouse for Leadership Programs.
- Kuh, G., Kinzie, J., Buckley, Bridges, B., & Hayek, J. C. (2006). *What matters to student success: A review of the literature*. Washington, DC: National Postsecondary Education Cooperative.
- Kuh, G., Kinzie, J., Schuh, J., Whitt, E., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco, CA. Jossey-Bass.
- Kuh, G., Cruse, T., Shoup, R., Kinzie, J. & Gonyea, R., (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540-563.
- Lacey, T. A., & Wright, B. (2009, November). Occupational employment projections to 2018. *Monthly Labor Review*, 132(11), 82-123.
- League for Innovation in the Community College. (2011). Retrieved from: <http://league.org/>
- Lederman, D. (2009). 2009, February 25. College for all. *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com/layout/set/print/news/2009/02/25/obama>

- Lent, R. W., Brown, S. D., & Larkin, K. C. (1984). Relation of self-efficacy in prediction of academic achievement and persistence. *Journal of Counseling Psychology, 31*, 356-362.
- Lester, V., & Johnson, C. (1981). The learning dialogue: Mentoring. In J. Fried (Ed.), *Education for student development. New directions for student services* (Vol.15) (pp. 49-56). San Francisco, CA: Jossey-Bass.
- Longerbeam, S. D., Sedlacek, W. I., & Alatorre, H. M. (2004). In their own voices: Latino student retention. *NASPA Journal, 41*(3), 538-550.
- Lotkowski, V., Robbins, S. B., & Noeth, R. J. (2004). *The role of academic and non-academic factors in improving college retention*. Washington DC: ACT—Washington DC
- Love, P., & Estanek, S. (2004). Rethinking student affairs practice. *The Review of Higher Education, 28*, 437-438. doi: 10.1353/rhe.2005.0017
- Maricopa Community Colleges District. (2011). Retrieved from: <http://www.maricopa.edu/>
- Materniak, G. (1984). Student paraprofessionals in the learning skills center. *New Directions for Student Services, 1984*(27), 23.
- McCabe, R. (2003). *Yes, we can! A community college guide for developing America's underprepared*. Phoenix, AZ: League for Innovation in the Community College.
- McClenney, K. M. (2004). *Keeping America's promise: Challenges for community colleges*. A joint publication of Education Commission on the States and League for Innovation in the Community College. Denver, CO: Education Commission of the States.
- McClenney, K. (2009). Helping community college students succeed: A moral imperative. *The Chronicle of Higher Education* <http://chronicle.com/week/v55/i33/33a0600.htm>.
- Merriam, S. B., Mott., V. W., & Lee, M. (1996). Learning that comes from the negative interpretation of life experience. *Studies in Continuing Education, 89*, 3-13.
- Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.

- Middle Class Task Force (2010). White House task force on middle class families staff report: Barriers to higher education. Retrieved from <http://www.whitehouse.gov>
- Miller, J. E., Gorocchia, J. E., & Miller, M. S. (2001). *Student-assisted teaching: A guide to faculty-student teamwork*. Bolton, MA: Anker.
- Miller, M., Lincoln, C., Goldberger, S., Kazis, R., & Rothkopf, A. (2009). Courageous conversations: Achieving the dream and the importance of student success. *Change*, 41(1), 24-41. Retrieved from Alt-Press Watch. doi: 1631527531
- Mills, G. E. (2003). *Action research: A guide for the teacher* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Moltz, D. (March, 2010). Missed Connections. Inside Higher Ed. Retrieved from <http://www.insidehighered.com>
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs of academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38, 30-39.
- National Center for Educational Statistics. (2011). Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011033>
- Nevitt, S. (1962). The American college: A psychological and social interpretation of the higher learning. doi: 10.1037/1181-002pmid:
- Newcomb, T. M. (1962). Student peer-group influences. In N. Stanford (Ed.), *The American college: A psychological and social interpretation of the higher learning* (pp. 469-488). New York, NY: John Wiley & Sons, Inc.
- Nealy, M. (2009). First year college students returning for second year. *Diverse Issues in Higher Education*. Retrieved from <http://diverseeducation.com/article/12217/>
- Nichols, F. W., & Oliver, A. R. (1994). Achieving diversity among community college faculty. *New Directions for Community Colleges*, 87, 35-42. doi: 10.1002/cc.36819948706
- Nodine, T. (2009). Innovations in college readiness: how early college schools are preparing students underrepresented in higher education for college success. Retrieved from: http://www.earlycolleges.org/Innovations_in_College_Readiness_PDFVersion_102909.pdf

