To my family
for the love, laughter, and support we share
ACKNOWLEDGMENTS

Completing a doctoral degree, assuming timely demands of coursework, and writing a dissertation does not come without sacrifices. Some say, “It takes a village to raise a child.” I say, “It takes a village to complete a doctoral degree.” I could not have completed such an undertaking without the support and encouragement of many people in my life, so I would like to take time to thank the village. First and foremost, I would like to express my love and appreciation to my husband, Brae, for his patience, understanding and overwhelming support when times were difficult. He was my rock throughout this process and is the love of my life. I thank my mother for her unconditional love and faith in me to achieve my goals without a doubt. I thank my family and friends for their patience and understanding for all the birthdays, celebrations, and dinners I missed because I was behind my computer doing research.

I am extremely grateful to Dr. Dale Campbell for chairing my committee, to Dr. Honeyman for his candor and always telling me exactly as it is, and to my doctoral committee members for their guidance and insight during this process. I would also like to thank Dr. Cynthia Garvan for her assistance and time spent with me reviewing my statistics and calculations - in layman’s terms. Much appreciation goes to Angela Rowe, the administrative assistant in the Educational Administration & Policy Department. She was exceptionally helpful with documentation, registration and procedures to keep me on track.

I could not have completed such a project without the help of Dr. Joyce Romano and Dr. Chanda Torres and her team. I thank them for their ideas, advice, and expertise during this process. I am eternally grateful for their support. I would also like to extend my greatest appreciation for Dr. Ragu Mathur and Jim Gaston of South
Orange County Community College District in southern California. The time and assistance they provided was extremely beneficial.

I would also like to express appreciation to my cohort. I learned a great deal simply listening to their professional experiences and knowledge of higher education. I have new friends and memories that will last a lifetime from the encounters I have had in this association.
# TABLE OF CONTENTS

**ACKNOWLEDGMENTS** .......................................................................................................................... 4

**LIST OF TABLES** .................................................................................................................................. 8

**LIST OF FIGURES** ............................................................................................................................... 9

**LIST OF ABBREVIATIONS** ................................................................................................................ 10

**ABSTRACT** ........................................................................................................................................... 11

**CHAPTER**

1 **INTRODUCTION** .............................................................................................................................. 12

   Background ........................................................................................................................................... 12
   Significance ........................................................................................................................................... 13
   Statement of the Problem ....................................................................................................................... 19
   Purpose of the Study .............................................................................................................................. 19
   Research Questions ............................................................................................................................... 19
   Assumptions .......................................................................................................................................... 20
   Limitations of the Study ......................................................................................................................... 20

2 **REVIEW OF LITERATURE** ................................................................................................................ 22

   Mission of the Community College .................................................................................................... 22
      First-Generation Students .................................................................................................................. 23
      Traditional Students .......................................................................................................................... 27
      Nontraditional Students .................................................................................................................... 31
   Importance of Developmental Advising ............................................................................................... 33
   Model Developmental Advising Programs ............................................................................................ 36
      Valencia Community College ............................................................................................................. 36
      South Orange County Community College District ........................................................................... 40

3 **RESEARCH PROCEDURE** .................................................................................................................. 51

   Setting .................................................................................................................................................. 52
   Population ............................................................................................................................................. 52
   Methodology ......................................................................................................................................... 53
   Instruments .......................................................................................................................................... 54
   Data Collection and Analysis ................................................................................................................ 55
   Criterion ............................................................................................................................................... 58
   Summary .............................................................................................................................................. 58
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>Demographic Sample of the Attitudes of Incoming Adult Learners Report</td>
<td>49</td>
</tr>
<tr>
<td>2-2</td>
<td>Sample Survey Items and Data from the Attitudes of Incoming Adult Learners</td>
<td>50</td>
</tr>
<tr>
<td>3-1</td>
<td>Demographics of Study</td>
<td>61</td>
</tr>
<tr>
<td>3-2</td>
<td>Demographics of the College</td>
<td>62</td>
</tr>
<tr>
<td>4-1</td>
<td>Gender and Race Differences between Completers and Non-Completers of the Road Map to Success Program</td>
<td>70</td>
</tr>
<tr>
<td>4-2</td>
<td>Age Differences between Completers and Non-Completers of the Road Map to Success Program</td>
<td>71</td>
</tr>
<tr>
<td>4-3</td>
<td>Grade Point Averages (GPA) for Students Who Successfully Completed the Road Map to Success Program and Those Who Did Not Successfully Complete Road Map to Success Program</td>
<td>71</td>
</tr>
<tr>
<td>4-4</td>
<td>Credit Hours Accumulated While Enrolled in the Road Map to Success Program and Number of Credit Hours Accumulated Two Semesters After the Road Map to Success Program for Fall 2009 and Spring 2010 Participants</td>
<td>72</td>
</tr>
<tr>
<td>4-5</td>
<td>Development of an Educational Plan between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete Road Map to Success Program</td>
<td>73</td>
</tr>
<tr>
<td>4-6</td>
<td>Development of Life Goals Between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program</td>
<td>74</td>
</tr>
<tr>
<td>4-7</td>
<td>Development of a Financial Plan between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program</td>
<td>75</td>
</tr>
<tr>
<td>4-8</td>
<td>Identification of Strengths and Talents between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program</td>
<td>76</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>The National Freshman Attitudes Report Demographic Sample</td>
<td>47</td>
</tr>
<tr>
<td>2-2</td>
<td>Disclaimer Encouraging Students to Make an Appointment with a Counselor</td>
<td>47</td>
</tr>
<tr>
<td>(South Orange County Community College District, 2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3</td>
<td>New Education Plan Created with Credit Already assigned from Transcript</td>
<td>48</td>
</tr>
<tr>
<td>(South Orange County Community College District, 2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-1</td>
<td>Methodology for Data Collection</td>
<td>60</td>
</tr>
</tbody>
</table>
## LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Advising</td>
<td>A student-centered approach that encourages advising alliances among students, faculty and staff</td>
</tr>
<tr>
<td>Financial Plan</td>
<td>A plan of action developed by students to budget and manage finances during their education</td>
</tr>
<tr>
<td>Life Goals</td>
<td>Objectives developed by students that show they have identified, clarified, and realized their personal, academic, and career goals through a growth process, which is based on self-awareness of abilities, interests, and values</td>
</tr>
<tr>
<td>Life Map</td>
<td>A developmental advising model utilizing technology to assist students in creating an academic plan to complete their education and career goals at a community college</td>
</tr>
<tr>
<td>My Education Plan (MEP)</td>
<td>A developmental advising model utilizing technology and dedicated to helping students define, refine, and implement their personal academic goals</td>
</tr>
<tr>
<td>Student Persistence</td>
<td>Students who have earned 30 credits or more in higher education toward a certificate or degree completion</td>
</tr>
</tbody>
</table>
FACTORS ASSOCIATED WITH IDENTIFYING AT-RISK STUDENTS IN A COMMUNITY COLLEGE STUDENT SUCCESS PROGRAM

By

Molly J. McIntire

May 2011

This study examined 180 students attending a large southeastern community college who voluntarily participated in a student success program. The purpose of this study was to examine a student success program at a community college and identify factors associated with at-risk students. Using analysis of survey responses and written open ended responses, the researcher compared factors and behaviors associated with completers and non-completers of a community college student success program. Research questions focused on demographic information such as race, gender and age. Participant Grade Point Average (GPA) and the number of credit hours enrolled, before and after the program, were also analyzed to determine student persistence. Behaviors included the development of an education plan, life goals, financial plan, and identification of strengths and talents. Factors associated with identifying at-risk students in a community college student success program were found to include GPA, race and student persistence.
CHAPTER 1
INTRODUCTION

Background

As early as the eighth grade, students begin to develop career and occupational interests (Tracey, Robbins, & Hofsess, 2005; Wimberly & Noeth, 2004). During progression through high school, students become more interested and better focused in academics. Entering an institution of higher education may cause intimidation, confusion, and an overwhelming challenge for students who enter college without a career plan. Obanion (1997) stated that with many academic majors and career options, a “learning college” must be “designed to help students make passionate connections to learning” (p. xiv).