- Nomi, T. (2005). *Focus on the Future: A Portrait of First-Generation Community College Students*. American Association of Community Colleges.
- Nora, A. (2003). Access to higher education for Hispanic students: Real or illusory? In J. Castellanos & L. Jones (Eds.), *The majority in the minority: Expanding the representation of Latina/o faculty, administrators and students in higher education*. Sterling, VA: Stylus.
- Nora, A., & Crisp, G. (2007-2008). Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *Journal of College Student Retention*, 9(3), 337-356
- O'Banion, T. (1997). *A learning college for the 21st century*. Phoenix, AZ: The Oryx Press.
- O'Banion, T. (2010, April 16). To what end? *Inside Higher Ed*. Retrieved from <http://www.insidehighered.com>
- Pajares, F., & Miller M. D. (1995). Mathematics self-efficacy and mathematics performances: The need for specificity of assessment. *Journal of Counseling Psychology*, 42, 190.
- Pascarella, E. (1996). First generation college students: characteristics, experiences, and cognitive development. *Researcher in Higher Education*, 37(1), 1.
- Pascarella, E., & Terenzini, P. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education*, 51, 60-75.
- Pascarella, E., & Terenzini, P. (1998). Studying college students in the 21st century: Meeting new challenges. *The Review of Higher Education*, 21(1), 151-165.
- Pascarella, E., & Terenzini, P. (2005). How college affects students: Ten directions for future research. *Journal of College Student Development*, 47(5), 508-520.
- Pearson, R. W. (2010). *Statistical Persuasion*. Thousand Oak, California. SAGE Publications.
- Pennington, H. (2004, Dec.). Fast track to college: increasing postsecondary success for all students. Report Prepared for *Renewing Our Schools, Securing Our Future a National Task Force on Public Education*. Retrieved from <http://www.americanprogress.org/kf/fasttrack-final%2012%2001.pdf>

- Pilkington, R. M. (2009). Practitioner research in education: The critical perspectives of doctoral students. *Studies in the Education of Adults*, 41(2), 154.
- Pima Community College. (2011). Retrieved from <http://www.pima.edu/announcements/pathways-to-pima-at-a-glance.pdf>
- Pintrich, P. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40.
- Policy Center on the First Year of College. (2002). Second National Survey of First-year Academic Practices 2002. Retrieved from <http://www.sc.edu/fye/centerinitiative/development/index.html>.
- Porter, S., & Swing, R., (2006). Understanding how first-year seminars affect persistence. *Research in Higher Education*, 47(1). doi: 10.1007/s11162-005-8153-6
- Rendon, L. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*. 19(1), 33-51, DOI: 10.10071BFO1191156
- Rendon, L. I. (2000). Academics at heart. *About Campus*, 5(3), 3-5.
- Rendon, L. I. (2002). Community college Puente: A validating model of education. *Educational Policy*, 16(4), 642-667. doi: 10.117710895904802016004010
- Rendon, L (2006). Reconceptualizing success of underserved students in higher education. *National Postsecondary Education Cooperative*. Retrieved from http://nces.ed.gov/NPEC/pdf/resp_Rendon.pdf
- Rendon, L. I., Jaloma, R. E., & Nora, A. (2000). Theoretical considerations in the study of minority retention. In J.M. Braxton (Ed.), *Reworking the Student Departure Puzzle* (pp. 127-156). Nashville, TN: Vanderbilt University Press.
- Rogers, B. (2005). Attracting low-income students is a shifting responsibility. *Trusteeship*, 13(4), 7.
- Roueche, J., Baker, G., & Brownell, R. (1972). *Accountability and the community college: Directions for the 70's*. Washington, DC: American Association of Junior Colleges.
- Roueche, J., & Roueche, S. (1993). *Between a rock and a hard place*. Washington, DC: The American Association of Community Colleges.

- Sander, L. (2008). At Community Colleges, a Call to Meet New Students at the Front Door. *Chronicle of Higher Education*, 54(29), A25. Retrieved from <http://chronicle.com/article/At-Community-Colleges-a-Call/16718>
- Sandford, N. (1962). *The American college: a psychological and social interpretation of the higher learning*. Oxford, England: Wiley. doi: 10.1037/11181-00
- Sanft, M., Jenson, M., & McMurray, E. (2008). *Peer mentor companion*. Boston, MA: Houghton Mifflin.
- Schlosser, L. Z., Knox, S., Moskovitz, A. R., & Hill, C. E. (2003). A qualitative examination of graduate advising relationships: The advisee perspective. *Journal of Counseling Psychology*, 50, 178-188.
- Schneider, M. (2010). Finishing the first lap: The cost of first year student attrition in America's four year colleges and universities. *American Institute for Research*. Retrieved from http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICEExtSearch_SearchValue_0=ED512253&ERICEExtSearch_SearchType_0=no&accno=ED512253
- Scrivener, S. & Weiss, M. J., & Teres, J. (August 1, 2009). More guidance, better results? Three-year effects of an enhanced student services program at two community colleges. New York, NY: MDRC, August 2009. Available at <http://www.mdrc.org/publications/524/full.pdf>
- Seidman, A. (Ed.). (2005). *College student retention: Formula for success*. Westport, CO: Praeger Publishers.
- Seidman, A. (2006). Retention formula slide show. Retrieved from [www.ccsr.org/docs/RetentionFormulaUpdate for Web2010.pdf](http://www.ccsr.org/docs/RetentionFormulaUpdate%20for%20Web2010.pdf)
- Smith, T. (2008). Integrating undergraduate peer mentors into liberal arts courses: A pilot study. *Innovative Higher Education*, 33, 49-63.
- Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). Self-efficacy and Hispanic college students: Validation of the college self-efficacy instrument. *Hispanic Journal of Behavioral Sciences*, 15(1), 80-95. Retrieved from <http://hjb.sagepub.com/content/15/1/80.refs.html>.
- Solberg, V. S., & Villareal, P. (1997). Examination of self-efficacy, social support, and stress as predictors of psychological and physical distress among Hispanic college students. *Hispanic Journal of Behavioral Sciences*, 19, 182-201.