Establishing those connections is complex. With the developmental diversity of enrollment on community college campuses, the greatest challenge for institutions is the overwhelming need to support students (Love & Guthrie, 1999). Kegan (1994) suggested the model of “sympathetic coaching” to offer the required support. Sympathetic coaches demonstrate a concern for the developmental progression of each student within a flourishing curriculum. By creating a bridge for students’ developmental progress, educators acknowledge and support students’ stages of development. Support needs to be developed in higher education institutions for students by implementation of services which engage group decision-making and compromise, create responsibility interdependence, and ensure the community embraces students and staff members who are available to welcome the transitioning students into college (Philip, 2005).
During this transition, research has implied the importance for students to develop interests in keeping with their college major and, eventually, their career choice. Students who have interests that are consistent with their choice of college major are more likely to remain in college (Leuwerke, Robbins, Sawyer, & Hovland, 2004). As a result, some higher education institutions have implemented developmental advising models to help students achieve life goals and stay in college. Developmental advising has been defined as both a process and an orientation (King, 2005). As Raushi (1993) suggested, "To advise from a developmental perspective is to view students at work on life tasks in the context of their whole life settings, including the college experience" (p. 6). Frost and Brown-Wheeler (2003) stated, "Developmental advising understands advising as a system of shared responsibility in which the primary goal is to help the student take responsibility for his or her decisions and actions" (p. 234). O'Banion (1994) described five steps to be "the dimensions of the process of academic advising" (p. 11). These five steps were: (1) exploration of life goals, (2) exploration of vocational goals, (3) program choice, (4) course choice, and (5) scheduling classes. O'Banion’s (1994) model suggested that students need to select courses within the broader context of the student's life and career goals. O'Banion (1994), as with Frost and Brown-Wheeler (2003), suggested that students should be responsible for making decisions throughout the advising process. Advisors are responsible for providing "information and a climate of freedom in which students can best make such decisions" (p. 11).

Significance

In 2009, President Barack Obama proposed an ambitious agenda for post-secondary education in the United States called the, The American Graduation Initiative. By providing resources through this initiative, he aimed to have the highest
proportion of college graduates in the world by the year 2020, with community colleges to create the pathway for success (The White House, 2009). In April 2010, the American Association of Community Colleges (AACC), along with five other organizations, responded by reaffirming a commitment to college completion, while maintaining a commitment to increasing access and quality. In 2010, the AACC and those other organizations issued a joint statement titled, Democracy’s Colleges: Call to Action (2010). The AACC partnered with the Association of Community College Trustees, the Center for Community College Student Engagement, the League for Innovation in the Community College, the National Organization for Staff and Organizational Development, and Phi Theta Kappa. Because enrollment at community colleges has increased almost eightfold from 1963 to 2008 (Snyder & Dillow, 2010), support for access comes from a variety of policy centers and private foundations such as the College Board Advocacy & Policy Center, the Bill and Melinda Gates Foundation, and the John N. Gardner Institute for Excellence.

Because the percentage of American adults with post-secondary education is not measuring as high as in other countries, improving success for all students in higher education is crucial to our nation’s social and economic well being (College Board Advocacy & Policy Center, 2010). Aligning student success with future opportunities for continued career success should be part of any completion agenda (Mullin, 2010). The College Board Advocacy & Policy Center has developed the College Completion Agenda to increase the number of 24 to 34 year olds, who hold an associate of science degree or higher, to 55% by the year 2025 (College Board Advocacy & Policy Center, 2010). The College Completion Agenda will integrate a Progress Report, updated
annually, and a companion State Policy Guide, which will be co-created with the National Conference of State Legislatures (College Board Advocacy & Policy Center, 2010). The College Completion Agenda and the State Policy Guide will include comprehensive research from nationally recognized sources with best-practice policy examples; all aligned around 10 key recommendations (College Board Advocacy & Policy Center, 2010). These 10 recommendations are focused at strengthening the educational process throughout a student’s learning path from preschool to college completion. The recommendations include (College Board Advocacy & Policy Center, 2010):

1. Provide an early childhood program of voluntary preschool education, universally available to children from low-income families
2. Improve middle and high school college counseling, and states and localities move toward professional norms for staffing middle and high school counseling offices, and colleges and universities collaborate actively to provide college information and planning services to all students
3. Implement the best research-based dropout prevention programs. States and local educational agencies adopt targeted interventional programs
4. Align the K–12 education system with international standards and college admission expectations and governors, legislators and state education agencies work to provide a world-class education to every American student by aligning high school programs with international benchmarks tied to the demands of college, work and life
5. Improve teacher quality and focus on recruitment and retention and states, and localities and the federal government step up to the crisis in teaching by providing market-competitive salaries by creating multiple pathways into teaching, and fixing the math and science crisis
6. Clarify and simplify the admission process and public and private institutions of higher education continue to uphold the highest professional standards in admission and financial aid, and collaborate to make the admission process more transparent and less complex
7. Provide more need-based grant aid while simplifying and making financial aid processes more transparent
8. Keep college affordable and restraining growth in college costs and prices, using available aid and resources wisely, and insisting that state governments meet their obligations for funding higher education.

9. Dramatically increase college completion rates and institutions of higher education set out to dramatically increase college completion rates by improving retention, easing transfer among institutions, and implementing data-based strategies to identify retention and dropout challenges.

10. Provide post-secondary opportunities as an essential element of adult education programs and a renewed commitment to adult education opportunities, one that supplements existing basic skills training with a new “honors GED,” and have better coordination of federal and state efforts to provide adult education, veterans' benefits, outreach programs, and student aid.

Not only has the College Board Advocacy & Policy Center addressed the issues surrounding student persistence and completion in post-secondary education, but the Gates Foundation has also created initiatives and partnerships to increase student success in higher education. The Gates Foundation proposed a goal to dramatically increase the number of students who graduate from high school to be ready for college and careers, and who go on to complete a post-secondary degree or certificate (Bill & Melinda Gates Foundation, 2010). Post-secondary enrollment is at an all time high; however completion rates have remained virtually stagnant during the past 30 years (Bill & Melinda Gates Foundation, 2010). More than half of all the students who entered the post-secondary system do not earn a degree or credential within eight years of enrolling (Bill & Melinda Gates Foundation, 2010).

The foundation has worked to improve the post-secondary education system for all students (Bill & Melinda Gates Foundation, 2010). Along with public and private sector partners, the foundation has strived to:

- Improve post-secondary performance by working with higher education institutions across the country and associations such as the American Association of Community Colleges, Association of Community College Trustees, and the League for Innovation in the Community College.
Empower student success to help students make good decisions about their education. Students need accurate information. The foundation supports a range of programs that provide students with guidance on how to access financial aid and structure their education to increase the chances of earning a degree.

Build commitment by working to make college completion a national priority by raising awareness about the impact of low completion rates on the economy and American competitiveness.

Build knowledge to increase graduation rates by evaluating what students need to get through school faster and at a lower cost (Bill & Melinda Gates Foundation, 2010).

Along with the Gates Foundation and the College Board Advocacy & Policy Center addressing improved student success, the John N. Gardner Institute for Excellence in undergraduate education has focused on institutional improvement. The John N. Gardner Institute has been a source for information and assistance to enhance college student learning, retention, and eventually graduation rates (John N. Gardner Institute for Excellence, 2010). The Institute works with post-secondary institutions of different sizes, types, and missions within the United States and in other countries as the institutions evaluate and improve their own policies, practices, and procedures in pursuit of undergraduate excellence (John N. Gardner Institute for Excellence, 2010). Not only does the Institute focus on first-year experience for students, but it also addresses issues surrounding transfer students in various types of institutions.

The Foundation of Excellence is an initiative at the Institute for Excellence to assist post-secondary institutions in conducting a self study. The self-study is externally guided, and intuitions that participate have developed a strategic action plan that results in a new vision for improvement to assist students in the first year, as well as transfer students (John N. Gardner Institute for Excellence, 2010). According to the vision of
John N. Gardner Institute for Excellence (2010), the Institute assumed a wide range of educational activities which include the following goals:

- Continue to provide campuses with the externally guided, voluntary, comprehensive self-study process known as “Foundations of Excellence in the First College Year.”

- Provide campuses with an expanded version of the Foundations of Excellence self study that will evaluate the institution’s approaches to enhancing success of transfer students.

- Provide campuses with a self-study process to assess and plan for excellence in the entire undergraduate experience.

- Conduct evaluations, surveys, educational training, research, and advisory services for postsecondary institutions, government agencies, foundations, and other appropriate entities that aspire to improve undergraduate student learning, success, retention, and degree completion.

- Sustain previous and current partnerships, and develop new partnerships with individuals, associations, higher education institutions, foundations, policy-making bodies, corporations, and other friends of higher education that share a common interest in pursuing excellence in undergraduate education.

- Provide unique meetings, retreats, other professional development activities, networks and associational opportunities for the support, professional advancement, and communication of post-secondary educators who share a common interest in achieving excellence in undergraduate education.

- Provide information and research to educational institutions through electronics and other means of dissemination.

- Provide *pro bono* services and information for post-secondary educators and institutions as the Institute may deem appropriate.

- Initiate other service activities to improve undergraduate education that are consistent with the Institute’s mission, resources, capabilities, interests, and tax-exempt non-profit status.

The initiatives from the College Board Advocacy & Policy Center, the Gates Foundation, and the John N. Gardner Institute for Excellence have all implemented initiatives to improve student success rates in higher education for the United States.
Statement of the Problem

High school education is not sufficient for Americans in today’s economy, however most Americans have not yet earned a college degree or certificate by age 30 (Bill & Melinda Gates Foundation, 2010). Assisting post-secondary education students to take responsibility for their actions and decisions has created a challenge. Even when students’ interests and choices are reliable, students’ career choices have been unreliable with current or future workforce demands. In addition, many students entered colleges with “undecided” majors. When making educational and career decisions, students need to be encouraged to investigate careers that are consistent with their interests. They should also be encouraged to consider the current and projected availability of employment in those careers and create an academic plan to meet their career goals. While a career and education plan has been useful to students who utilize career resources, some students do not take advantage of the resources offered. Assisting a student develop an academic plan alone will not lead to student success (Community College Survey of Student Engagement, 2008). For that reason, as Fullen (2007) explained, “Action learning is good, but it must be accompanied by reflective insight tied to an underlying theory that guides further action” (p. 5).

Purpose of the Study

The purpose of this case study was to identify factors associated with at-risk students in a community college student success program.

Research Questions

The study addresses the following questions:

- Does a significant difference exist in demographics (i.e. age, gender, and race) between students who completed a student success program and those who did not successfully complete a student success program?
Does a significant difference exist in GPA between students who completed a student success program and those who did not successfully complete a student success program?

Does a significant difference exist in the number of credit hours enrolled between students who completed a student success program and those who did not successfully complete a student success program?

Do students who complete Road Map to Success demonstrate higher levels of persistence in college than those who did not successfully complete a student success program?

Does a significant difference exist in the development of an educational plan between students who completed a student success program and those who did not successfully complete a student success program?

Does a significant difference exist in the development of a financial plan between students who completed a student success program and those who did not successfully complete a student success program?

Does a significant difference exist in the development of life goals between students who completed a student success program and those who did not successfully complete a student success program?

Does a significant difference exist in the identification of strengths and talents between students who completed a student success program and those who did not successfully complete a student success program?

Assumptions

1. The students in this study were representative of a large community college located in the southeastern region of the United States.

2. Students were enrolled in the Student Success course at their community college.

3. Most community college students do not have an educational plan.

4. Most community college students have life goals.

5. Most community college students are aware of financial plans.

Limitations of the Study

1. Because the research was a case study, the number of subjects was limited.

2. Because the career and academic planning resources at this institution might not be available at other community colleges, the results of the study can be attributed
to the programs implemented in the Southeastern region of the United States with similar resources.

3. The students in this study may not be representative of other institutions; therefore, the conclusions reached in this study may not be generalized to populations at other community colleges.

4. The instruments used in this study were created by the institution and remains in tact. Validity was based on the results from previous data collected by the institution.

5. Interpretation of what was implied by the term “education plan” could be perceived differently by students resulting in skewed data.
CHAPTER 2  
REVIEW OF LITERATURE

Mission of the Community College

Due to open admissions, community colleges have provided accessibility for students to obtain certificates and degrees in higher education. The diversity at community colleges, as a result of open admissions, has continued to range with enrollment of students from various backgrounds and goals. Students vary in age from the traditional first-year students, having just graduated from high school, to nontraditional students returning to college for new skills or a career change. Some students entered the community college to earn a degree, while others searched for job training certificates.

With the vast enrollment in populations at community colleges, students seek access to opportunity for education that serve as the foundation for a career, new life, or a new perspective (Mullin, 2010). Although students enroll in courses to achieve their goals, it is an institutional effort to help students successfully complete the courses. Mullin (2010) classified community college students into three categories: high school students, swirlers, and retoolers.

Research has shown high school students, as classified for the first category, who earn college credit while in high school, increase the likelihood that they will enroll and persist in a post-secondary education institution (Karp, Calcagno, Hughes, Jeong & Bailey, 2007). A considerable growth of dual enrollment programs has been made in high schools, which has resulted in the increased demand for college courses (Southern Regional Education Board, 2010). However, to be successful in college level courses, students must have the knowledge and preparation provided by a rigorous K-12
learning experience (Mullins, 2010). Therefore, 60% of community college students in 2004 needed academic remediation (Wirt, Choy, Rooney, Prevasnik, Sen & Tobin, 2004). In Chapter 1, the Bill and Melinda Gates Foundation addressed this issue, and the Foundation continues to work with community colleges, as well as with policymakers, to enhance the academic support needed at the K-12 curriculum levels.

Swirlers, as classified in the second category, are students who attend four-year institutions, but enroll at a community college for one or two courses (Mullin, 2010). The swirler student gains the benefits of quality learning, yet the courses they take are transferable to their primary institution, and they also pay a decreased tuition rate by enrolling at the community college (Mullin, 2010). Swirlers take advantage of the opportunities at community colleges because it will decrease time for degree completion by providing courses that are most convenient to them (Mullin, 2010).

Unlike swirlers, the retoolers, as classified in third category, at community colleges are those who are working adults and want to retool their knowledge or skills (Mullin, 2010). Retoolers benefit workforce industries benefit by the retoolers by increasing productivity place of work. Many professions in the workforce require continuing education units (CEUs) to maintain licensure. Students use courses at the community college to sustain professional licensure. While community colleges are focused on completion rates, students -however they are defined- are enrolled for various reasons.