- Solutions Through Higher Education. (2010). Call to action. Retrieved February 13, 2010 from <http://www.highereducationsolution.compage/view?id=105>.
- Somerville, J., & Yi, Y. (2002). *Aligning K-12 and postsecondary expectations: State policy in transition*. Washington, DC: National Association of Systems Heads & U.S. Department of Education, Office of Vocation and Adult Education.
- Stringer, E. T. (2007). *Action Research* (3rd ed.). Thousand Oaks, CA: Sage.
- Swail, W., Cabrera, A., Lee, C., & Williams, A. (2005). *Latino students and the educational pipelines: A three-part series. Part III. pathways to the bachelor's degree for Latino students*. Stafford, VA: Education Policy Institute. Retrieved from <http://educationalpolicy.org/>
- Swenson, L. M., Nordstrom, A., & Hiester, M. (2008). The role of peer relationships in adjustment to college. *Journal of College Student Development*, 49, 551-567.
- Taylor, K., & Haynes, C. (2008). A framework for intentionally fostering student learning. About Campus/ November-December. Retrieved from www.interscience.wiley.com. doi: 10.1002/abc.265
- Terenzini, P. T., Pascarella, E. T., & Billing, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development*, 37, 149-162.
- Terenzini, P., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, 37(1), p.1.
- The Conditions of Education. (2011). Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011033>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89-125.
- Tinto, V. (1982). Limits of theory and practice in student attrition. *Journal of Higher Education*, 53, 687-700.
- Tinto, V. (1990). Principles of effective retention: *Journal of the Freshman Year Experience*, 2(1), 35-48.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.

- Tinto, V. (1997). Restructuring the first year of college. *Planning for Higher Education*, 25(1), 1.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The Review of Higher Education*, 21(2), 167-177.
- Tinto, V. (2005). Graduation rate outcomes. Student success and the construction of inclusive educational communities [speech]. *American Association of State Colleges and Universities*, 1-11. Retrieved from <http://survey.csuprojects.org/gedocuments/student-success-and-the-construction-of-inclusive-educational-communities>
- Turner, C. S. (1994). A guest in someone else's house: Students of color on campus. *The Review of Higher Education*, 17(4), 355-370.
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O., & Associates (2005). *Challenging and supporting first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.
- U.S. Department of Education (2010). Retrieved from <http://www.ed.gov/>
- Valadez, J. (1993). Cultural capital and its impact on the aspirations of nontraditional community college students. *Community College Review*, 21(3), 30-43. doi: 10.1177/009155219302100304
- Valencia College. (2011). Retrieved from <http://valenciacollege.edu/>
- Valverde, L. A. (2008). *Latino change agents in higher education: Shaping a system that works for all*. San Francisco, CA: Jossey- Bass.
- Vargas, J. (2004). College knowledge: addressing information barriers to college. *The Education Resources Institute*. Boston, MA.
- Vega, W. A., Hough, R. L., & Miranda, M. R. (1985). Modeling cross-cultural research in Hispanic mental health. In W. A. Vega & M. R. Miranda (Eds.), *Stress and Hispanic mental health: Relating research to service delivery* (Publication No [ADM] 85-1410). Washington, DC: National Institute of Mental Health, Department of Health and Human Services.
- Venezia, A. (2001). A student-centered P-16 accountability model: Encouraging high standards, equitable educational opportunities and outcomes, and flexibility within a seamless system of education. Education Commission of the States.

- Venezia, A., Kirst, M., & Antonio, A. (2003, March). *Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student expectations*. Stanford, CA: National Center for Postsecondary Improvement.
- Wallace, D., Able, R., & Ropers-Huilman, B. (2000). Clearing a path for success: Deconstructing borders through undergraduate mentoring. *The Review of Higher Education, 24*, 87-102.
- Weiss, C. (1997). *Evaluation Research: Methods for Assessing Program Effectiveness* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Wells, R. (2008). The effects of social and cultural capital on student retention: Are community colleges more meritocratic? *Community College Review, 36*(1), 25-46.
- White House Summit on Community College (2010). Building American Skills by Strengthening Community Colleges. Retrieved from <http://www.whitehouse.gov/CommunityCollege>.
- Williford, A. M., Chapman, L. C., & Kahrich, T. (2000-2001). The university experience course: A longitudinal study of student performance, retention, and graduation. *Journal of College Student Retention, 2*(4), 327-340.
- Woodlief, B., Thomas, C., & Orozco, G. (2003). *California's gold: Claiming the promise of diversity in our community colleges*. Oakland, CA: California Tomorrow.
- Yarzedjian, A., Purswell, K., Sevin, T., & Toews, M. L. (2007). Adjusting to the first year of college: Students perception of the importance of parental, peer and institutional support. *Journal of the First-Year Experience and Students in Transition, 19*(2), 29-46.
- Zachery, L. (2005). *Creating a Mentoring Culture*. San Fransisco, CA: Jossey-Bass.
- Zalaquette, C. P. (1999). Do students on non-college-educated parents achieve less academically than students of college educated parents? *Psychological Reports, 85*, 417-421.
- Zalaquette, C. P. & Turner, M. T. (1997). Succeeding in the 21st century: A qualitative analysis. *Texas Counseling Journal, 25*(1), 331-340.

Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007). *Do student success courses actually help community college students succeed?* CCRC brief n. 36 Community College Research Center. Available from: CCRC Publication. Teachers College, Columbia University. Retrieved from <http://ccrc.tc.columbia.edu/>

APPENDIX A

COLLEGE STUDENT SELF-EFFICACY INSTRUMENT

8. Get along with students in your classes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Do well on your exams.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Join a student organization or club.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Develop effective study strategies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Develop an educational plan with my advisor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Ask an instructor a question.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Take good class notes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Ask a tutor for help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Develop strategies for coping with stress.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Socialize with others outside of class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Keep up to date with your schoolwork.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Use technology to complete assignments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Study with a peer/group outside of class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please continue survey on back side...

Demographic Information

Gender:

- Female
- Male

Did you graduate from high school?

- Yes
- No
- Earned GED

Age group:

- 15-19
- 20-24
- 25-29
- 30-39
- 40-49
- Over 50

When was your first semester of college?

- Fall
- Spring
- Summer

What year did you first enroll in college?

- 2011
- 2010
- 2009
- 2008
- 2007
- Before 2006

Ethnicity:

- American Indian/Alaska Native
- Asian
- Black or African American
- Hispanic
- White
- Other

Are you the first in your family to attend college?

- Yes
- No

Have you declared a college major?

- Yes
- No

Do you plan to take classes at EMCC during the Fall 2011 semester?

- Yes
- No

Please indicate whether you plan to do any of the following: (Mark all that apply)

- Graduate from EMCC with an associate's degree or certificate.
- Graduate from another community college with an associate's degree or certificate.
- Transfer to a four year school and complete a bachelor's program.
- Attend Graduate College – pursue advanced degree.

APPENDIX B
FACULTY RECRUITMENT LETTER

Letter to Faculty Soliciting Participation Campus Correspondence sent via e-mail

To: Estrella Mountain Community College Counseling Faculty

From: Vivian Miranda, Coordinator of Student Success

RE: Dissertation Research

Date: April 2011

I am a doctoral student under the direction of Dr. Lisa McIntyre in the Higher & Postsecondary Education Program, in the Mary Lou Fulton Teachers College at Arizona State University. I am conducting a study to fulfill the dissertation requirement of the doctoral degree and plan to collect my data this spring semester. I am contacting you to request your assistance with this study.

The purpose of this study is twofold. The first purpose is to expand the researchers' understanding of self-efficacy beliefs and how these beliefs influence the persistence of a first year college student. The second purpose is to evaluate the impact peer mentoring has on self-efficacy of first-year community college students. This study will help to determine the value of the peer mentors' role as it relates to the confidence of first-year students at Estrella Mountain Community College.

Specifically, I am interested in exploring the relationship between the support of a peer mentor and college student self-efficacy. College self-efficacy is defined as a students' degree of confidence that they could successfully complete a given college related task (e.g., taking notes, asking a question in class, etc.). For this reason, students enrolled in a CPD 150 section will be invited to be part of the study. This study is consistent with the IRB Guidelines for using human subjects and student participation will be voluntary.

If you agree to participate in this study, I will need your assistance to collect data via a survey instrument (College Student Self-Efficacy Survey) to be administered the last week of April 2011. I will provide you with the instrument packet that will contain the instructions, the survey, student consent forms and demographic information sheets for all those students choosing to participate. The survey task for students will require approximately 10-15 minutes.

If you agree to participate in this study, please respond directly to this email no later than _____. Please contact me by telephone at 623-935-8900 or email at vivian.miranda@estrellamountain.edu if you have any questions or need clarification about the study. I appreciate your assistance in helping me with this process.

Thank you for your attention and hopefully your assistance in supporting this study.

Sincerely,

APPENDIX C

CPD 150 – STRATEGIES FOR COLLEGE SUCCESS COURSE SYLLABUS -

MASTER

Course Description: This class is focused on increasing student success through college orientation and personal growth, study skills development, and educational and career planning.

Course Competencies: Strategies for College Success

1. Identify and describe campus student support resources.
2. Identify and apply time-management strategies.
3. Identify and apply goal-setting strategies.
4. Identify preferred learning style and describe its relationship to teaching and learning strategies.
5. Identify and utilize interpersonal communication skills.
6. Identify and utilize strategies to organize study materials.
7. Identify and utilize note-taking strategies.
8. Identify and utilize textbook, academic, and classroom strategies.
9. Identify and utilize test-taking strategies.
10. Identify and utilize strategies to improve memory.
11. Identify and utilize strategies for critical and creative thinking.
12. Describe the process of educational and career planning.
13. Describe current occupational trends and outlooks.
14. Utilize career-planning resources.
15. Develop an education plan.

Definitions of Critical Thinking and Communication

Critical Thinking and Communication are currently being integrated into a wide variety of Estrella Mountain courses. By integrating these abilities into a variety of courses offered at the college, students benefit twice. They learn course content, and they develop these important abilities to enhance student success in academic and professional pursuits.