**First-Generation Students**

While the high schoolers, swirlers, and retoolers have their own agendas for college course completion, another group of students are enrolled in a community college. Students whose parents have no postsecondary education experiences are called first-generation students. According to the National Center for Education
Statistics (2005), first-generation college students made up 45% of the public community college population. A report titled, *The Faces of the Future: A Portrait of the First-Generation Community College Students* discusses the findings from a national survey developed to examine the lives and experiences of credit and noncredit community college students (Nomi, 2005). The findings revealed the demographic characteristics, goals, and college experiences, reported by 49,893 first-generation community college students surveyed while enrolled in credit-bearing courses at 158 community colleges between the fall 2001 and fall 2003 (Nomi, 2005). To understand the first-generation population, results were compared with students in two other groups. Moderate Parental Education (MPE) students were defined as students who had at least one parent with post-secondary education, but either only one parent or neither parent who had earned a bachelor degree (Nomi, 2005). High parental education (HPE) students were categorized if both parents earned at least a bachelor’s degree (Nomi, 2005).

Based on the findings from the report, first-generation students were less likely to be of traditional age (17-21) than were MPE students and HPE students, which suggested they were less likely to enroll in college immediately after high school completion (Nomi, 2005). The median ages of first-generation students were 24, HPE median age was 21, and MPE median age was 20 years of age (Nomi, 2005). The study also found that first-generation community college students were more likely to be female. Approximately 67% were women compared to 61% of MPE students and 50% of HPE students (Nomi, 2005).
The study also concluded that students who were considered first-generation students were more racially and ethnically diverse than MPE or HPE students. Approximately 35% of first-generation students were members of minorities, compared to 27% of MPE students and 29% of HPE students (Nomi, 2005). The majority of Hispanic students (53%) were first-generation, 43% were Native American, and 41% of black students were first-generation (Nomi, 2005). In contrast, Asian American and white students were much less likely to be first-generation, and they were the only two groups with more than 10% in the HPE student category (Nomi, 2005).

Most students enrolled in community colleges were employed, either full-time or part-time, regardless of the education level attained by the parents. However, first-generation students in this study were more likely to be employed full time, as opposed to the MPE students and HPE students (Nomi, 2005). In addition, a majority of first-generation students were more likely to support dependants, whereas HPE students were more likely to be a dependant (Nomi, 2005).

The additional responsibilities at home could likely contribute to the finding that first-generation students completed fewer courses than MPE students and HPE students (Nomi, 2005). Approximately 50% of first-generation college students were enrolled in three or fewer courses, compared to 42% of MPE and 40% of HPE students (Nomi, 2005). Funding these courses likely explained the part-time enrollment. Only 14% of parents' income and savings were reported as major sources of funds for college-related expenses for fewer first-generation students, as opposed to HPE students at 40% (Nomi, 2005). Fifty-five percent of first-generation students reported they relied on financial aid as a major source of funding college expenses compared to
45% of MPE students and 30% of HPE students (Nomi, 2005). For each demographic group of students in this study, the cost of attending college was the most frequently cited factor influencing choice of college (Nomi, 2005). However, a higher percentage of the first-generation students cited it as a very important factor (Nomi, 2005).

As with the other previously defined groups of students, first-generation students had a variety of reasons why they attended a community college. More first-generation students (46%) indicated that they enrolled in community college courses because they were related to a future job (Nomi, 2005). Forty-two percent of first-generation students attended for the purpose of obtaining an associate’s degree. Moderate Parental Education students (48%) and HPE (57%) were more likely to attend community colleges with the intent to transfer to a four-year institution (Nomi, 2005). First-generation students were less likely than the MPE students or HPE students to cite their parents’ desire for them to continue their education as a major reason for enrolling in specific courses or programs (Nomi, 2005). This finding is likely explained by the fact that the parents of first-generation students were less academically oriented and provided less influence on post-secondary education than the parents of MPE students and HPE students. First-generation students also cited the major reason for attending a community college was to meet the requirements for a chosen occupation, increase earning potential, make a career change, develop computer or technology skills, advance in a current job, enter the workforce after children are grown, and enter the workforce after a major life change (Nomi, 2005).

All community college groups in this study indicated that the college experiences contributed substantially to their academic and non-academic
development, and first-generation students expressed a great satisfaction (Nomi, 2005). The difference in the satisfaction levels was related to career-related goals. For instance, 51% of first-generation students indicated that their college experiences made a major contribution to acquiring the specific skills needed for a current or future job, compared to 42% of MPE students and 36% of HPE students (Nomi, 2005). A greater percentage of first-generation students cited being satisfied with receiving training and acquiring skills needed to advance their careers (40%) than did MPE students (32%) or HPE students (29%). First-generation students also reported being more satisfied with the opportunities to develop self-confidence than the MPE students and HPE students (Nomi, 2005).

**Traditional Students**

Research has continued to identify academic and career counseling as an essential component for student success in higher education. In 2007, a national research study was conducted, on more than 92,000 first-year students nationwide who attended 302 colleges and universities. Students completed a 100-item survey during the first weeks of school by the Noel-Levitz Retention Management System, and the survey included a wide range of various institutions. From the respondents, 45.2% were male, and 54.5% were female. The demographic sample was consistent with national trends for undergraduate students with an ethnic/racial distribution displayed in Figure 2-1 (Noel-Levitz, 2008b).

According to the National Freshman Attitudes Report (Noel-Levitz, 2008b), a special focus of this survey was to identify attitudes that may pose barriers or opportunities for students in continuing and completing their degrees. Findings indicated 95% of first-year students entering college arrived highly motivated to
complete a degree, while 74% wanted assistance in knowing how to prepare for exams, and 66% indicated a desire for career guidance (Noel-Levitz, 2008b). When surveyed with questions regarding their desire to finish college, 93.9% indicated, according to certain responses, “I am very strongly dedicated to finishing a college, no matter what obstacles get in my way,” and 89.3% specified, according to certain responses, “I am deeply committed to my educational goals, and I’m fully prepared to make the effort and sacrifices that will be needed to attain them” (Noel-Levitz, 2008b).

A disturbing finding from the report indicated that while a majority of first-year students arrived at college highly motivated to complete their educational goals, only half of them were likely to accomplish those goals and aspirations (Noel-Levitz, 2008b). The lack of career planning could be contributed to this finding. The report (Noel-Levitz, 2008b) stated that only 61.7% of incoming college freshmen made a firm decision to enter a particular occupation and 23.4% identified being confused about having to choose an occupation (Noel-Levitz, 2008b).

The National Freshman Attitudes Report (2008b) included both two-year and four-year institutions nationwide. Because institutions vary from campus to campus, data were varied for each college. The average age for population surveyed was 19.9 years old (Noel-Levitz, 2008b). Demographics in community colleges have traditionally included a more diverse population, as previously discussed, therefore the outcomes from a survey administered strictly at two-year colleges could contrast.

The National Student Satisfaction and Priorities Report for Community, Junior, and Technical College (2008c), listed in order of importance-the top challenges identified by students:
My academic advisor is knowledgeable about my program requirements.
This school does whatever it can to help me reach my educational goals.
Adequate financial aid is available for most students
My academic advisor is knowledgeable about the transfer requirements of other schools.
My academic advisor is concerned about my success as an individual.
Financial aid counselors are helpful.
I seldom get the “run around” when seeking information on this campus.

This report consisted of 244 community, junior, and technical institutions with more than 195,000 respondents between 2005 and 2008 (Noel-Levitz, 2008c). The report (2008c) noted that effective institutions will administer self-surveys repeatedly to compare their data to national trends, to past performance, and to actively respond to the challenges indicated by students.

Based on data collected in the National Freshman Attitudes Report (2008b), educators must continually address student advising, as well as attend to those students who have not developed a financial plan for post-secondary education. According to the report, entering first-generation students entered college worrying about finances (Noel-Levitz, 2008c). Only 47.4% of college students surveyed stated they have the financial resources they need to finish college (Noel-Levitz, 2008c). Based on this report (2008c), 63.7% of students would like to speak with a counselor about getting a some type of financial aid.