At Estrella Mountain, Critical Thinking is defined as: A student who thinks critically processes, synthesizes and applies information to solve problems by:

- Identifying the problem
- Evaluating information
- Responding to the problem
- Developing and implementing strategies
- Reaching conclusions

At Estrella Mountain, Communication is defined as: A student who effectively communicates:

- Responds to an audience
- Organizes information
- Demonstrates a clear sense of purpose
- Delivers information using appropriate language

Required Materials:

1 three-ring binder w/dividers ; USB Stick
EMCC Student Handbook & Planner

COURSE REQUIREMENTS

1. Attendance - Because research shows that there is a direct relationship between classroom attendance and grade performance, and because much of the learning for this class takes place in the classroom via classroom activities and group interaction, regular attendance is required and will count as part of your grade. Missing classes or being consistently tardy to class will lower your semester grade. Talking, sleeping, reading, working on other material, etc. indicates a desire to be some place else other than class, and can affect your attendance. When absence is unavoidable, work must be made up by

the next class meeting. It is advisable to contact the instructor PRIOR to missing class. CELL PHONE & IPODs ARE NOT PERMITTED FOR USE DURING CLASS.

2. Classroom Participation - Regular participation in discussions and class exercises is expected and required.

3. Reading and Other Study - Keep up on your reading by observing the syllabus. Failure to do the reading will affect your ability to participate in class, and therefore, will affect your grade.

4. Assignments/Exercises - Assignments and exercises will be given in class and/or posted on our CPD 150 Blackboard site. Blackboard is a resource and a tool to assist you in the management and tracking of your assignments. You are responsible for knowing assignments even if you miss class. Some assignments will be done in class. Should you miss class, you will be responsible to make up the in-class work, as well as the homework assignments. Please be sure to review the syllabus and communicate with your instructor.

5. Confidentiality & Respect - Whatever is said in the classroom, must remain in the classroom. Should a student demonstrate disrespectful behavior (whispering, doing other assignments, etc.) to her/his peers or the instructor, s/he will be asked to leave the classroom and will be considered absent.

6. Academic Honesty - Any cheating and/or plagiarizing will result in automatic lowering of the course grade. The instructor has the option of giving a failing course grade.

7. Grading Policy :

100% - 90%	= A
89% - 80%	= B
79% - 70%	= C
69% - 60%	= D
< 59%	= F

Disclaimer

All provisions in this syllabus are subject to revision by the instructor. Such revisions, if any, will be announced in class and/or Blackboard. The student is responsible for making note of all such announcements concerning syllabus revisions and assignments

Disability Policy

The college will make reasonable accommodations for persons with documented disabilities, including learning disabilities. Students should contact the Disability Resources Office in Komatke Hall B (623-935-8935) and their instructors as soon as possible of any special needs.

Additional Resources (many can also be found online from the Student section off of the EMCC homepage):

Information Commons, Instructional Computing (623) 935-8150

Library (623) 935-8191

Learning Enhancement and Writing Support Center (623) 935-8189

NASA Center for Success in Math and Science (623) 935-8221

Online Writing Center- You can access this resource through your Blackboard course management system

Course Tracker

Wk	Dates	Class Content
1		Class Introduction, Expectations & Icebreakers & SRI
2		Scavenger Hunt & Blackboard
3		Library & LEC
4		Advisement & FA
5		Time
6		Time
7		Personal Development – SRI Interpretation
8		Personal Development
9		Personal Development (visit to Fitness Centers)
10		Study Skills
11		Study Skills
12		Study Skills
13		College & Careers
14		College & Careers
15		College & Careers
16		Final ppts & Portfolios Due

APPENDIX D

STUDENT RECRUITMENT SCRIPT/INFORMED CONSENT

Vivian Miranda, a graduate student at Arizona State University is conducting a research study for two reasons: (1) to expand her understanding of self-efficacy and how self-efficacy influences the persistence of a first year college student and (2) to explore the relationship between the support peer mentoring has on self-efficacy of first-year community college students. College self-efficacy is defined as a students' degree of confidence that they could successfully complete a given college related task (e.g., taking notes, asking a question in class, etc.).

Ms. Miranda is inviting your participation. If you agree to participate you will complete a 20 item College Student Self-Efficacy Inventory, you will also be asked to provide some demographic data. Your participation is anonymous, your name will not be documented, and neither the researcher nor your instructor will know how you responded. The survey items are designed to gather information about your confidence level regarding tasks related to college. The survey will take approximately 10-15 minutes to complete.

The risks associated with this study are minimal and represent no more risk than what is experienced in everyday life.

The possible benefit of your participation in the research is that your answer to the survey will be used to improve student learning, persistence and college completion rates.

If you choose to participate in the study you will receive a student consent form with important contact information regarding this study and your participation.

Please raise your hand if you choose to participate in this study, your instructor will then provide you with a College Student Self-Efficacy Inventory and #2 pencil (please use only a #2 pencil on the survey instrument).

Thank you for your attention.