According to the National Council on Economic Education (2005), 38 states now have personal finance standards built into state education systems, and 21 of these states require the standards be implemented in the curriculum. In six states, personal
finance is a requirement for high school graduation (Idaho, Illinois, Kentucky, New York, Georgia, and Alabama). Lyons (2003) found that one in three students reported his/her financial situation was as “likely” or “somewhat likely” to affect the ability to complete a college degree.

Financial literacy programs in higher education have also been developed to assist students with funding post-secondary education. Texas Tech offers a Red to Black program for students. The services are free for students and offers financial planning services, counseling and seminars. The mission of Red to Black is to “help students, faculty, community members, and organizations by advocating responsible financial behaviors through financial counseling, financial education, and transfer of skills” (Texas Tech University, 2007). The Red to Black program provided financial awareness through client-based and outreach-based planning, training, and coaching were provided by (Texas Tech University, 2007):

- Evaluating client needs and providing confidential advice
- Empowering clients through financial education
- Providing professional leadership experience for Pilot Funding Program (PFP) students
- Serving as the premier campus-based financial counseling and education model for other colleges and universities (Texas Tech University, 2007).

In 2006, researchers from the University of Georgia presented a paper at the Eastern Family Economics and Resource Management Association titled, “College Students and Financial Literacy: What They Know and What We Need to Learn,” which presented the results of a study conducted as a multi-state project (Lyons, 2003). An online survey was conducted at the University of Illinois at Urbana-Champaign in the fall of 2004 and at Louisiana State University, University of Georgia, and the University
of Illinois at Chicago in the spring of 2005. This paper reported the preliminary results for Louisiana State University (LSU) and University of Georgia (UGA). Five thousand LSU undergraduate students and 3,266 UGA undergraduate students were invited to participate. A total of 1,891 students (1,400 from LSU and 491 from UGA) responded to the online survey. According to the survey, the most significant influence on students’ money management behaviors was their parents (Lyons, 2003). Students were more likely to be financially fit if they had higher GPAs or had parents who were married. Students were more likely to be financially at risk if they had a credit card or were a minority or college senior (Lyons, 2003). The implications of poor financial management affected more than students’ finances. Poor financial management affected their academic performance, mental and physical well-being, and even their ability to find employment after graduation (Bodvarsson & Walker, 2004; Lyons, 2003).

**Nontraditional Students**

A similar study was conducted as an appendage to the National Freshman Attitudes Report (Noel-Levitz, 2008a) and compared the attitudes and motivations of first-year, nontraditional age students to those of the traditional-age student. The “Attitudes of Incoming Adult Learners” study was based on a 100-item attitudinal survey administered in the summer and early fall of 2007. The study focused on a wide range of student success issues such as study habits, desire to finish college, receptivity to assistance, and clarity on career decision-making (Noel-Levitz, 2008a). The study also examined attitudinal trends among freshmen as a whole, as well as differences between first-generation and non-first-generation freshmen (Noel-Levitz, 2008a).

Participants in the study were enrolled at a broad cross-section of public and private, two-year and four-year post secondary institutions. The 100-item survey was
administered to students during the college orientation, or within the first few weeks of the semester. Nontraditional-age students were defined as students 25 years of age or older. The average age of the traditional-age group was 18.4 (Noel-Levitz, 2008a).

According to the study, a special focus was to identify attitudes that may pose barriers or opportunities for students in continuing and completing their degrees (Noel-Levitz, 2008a). Table 2-1 reflects the demographic sample of the Attitudes of Incoming Adult Learners Report.

The findings from the Attitudes of Incoming Adult Learners Report (2008a) were listed as percentages of entering first-year students and divided between nontraditional-age and traditional-age learners in Table 2-2. Data indicated a number of differences and similarities in the attitudes of nontraditional-age and traditional-age students. These findings presented implications for all practitioners who were dedicated to improving persistence and goal attainment for this demographic in higher education.

According to the National Center for Education Statistics (2007a), the dropout rate for adult learners was higher compared to traditional-age students at two-year and four-year institutions. Approximately 56.6% of adult learners at two-year institutions dropped out, as opposed to 43.3% of traditional-age students (National Center for Education Statistics, 2007b). Approximately 49.9% of nontraditional-age students dropped out at four-year institutions, as opposed to 28.2% of traditional-age students (National Center for Education Statistics, 2007b). These findings revealed a considerable challenge as enrollment of adult learners at degree-granting institutions grew 186% between 1970 and 2005, and these percentages are projected to grow another 20% by 2016 (National Center for Education Statistics, 2007a).
Importance of Developmental Advising

“Academic advising is more than just offering a service or providing information; it is a teaching and learning process that helps students construct meaning and purpose from their experiences” (Castillo, 2007, p. 153). With the findings from studies on first-generation, traditional-age and nontraditional-age students, as well as the initiatives set forth by policymakers, the need for effective development advising at community colleges is evident. The Center for Community College Student Engagement partnered with the Association of Community Colleges and Schools (AACC), as discussed in Chapter 1, to reaffirm commitment to college completion in Democracy’s Colleges: Call to Action (2010). A national report released key findings from the 2009 cohort of the Community College Survey of Student Engagement (CCSSE). The report, “Making Connections: Dimensions of Student Engagement,” provided data about the quality of community college students’ educational experiences and described how institutions across the country were intentionally making connections with students online, in the classroom, on campus, and beyond (CCSSE, 2009).

The Community College Survey of Student Engagement (2008) reported 62% of community college students were enrolled part-time, while 56% of students worked more than 20 hours per week (p. 9). The difference in student engagement between part-time and full-time students has remained a key finding in CCSSE data. In 2006, CCSSE surveyed 249,548 students at 447 colleges in 46 states (cited in Burnett, 2006, p. 6). The CCSSE reported a meager 19% of part-time students who said they had discussed career plans with an advisor or instructor often or very often, in contrast to 30% of full-time students (cited in Burnett, 2006, p. 6). With the growing number of diverse students in community colleges, support in academic advising and career
planning has continued to be essential for student success. According to CCSSE (2008), literature showed that use of certain key services was significantly related to student success (p. 4). However, most community college students spent a limited amount of time on campus due to work and life schedules, which resulted in limited time to use such resources, such as academic advising and student services offered on campus. As a result, not all students took advantage of resources available on campus. Although students indicated they highly value academic services, students have not used these services often (CCSSE, 2009, p. 14). Part-time students were also twice as likely to report receiving no advising services, with 16% of part-time students stating they had utilized no advising services, compared to 29% of full-time students (cited in Burnett, 2006, p. 6). While the majority of students (62%) and faculty members (85%) indicated they believe academic advising and planning were very important to students, only 29% of instructors referred students to advising services often, and only 19% of instructors incorporated the use of academic advising or educational planning into their selected course often (CCSSE, 2009).

Increasingly, colleges have reported using technology to reach out to students enrolled in a community college (CCSSE, 2009). Data showed significant growth in the use of online courses and support services, including online developmental education classes, advising, orientation, and tutoring (CCSSE, 2009). The CCSSE (2009) report offered new primary research on the use of Web 2.0 social networking tools. The CCSSE (2009) participants reported stable increases in use of computers, the Internet, and e-mail each year since 2004. While technology use was once the territory for younger students, the age gap has diminished to within one percentage point. Upwards
of 66% of all students have used these technologies to work on assignments (CCSSE, 2009).

However, the 2009 CCSSE special-focus items indicated that age gaps remain for some types of technology, particularly the newer social networking tools, such as Facebook, MySpace, and Twitter. The CCSSE (2009) indicated traditional students, age 18 to 24 years old, were more likely to use social networking tools multiple times per day “for any purpose” (68%). Among the traditional-age participants, just 5% of students versus 22% of nontraditional-age students never used social networking tools (CCSSE, 2009). Traditional-age students were also more likely to use social networking tools to communicate with other students, instructors, or college staff about their college coursework (CCSSE, 2009). Only 27% of traditional-age students versus 49% of nontraditional-age students reported they had never communicated via social networking resources (CCSSE, 2009).