Student Consent Form

1. **Title of Research Study:** Peer Mentor Impact on College Self-Efficacy
2. **Project Director** Dr. Lisa McIntyre Phone Number: 480-965-6738
Student Investigator: Vivian Miranda Phone Number: 623-935-8900
3. **Purpose of the Research:**
The purpose of this study is twofold. The first purpose is to expand the researchers' understanding of self-efficacy and how self-efficacy influences the persistence of a first year college student. The second purpose is to explore the relationship between the support peer mentoring has on self-efficacy of first-year community college students. College self-efficacy is defined as a students' degree of confidence that they could successfully complete a given college related task (e.g., taking notes, asking a question in class, etc.).
4. **Procedures for the Research:**
If you agree to participate in this study, you will be asked to provide some demographic data and a 20 item College Student Self-Efficacy Inventory. Your participation is anonymous, your name will not be documented, and neither the researcher nor your instructor will know how you responded. The survey items are designed to gather information about your confidence level regarding tasks related to college. The survey will take approximately 10-15 minutes to complete.
5. **Potential Risks:**
The risks associated with this study are minimal and represent no more risks than what is experienced in everyday life.
6. **Potential Benefits:**
Data collected will be used to improve student learning, persistence and college completion rates.
7. **Alternative Procedures:**
This research does not allow for alternative procedures, however, your participation is entirely voluntary and you may choose to cease participation at any time without consequence.
8. **Protection of Confidentiality:**
Your privacy will be maintained and your identity will not be revealed at any time. Please **do not** place your name on the survey instrument. All data collected will be securely stored at all times.

If you have any questions concerning this research study, please contact the research team at: Lisa.McIntyre@asu.edu, or Vivian.Miranda@estrellamountain.edu If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480)-965-6788 or Maricopa Community College District Research Integrity and Assurance, at (480)-731-8701.

APPENDIX E
SAMPLE'S DEMOGRAPHIC FREQUENCIES

Sample's Demographic Frequencies (N=79)

	Demographics	With Peer Mentor	%	Without Peer Mentor	%
Gender	Female	22	51.1	24	66.9
	Male	21	48.8	12	33.3
Earned high school diploma	Yes	40	93.0	14	38.8
	No	1	2.3	22	61.1
	Earned GED	1	2.3	0	0.0
	Missing data	1	1.0	0	0.0
Declared major	Yes	30	69.7	17	39.5
	No	12	27.9	19	44.1
Age group	15-19	23	53.4	30	83.3
	20-24	10	23.2	3	8.3
	25-29	5	11.6	2	5.5
	30-39	1	2.3	1	2.7
	40-49	2	4.6	0	0
	+50	2	4.6	0	0
First semester of college	Fall 2010	17	39.5	10	27.7
	Spring 2011	26	60.4	26	72.2
Ethnicity	Am. Ind/ Alaskan	2	4.6	2	5.5
	Asian	0	0	0	0
	Black	6	13.9	1	2.78
	Hispanic	22	51.1	12	33.3
	White	12	27.9	19	52.7
	Other	1	2.3	1	2.7
	Missing data	0	0	1	2.7
Future educational plans	Continue at EMCC	36	83.7	35	81.3
	Leave EMCC	7	16.2	1	2.3
	Graduate from EMCC	22	51.1	29	67.4
	Graduate different CC	8	18.6	1	2.3
	Transfer to 4-year school	23	53.4	25	58.1
	Attend graduate school	5	11.6	15	34.8

Note: CC=community college

APPENDIX F
ANOVA RESULTS

	Social Integration- Efficacy	Variance	SD	(Mean)
Gender	Female	2.17	1.47	7.31
	Male	2.56	1.60	7.53
High School Graduate	Yes	2.54	1.59	7.36
	No	1.98	1.40	7.52
Declared Major	Yes	2.40	1.54	7.37
	No	2.12	1.45	7.53
First Generation	Yes	1.43	1.18	7.75
	No	2.64	1.62	7.26
Age Group	15-19	2.37	1.53	7.36
	20-24	1.77	1.33	7.31
	25-29	3.51	1.87	8.29
	30-39	1.53	1.23	7.38
	40-49	5.28	2.29	6.63
	50+	1.13	1.04	7.0
Ethnicity	American Indian	1.79	1.33	7.25
	Black	3.23	1.79	7.25
	Hispanic	2.26	1.48	7.23
	White	2.41	1.55	7.54
	Other	2.53	1.58	8.13
First Semester Enrolled	Fall 2010	1.85	1.36	7.32
	Spring 2011	2.59	1.60	7.44

	Social Self-Efficacy	Variance	SD	(Mean)
Gender	Female	2.30	1.51	7.55
	Male	2.59	1.60	7.53
High School Graduate	Yes	2.21	1.48	7.60
	No	2.77	1.66	7.15
Declared Major	Yes	1.59	1.26	7.75*
	No	3.59	1.87	6.96*
First Generation	Yes	2.09	1.44	7.60
	No	2.57	1.60	7.39
Age Group	15-19	2.25	1.50	7.28
	20-24	2.95	1.71	7.24
	25-29	2.89	1.70	8.37
	30-39	2.72	1.64	7.61
	40-49	0.02	0.14	8.56
	50+	1.02	1.0	8.84
Ethnicity	American Indian	1.47	1.21	7.11
	Black	2.97	1.72	7.70
	Hispanic	3.98	1.99	7.08
	White	1.86	1.36	7.76
	Other	0.05	0.22	8.17
First Semester Enrolled	Fall 2010	1.07	1.03	7.71
	Spring 2011	3.08	1.75	7.31