Technology has had a significant impact on the structure and delivery of student services. Many student services offered at higher education institutions have advanced, which allows students to access services online or at off-campus locations. As early as 1999, the National Survey of Information Technology in Higher Education found that 70% of the institutions surveyed provided online access to their undergraduate admissions application and 77% provided on-line access to their catalog (Campus Computing Project, 1999). As technology has improved, higher education and student affairs professionals have tailored such technological progress by providing greater access to student services. In recent years these advances have resulted in cyber-
services such as on-line course registration, financial aid applications, academic and career planning, and learning communities.

**Model Developmental Advising Programs**

**Valencia Community College**

In the 1990’s, Valencia Community College (VCC) was in the process of the Learning Centered Initiative. As part of this course of development, a consultant was involved in working with Student Affairs staff to support and improve student success and learning (Shugart & Romano, 2008). Research has shown that the more students were actively engaged with faculty, staff and other students, the more likely they learned and actively persisted toward achieving their academic and life goals (CCSSE, 2006). The CCSSE (2006) has focused data on institutional practices and student behaviors that promote student engagement. Valencia Community College has utilized CCSSE data since 2001 to improve educational practices to increase student success. With the CCSSE (2006) data, VCC administrators implemented community goals and monitored progress toward achieving those goals. Throughout each step, each year, VCC administration encouraged innovation and improvement that has resulted in better student outcomes. With 62% of community college students enrolled part-time (National Center for Education Statistics, 2008a), engaging students can be challenging, yet extremely important to support student success. The CCSSE (2006) suggested that engagement efforts encouraged students to set and meet goals, such as academic and career advising, and these efforts have had a significant impact on student retention and, ultimately, student success. Unfortunately, more than one-third (36%) of CCSSE (2006) respondents reported they rarely or never use academic advising/planning services, even though 88% cited advising as important. Nearly half of
the students (49%) reported they rarely or never use career counseling services (Community College Survey of Student Engagement, 2006).

Faculty, staff, and students at VCC engaged in conversations supported by data and professional literature and practice. Hundreds of faculty, staff, and students were engaged in dialogue that helped develop a sense of shared practice at the college. Administrators at the college took time to understand the root of the problem rather than jumping straight into problem-solving. Data from the institution’s research revealed several concerns.

The first piece of evidence the administrators found was the relationship between graduation success rates and the first few classes of college course work (15 credit hours) on the first attempt (Shugart & Romano, 2008). Many of the most heavily enrolled courses at the college were also the least productive, with success rates around 50%. These courses accounted for about 40% of the total enrollment of the college (Shugart & Romano, 2008). Because these courses were considered “gateway” courses, they presented a major barrier for many students at the college. The administration’s discussion with faculty, staff, and students focused on improving student readiness for college (Shugart & Romano, 2008).

As part of the Learning Centered Initiative in 2001, administrators led the change in academic advising and implemented Life Map, a technological tool to assist students in the development of an academic plan to complete educational and career goals (Shugart & Romano, 2008). Life Map is based on VCC’s developmental advising model that promotes social academic integration, education, and career planning (Shugart & Romano, 2008). Developmental advising is considered a student-centered
approach that encourages advising associations among students, faculty, and college staff. Life Map has linked all of the components of VCC (faculty, staff, courses, technology, programs, services, and so forth) into an individual schedule to enable students succeed in their college experience (Valencia Community College). This technological tool describes for students what they should be doing for each of the five stages of their development. The five stages include (Shugart & Romano, 2008):

- College Transition (middle and high school to college decision making)
- Introduction to College (0-15 credit hours)
- Progression to Degree (16-44 credit hours)
- Graduation Transition (45-60 credit hours)
- Lifelong Learning (learning beyond a first degree)

Life Map has been implemented into the Student Success course curriculum at Valencia Community College to help students become familiar with the technological resources offered to them. With the implementation of Life Map, VCC strived to help students learn how to make a plan, implement goals, achieve educational and career goals in a shorter time, understand how courses relate to personal goals and a chosen career, maximize use of VCC’s resources, and stay in college to complete their degree (Valencia Community College).

Students at VCC initiated the use of Life Map by interacting with faculty and to discussing educational goals. New students entering the college are mandated to attend New Student Orientation before they are able to register for courses. New Student Orientation included a campus tour, information and educational planning, college resources and Life Map tool overview, as well as a group advisement session. Students who take the College Placement Test and have scores which place them in two college preparatory courses, such as reading, mathematics, and English, must
successfully complete the SLS 1122 Student Success course (Valencia Community College, 2008). As part of the Student Success curriculum, students used the Life Map web-based planning tools to design and save their educational and career plan followed by an advisement session with an academic advisor.

Valencia Community College has had tremendous success with the implementation of Life Map. In a recent VCC student survey (2008), 133 random students, who were enrolled in Student Success, were surveyed to gain, as identified by Fullen (2008) as, “reflective insight.” The results of the self-study indicated that students should continue to use Life Map and the education plan tool after they were informed of the resources offered. Students also strongly agreed that academic advisement sessions were helpful to make the needed connections that O’Banion (1997) referred to as a “learning college” (p. xiv). Fall to spring persistence of students also grew during the period of the college’s reforms from about 66% to more than 80% (Shugart & Romano, 2008). As a result, the chances increased of higher success rates for students enrolled in gateway courses. In five of the six gateway courses, success and persistence rates for all students have increased, with the greatest gains among African American and Hispanic students (Shugart & Romano, 2008).

Most colleges adopt strategies to improve student performance, however, the experience at VCC showed the benefits when the focus on students was placed at the time that students enter college. Valencia Community College created an environment that increased student engagement from the start of the college experience. This concept has encouraged the potential for all faculty and staff to contribute to student success at VCC (Shugart & Romano, 2008).
South Orange County Community College District

As a 2009 Bellwether Award finalist, South Orange County Community College District in southern California (SOCCCD) has also led the change in higher education by helping, “students make passionate connections to learning” (O'Banion, 1997, p. xiv). South Orange County Community College District is one of 72 community college districts in California. It is a multi-campus district consisting of Saddleback College in Mission Viejo, Irvine Valley College in Irvine, and the Advanced Technology & Education Park (ATEP) in Tustin (South Orange County Community College District, 2007). Saddleback College and Irvine Valley College are accredited, offering associate degrees and providing academic major prerequisites that are transferable to four-year colleges and universities (South Orange County Community College District, 2007). The Advanced Technology & Education Park is the newest SOCCCD campus and collaborates with other educational institutions with technology-related businesses (South Orange County Community College District, 2007). South Orange County Community College District has served more than 37,000 students each semester, and has employed more than 2,300 faculty and staff (South Orange County Community College District, 2007).

Under the direction of Chancellor Dr. Ragu Mathur, the district investigated methods to help students make intelligent decisions in course selection. Not only did they use educational plans to assist students, they have continued to lead the change by developing a new student-centered award-winning system called My Academic Plan (MAP), dedicated to helping students define, refine, and implement their personal academic goals. The MAP project director explained that this tool does not offer a “cookie cutter experience.” Each student received personalized information and
guidance based on his individual goals, current assessment levels, and academic history (J. Gaston, personal communication, February 18, 2009).

With the primary constituents being counselors and students, MAP was created by a design team containing primarily a group of counselors and students. Work began in fall 2005 and the system went online on April 27, 2007 after extensive counselor testing and numerous student focus group sessions. It utilized the very latest technology to create an intuitive user interface and incorporated a large amount of information presented in a readable and efficient format (J. Gaston, personal communication, February 18, 2009). During implementation, Jim Gaston, Associate Director for Academic Systems and Special Projects, discussed the costs and demands of this project, and this project would not have been possible without the tremendous amount of support from leaders at the college. With the backing from Dr. Mathur, Dr. Allen McDougal, retired IT director, lent his full support to help Jim Gaston with the developmental process. Gaston cited a point during the development when he needed to ask for more time and money to continue the process, and Dr. McDougal responded, “What more important things could be we doing with our resources than helping students make intelligent decisions about the courses they take? You do it right and I’ll go find the money” (Dr. Allen McDougal, as cited by J. Gaston, personal communication, February 18, 2009).

My Academic Plan (MAP) was designed as a tightly integrated system with the SOCCCD student system and a statewide inter-segmental articulation database. The system not only evaluated the student transcript, but also made certain that all obligatory prerequisites and corequisites had been successfully completed by the
student. When a student added a course to his academic plan, the system checked the curriculum to determine if the course had any prerequisite stipulations. If so, the system then determined if the student had completed the prerequisite, or if the student had already added a course to the academic plan that would fulfill the prerequisites. If not, then all necessary prerequisite courses were automatically added to the academic plan creating less confusion for the student as to what courses needed to be completed for his desired major. Note that MAP was not designed to “replace” academic advisors; however, it provided students with an online guide as a resource when students had questions and advisors could not provide immediate feedback. Students were prompted by MAP to speak with a counselor shown in Figure 2-2 (J. Gaston, personal communication, February 18, 2009).

Other implementations have been available for students to assist them when using MAP. My Academic Plan is integrated with SmartSchedule, the SOCCCD online class schedule. When a student used the course scheduling page, a search icon automatically appeared next to any semester that had an online schedule available. Clicking on the icon created a customized page for that student containing all the sections offered during the selected semester for the courses listed in his individual plan. The student selected the desired class by clicking on the “Add to Shopping Cart” button. Students were given a time frame to register. During the student’s registration time, the student could enroll in all of the selected classes with one click of a mouse. Students could also subscribe to a daily email tool that allowed them to track the status of those classes informing the student if any of the classes had closed prior to registration appointment time (J. Gaston, personal communication, February 18, 2009).
In addition to the student benefits, counselors used MAP as a great resource to support in the academic advisement. If a student has completed coursework at other institutions, a counselor could input that information (J. Gaston, personal communication, February 18, 2009). My Academic Plan automatically credits the student with the appropriate number of units in the General Education requirements, as certified by the institution at which the student took the course in the semester in which he attended. Credit are possible because MAP is the only academic planning tool that is fully integrated with Project ASSIST (Articulation System Stimulating Inter-institutional Student Transfer), a California inter-segmental articulation database. Project ASSIST is a computerized student-transfer information system that can be accessed over the World Wide Web (ASSIST). It displays reports of how course credits earned at one California college or university can be applied when transferred to another, and is contained in the MAP database, which is automatically updated monthly (J. Gaston, personal communication, February 18, 2009).

Figure 2-3 demonstrates an education plan created with credits already assigned from a transcript. My Academic Plan contains the following features (South Orange County Community College District, 2007):

- A multi-page “wizard” that guides a student through the process of selecting an academic goal
- A planning tool that provides the student with a complete list of courses that will help him achieve the goal, broken down by the various categories (General Education, Major Preparation, Electives, etc.)
- Customized prerequisite and corequisite guidance, based on curriculum requirements and the student’s personal assessment level or course completion
- An individualized set of classes, including a timeframe for completing the classes
- An edit, delete and save multiple plan
• A plan audit to ensure that the plan is complete

• A printable report listing all courses in the plan, sorted by course type and intended semester

• Entering courses taken by students at other institutions in the system, providing students full credit for courses taken outside the SOCCCD

• Online help to alert students to exceptions or unusual situations, which can be set at the institution, term, program, or course level

• Full integration with the SOCCCD Student Information System, which allows MAP to evaluate the student transcript every time the plan is accessed providing a continuous progress report of how the student is accomplishing his goal

• Making MAP fully integrated with Project ASSIST, which is a California state database containing transfer and articulation data, drastically reducing the maintenance requirements for MAP since the ASSIST data receive a monthly update

• MAP providing helpful tutorial videos, which include full motion screen captures and counselors explaining how the students can use the system most effectively

• Storage of notes that can be associated with the student, with the plan, or with individual courses

• Counselors being able to mark a plan as “Reviewed,” which removes any disclaimers that encourage students to make a counseling appointment; if the student makes any changes to the plan, the status automatically reverts back to “Not Reviewed”;

• Locking a plan that prohibits the student from making any changes to that individual plan, but the student can make a copy of the plan and modify the new plan

• Counselors being able to store course equivalencies from other institutions, thus creating a valuable database that other counselors can utilize

• Links to a personalized online class schedule listing only the courses the student is interested in for that semester, and then the student can add the individual section to a “shopping cart” and proceed directly into the registration system

The principal outcome of this project was to create a unique and innovative system that provided the students at Saddleback College and Irvine Valley College with a high level of service (J. Gaston, personal communication, February 18, 2009). The system
assisted counselors by automating processes that were arduous to track manually, and it provided the instructional offices extensive information regarding future course demand (J. Gaston, personal communication, February 18, 2009). Since April 27, 2007 MAP has been used to create more than 38,000 academic plans representing more than 17,000 students (Jim Gaston, personal communication, February 18, 2009). My Academic Plan was recognized by the California Community Colleges Chancellors Office with a 2007 Technology Focus Award. Most recently, SOCCCD was a 2009 Bellwether Award Finalist for MAP in recognition of outstanding and innovative programs and practices successfully leading community colleges into the future (College of Education, University of Florida, 2008). “One of the real lessons of the MAP project involves the importance of true student-centered design. From the very beginning of this project, the design team never lost sight of the critical importance of keeping the focus on the student experience” (J. Gaston, personal communication, February 18, 2009). Preliminary research has indicated that students who use MAP have a higher success rates in classes than students who do not use MAP, however more research will be conducted as MAP continues to be an integral part of student services (J. Gaston, personal communication, February 18, 2009).

A Learning College for the 21st Century challenges higher education to place student learning at its center (O’Banion, 1997). O’Banion (1997) also stated, “The learning college assists learners to form and participate in collaborative learning activities” (p. 54). With the bellwether examples of the developmental advising models implemented at Valencia Community College and the Orange County Community College District, O’Banion’s visions for Learning Colleges are being demonstrated by
these programs “designed to help students make passionate connections to learning” (O’Banion, 1997, p. xiv).
Figure 2-1. The National Freshman Attitudes Report Demographic Sample