Note. * Indicates statistical significance

	Academic Self-Efficacy	Variance	SD	(Mean)
Gender	Female	2.17	1.47	7.31
	Male	2.56	1.60	7.53
High School Graduate	Yes	1.61	1.26	7.82
	No	1.57	1.25	7.69
Declared Major	Yes	1.09	1.04	7.86
	No	2.40	1.54	7.65
First Generation	Yes	1.64	1.28	7.81
	No	1.58	1.25	7.77
Age Group	15-19	1.35	1.16	7.76
	20-24	2.83	1.68	7.17
	25-29	0.72	0.84	8.61
	30-39	0.16	0.4	7.71
	40-49	0.16	0.4	8.86
	50+	2.0	1.41	8.43
Ethnicity	American Indian	1.03	1.01	7.14
	Black	2.09	1.44	7.76
	Hispanic	2.07	1.43	7.52
	White	1.05	1.02	8.12
	Other	0.16	0.4	8.43
First Semester Enrolled	Fall 2010	1.26	1.12	7.81
	Spring 2011	1.78	1.33	7.77

APPENDIX G

CSEI ALIGNMENT WITH CPD 150 AND PEER MENTORS

College Self-Efficacy Inventory Principle Factors	Academic Self-Efficacy	Social Self-Efficacy	Social Integration-Efficacy
Make new friends.			X
Choose a major or career.		X	
Seek assistance for college staff member.		X	
Manage time effectively.	X		
Ask a question in class.		X	
Participate in class discussions.		X	
Use library services.	X		
Get along with students in your class.		X	
Do well on your exams.	X		
Join a student organization or club.			X
Develop effective study strategies.	X		
Develop an educational plan with your advisor.		X	
Ask an instructor a question outside of the classroom.		X	
Take good class notes.	X		
Ask a tutor for help.		X	
Develop strategies for coping with stress.		X	
Socialize with others outside of class.			X
Keep up to date with your schoolwork.	X		
Use technology to complete assignments.	X		
Study with a peer/group outside of class.		X	

College Student Self-Efficacy Principle Factors:

Academic Self-Efficacy: Course performance

Social Self-Efficacy: Interpersonal and social adjustment (knowing oneself)

Social Integration-Efficacy: Connection to the institution

APPENDIX H
EMCC PEER MENTOR PROGRAM

Mentor & CPD 150 Student Relationship

This CPD 150 class has been selected to participate in EMCC's Peer Mentor Program. As a student in this CPD 150 class, you have a unique opportunity to receive extra guidance and support to ensure your academic success. Each student in this class will be assigned a peer mentor. It is important for you to understand that meeting with your peer mentor throughout this semester is an expectation of this class. A description of the peer mentor-mentee relationship is listed below. Please read carefully. By remaining registered in this course, you are entering into a commitment to participate in the EMCC Peer Mentor Program.

Mentor-Mentee Relationship

- Building a relationship where CPD 150 student feels comfortable. CPD 150 student dictates the depth and breadth of personal information related to her/his education.
- Mentors are NOT counselors. If there is an issue that is of great concern of a non-academic issue and/or one which might best be shared with a counselor, let your instructor know. If there are any questions regarding the EMCC Peer Mentor Program, please contact [REDACTED]
- Mentors check in twice a month with their assigned CPD 150 students.
 - Email, phone, or in-person (3 mandatory meetings per semester in person)
 - [REDACTED] Regularly scheduled weekly office hours in [REDACTED]
 - Type of contact is determined by the CPD 150 student
 - CPD 150 student provides contact information (phone #, email address)
 - In person meetings take place on campus in a public venue
- The role of a peer mentor IS to:
 - Help brainstorm strategies that help CPD 150 students negotiate transition to EMCC.
 - Connect and refer CPD 150 students to EMCC resources and personnel
 - Share personal experiences related to academic success and college transition
 - Help provide motivation and coping strategies necessary for student academic success
- The role of a peer mentor is NOT:
 - A (surrogate) parent.
 - A professional counselor or therapist.
 - A flawless or infallible idol.
 - A social worker.
 - A lending institution.

- A playmate or romantic partner.
- A teacher's aide/teaching assistant

Student Contact Check Sheet

Class: _____

Date:

Student:

What classes are you registered for this semester (please list your entire class schedule)?

Time	Monday	Tuesday	Wednesday	Thursday	Friday

What concerns (if any) do you have for academic success in those classes?

1. Class:
2. Class:
3. Class:
4. Class:
5. Class:

What is needed/expected from your assigned Peer Mentor to help?

Possible meeting dates & times: Preferred form of contact (e.g. , phone, email):

Student Signature

Date

APPENDIX I
CSEI FACTOR ANALYSIS

Course Competencies	CPD 150	Peer Mentor	CSEI
Identify and describe campus student support resources.	X	X	
Identify and apply time-management strategies.	X	X	X
Identify and apply goal-setting strategies.	X	X	X
Identify preferred learning style and describe its relationship to teaching and learning strategies.	X		
Identify and utilize interpersonal communication skills.	X	X	X
Identify and utilize strategies to organize study materials.	X	X	X
Identify and utilize note-taking strategies.	X	X	X
Identify and utilize textbook, academic, and classroom strategies.	X	X	X
Identify and utilize test-taking strategies.	X	X	X
Identify and utilize strategies to improve memory.	X	X	
Identify and utilize strategies for critical and creative thinking.	X	X	X
Describe the process of educational and career planning.	X	X	X
Describe current occupational trends and outlooks.	X		
Utilize career planning resources.	X	X	X
Develop an education plan.	X	X	X
Describe effective behavior in higher education settings.	X	X	X
Describe college transition issues and identify strategies.	X	X	X

APPENDIX J
IRB APPROVAL FORMS



Maricopa County Community College District
2411 West 14th Street
Tempe
AZ, 85281
TEL: (480) 731-8701
FAX: (480) 731 8282

DATE: April 08, 2011
TO: Miranda, Vivian
FROM: MCCCC Institutional Review Board
PROTOCOL TITLE: Peer Mentors Impact on Community College Students' Self Efficacy
FUNDING SOURCE: NONE
PROTOCOL NUMBER: 2011-02-104
FORM TYPE: NEW
REVIEW TYPE: EXEMPT

Dear Principal Investigator,

The MCCCC IRB reviewed your protocol and determined the activities outlined do constitute human subjects research according to the Code of Federal Regulations, Title 45, Part 46.

The determination given to your protocol is shown above under Review Type.

You may initiate your project.

If your protocol has been ruled as *exempt*, it is not necessary to return for an annual review. If you decide to make any changes to your project design which might result in the loss of your exempt status, you must seek IRB approval prior to continuing by submitting a modification form.

If your protocol has been determined to be *expedited or full board review*, you must submit a continuing review form prior to the expiration date shown above. If you make any changes to your project design, please submit a modification form prior to continuing.

We appreciate your cooperation in complying with the federal guidelines that protect human research subjects. We wish you success in your project.

Cordially,
MCCCC IRB

Page: 1

To: Lisa McIntyre
From: Mark Roosa, Chair
Soc Beh IRB
Date: 04/08/2011
Committee Action: **Exemption Granted**
IRB Action Date: 04/08/2011
IRB Protocol #: 1103006232
Study Title: Peer Mentors Impact on Community College Students' Self-Efficacy

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(1) (2) .

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX K

SPECIAL ADMISSION INFORMATION AND GUIDELINES

Special Admission Information and Guidelines
For students under 18 years of age
who don't have a high school diploma or GED

Registration:

1. The college may limit the number of credit hours in which the student may enroll to no more than six (6) credit hours.
2. **Students under the age of 16** may be limited to course selection based on faculty approval. Academic divisions will be notified.
3. Students/parents are responsible for all tuition, fees and books must adhere to all payment deadlines, policies and processes.
4. Special admission students are held to the same add/drop and refund policy established by the college.
5. Special admission students are held to all admission and pre-requisite requirements.
6. Students are responsible to go online to their Student Center at www.my.maricopa.edu to obtain their final college grades. Grades will not be mailed out to student's residence.
7. By taking a class at Estrella Mountain Community College or any other college the credit students earn will appear on a college transcript which is a **permanent academic record**.

FERPA – Family Educational Rights and Privacy Act

1. The student signature on the special admission form gives permission for the release of any and all student records to their designated parent/legal guardian. Dependent verification and photo ID will be required prior to the release of any student records.
2. Faculty members are not permitted to discuss student information without the student being present and are not required to meet with a parent/legal guardian.

High School Credit

1. Students interested in transferring their college credit back to their high school for high school credit are responsible for meeting with high school officials to gain approval prior to registering for college courses.
2. High school/high school district determines whether a college course may be used for a high school credit.

College/Course Expectations

1. Special admission students **will be treated like everyone else** in the class and will not be identified as an special admission student unless the student volunteers information to the instructor/fellow classmates or is under the age of 16 (see #2 under Registration).
2. Special admission students **will be held to the same expectations as any other student in the classroom and will be expected to follow the syllabus.**
3. Students **will be required to attend the class according to the attendance requirements stated in the course syllabus.**
4. The course content or delivery in a class **will not be altered due to special admission students enrolled in the course.** Students may be exposed to adult language, discussion and/or themes in the classroom and on the college campus.
5. Students are responsible to communicate with the instructor if there are any questions or concerns.
6. Course delivery/mode (online, hybrid, traditional lecture) will be discussed with the special admission administrator. When taking an online/hybrid class:
 - a) Many times more home work is assigned in the online class to make up for the lack of seat time and to ensure students have an understanding of the material presented.
 - b) Online classes require that students log into their online course on a regular basis.
7. Students are responsible to seek assistance for any special needs they have.
 - a) Contact Disability Resource Center for assistance at 623-935-8935.
 - b) Contact the Learning Enhancement Center (writing, reading, ESL, other areas) at 623-935-8189.
 - c) Contact NASA Math and Science Tutoring Center at 623-935-8221.