Figure 2-2. Disclaimer Encouraging Students to Make an Appointment with a Counselor (South Orange County Community College District, 2007).
Figure 2-3. New Education Plan Created with Credit Already assigned from Transcript (South Orange County Community College District, 2007)
<table>
<thead>
<tr>
<th>Participant Demographics</th>
<th>Adult Learners</th>
<th>Traditional Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Participants</td>
<td>8,867</td>
<td>81,080</td>
</tr>
<tr>
<td>Percent Male</td>
<td>43.1 %</td>
<td>45.5 %</td>
</tr>
<tr>
<td>Percent Female</td>
<td>56.9 %</td>
<td>54.5 %</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>3.6 %</td>
<td>3.9 %</td>
</tr>
<tr>
<td>Black</td>
<td>24.3 %</td>
<td>17.7 %</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11.7 %</td>
<td>8.7 %</td>
</tr>
<tr>
<td>Other</td>
<td>4.1 %</td>
<td>3.8 %</td>
</tr>
<tr>
<td>White</td>
<td>43.9 %</td>
<td>61.1 %</td>
</tr>
<tr>
<td>Sample Survey Items</td>
<td>Nontraditional</td>
<td>Traditional</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>I am deeply committed to my educational goals, and I’m fully prepared to make the effort and sacrifices that will be needed to attain them.</td>
<td>94.6 %</td>
<td>88.8 %</td>
</tr>
<tr>
<td>I have found a potential career that strongly attracts me.</td>
<td>88.2 %</td>
<td>78.4 %</td>
</tr>
<tr>
<td>I have made a firm decision to enter a certain occupation and have begun planning my life around that decision.</td>
<td>76.7 %</td>
<td>60.2 %</td>
</tr>
<tr>
<td>I have the financial resources that I need to finish college.</td>
<td>42.4 %</td>
<td>47.9 %</td>
</tr>
<tr>
<td>I would like to receive some help in improving my study habits.</td>
<td>59.1 %</td>
<td>55.7 %</td>
</tr>
<tr>
<td>I would like some help selecting an education plan that will prepare me to get a good job.</td>
<td>59.9 %</td>
<td>66.4 %</td>
</tr>
<tr>
<td>I would like to talk to someone about getting a scholarship.</td>
<td>61.4 %</td>
<td>63.9 %</td>
</tr>
<tr>
<td>I would like to talk with someone about getting a loan to help me through school.</td>
<td>37.3 %</td>
<td>29.5 %</td>
</tr>
</tbody>
</table>
CHAPTER 3
RESEARCH PROCEDURE

This chapter defines the research methodology used in this case study, describing the research setting, population and methodology. The instruments used are provided and data collections are detailed.

This case study followed students in a Student Success program at a large community college in the Southeastern region of the United States. Students, whose entry level test scores placed into at least two preparatory mathematic and reading courses, were mandated to take the Student Success course. The Student Success course is a three-hour, elective college level credit course in which all new students were strongly encouraged or mandated to enroll. The curriculum focused on career and educational planning, understanding of self and learning styles, and academic success skills. Student Success faculty implemented active and collaborative learning strategies to engage students in the learning process. Students developed a Learning Portfolio which starts the documentation of their learning and achievement of core competencies at the college.

As part of the curriculum in the Student Success course, students were invited to participate in an incentive program, developed and implemented by the institution called “Road Map to Success.” Students had the opportunity to complete criteria-based “best practices” for academic success, and to earn a $500 award. Students must have met with an educational advisor, career program advisor or counselor to certify their completion and requirements (Appendix A). The purpose of this case study was to identify factors associated with at-risk students in a community college Student Success program.
Setting

This large southeastern community college was originally founded in 1967 as a junior college and became a community college in 1971. Accredited by Southern Association of Colleges and Schools (SACS), this multi-campus community college serves more than fifty thousand credit students per year with about two-thirds pursuing transfer programs and one-third technical degrees and certificates (Shugart & Romano, 2008). The college offered the Associate in Arts (AA) degree, 7 articulated AA Pre-Majors, 4 AA Pre-Majors, 30 transfer plans, and 103 Associate in Science and Applied Science degrees and certificate programs, which lead to immediate entry into the workforce. The college was ranked first among the nation's two-year institutions, and fourth among two-year and four-year colleges and universities in the number of Associate degrees awarded to students (National Center for Education Statistics, 2008b).

In the mid-1990s the college’s faculty, staff, and students began a deep and lasting dialogue on the learning college paradigm (Shugart & Romano, 2008). Primarily, the faculty, staff, and students began developing a common language and the purpose for reform. The institution focused a concentrated on staff and faculty development (Shugart & Romano, 2008). As a result, a new strategic plan was adopted in 2002, which included an important goal called “Start Right.”

Population

The college’s typical credit student is Caucasian, 23 years old, and a resident of the county area which the college serves. This representative student is enrolled part-time, attends classes during the day, and enrolls in 9 credit hours, and seeks an AA degree. Table 3-2 provides the college’s annualized student profile data for the 2009-
2010 reporting year, as provided by the college’s Statistical History Fact Book (Valencia Community College, 2010).

Student Success was an entry level course at the college. Students were encouraged to enroll upon college application even if they were not mandated to complete the course. Participants in this study were volunteer students enrolled in a Student Success course; they were invited to participate in a Student Success program titled, “Road Map to Success.” Students were not selected to participate based on gender, age, race, or any other criteria. Figure 3-1 illustrates the methodology for this study.

According to Patton, (1987) the power of purposeful sampling lies in selecting “information-rich cases” for study an in-depth study (p. 52). The population of the study was demographically diverse within the confines of the larger student population enrolled in the Student Success course. The study’s population includes males and females, Caucasian, African Americans, Hispanic, Asian, and other individuals of any other descent (see Table 3-1). The student population who participated in Road Map to Success ranged from 18 years to more than 50 years of age. The median age range was 24 years. The purpose of this homogenous sample was to conduct an evaluation of the Road Map to Success program, based on the thoughts and experiences of a particular group.

Methodology

At the beginning of the Fall 2009 and Spring 2010 terms, students enrolled in the Student Success course were invited to participate in the Road Map to Success convocation. Convocation is an assembly where students are introduced to the Road Map to Success program. At convocation, students interested in participating in the
Road Map to Success program congregated on one campus. Faculty members were introduced to students, and administrators were presenters who provided information to students about college resources. A keynote motivational speaker was an element of the program to encourage students to participate in Road Map to Success and promote student success and persistence in college. Students were asked to complete a Road Map Pre-Assessment Survey at convocation. During the semester, participants completed the required tasks to earn points and achieve the $500 reward at the end of the term (see Appendix A). Students, who did not complete the required tasks, did not receive the scholarship reward. At the conclusion of the term, successful completers and non-completers were asked to take a Road Map Post-Assessment Survey. Data were collected from each pre- and post-assessment survey completed by participants. Each campus had student enrollment in the Student Success course and participants in the Road Map to Success program. Participants involved in this study were enrolled at one of the four college campuses.

**Instruments**

At the beginning of the Road Map to Success program, students were given a Pre-Assessment Survey, a paper-and-pencil method containing four Likert scale questions ranging from Strongly Agree to Strongly Disagree. An open-ended question was included to obtain analytic information regarding expected learning outcomes (Appendix B). Upon completion of the program, students received a Post-Assessment paper-and-pencil survey containing the same four Likert scale questions, ranging from Strongly Agree to Strongly Disagree. Two additional open-ended questions were included to obtain analytic information regarding learning outcomes and program improvements (Appendix C).
Data Collection and Analysis

Results from the pre- and post-assessment surveys were collected by the institution and analyzed by the researcher. The numerical data from the results in both the pre- and post-assessment survey were analyzed using a standard t-test for the following research questions:

- Does a significant difference exist in demographics (i.e. age) between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Does a significant difference exist in GPA between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Does a significant difference exist in the number of credit hours enrolled between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Do students who complete a Student Success program demonstrate higher levels of persistence in college than those who did not successfully complete a Student Success program?

The categorical data from the results in both the pre- and post-assessment survey were analyzed using a standard chi-square or Fischer’s Exact test for the following research questions:

- Does a significant difference exist in demographics (i.e. race, and gender) between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Does a significant difference exist in the development of life goals between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Does a significant difference exist in the development of a financial plan between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Does a significant difference exist in the development of an educational plan between students who completed a Student Success program and those who did not successfully complete a Student Success program?
Does a significant difference exist in the identification of strengths and talents between students who completed a Student Success program and those who did not successfully complete a Student Success program?

The statistical data collected by the institution were used by the researcher to compare the Road Map to Success completers with the non-completers. A database of Road Map to Success participants in the Fall 2009 and Spring 2010 semesters was created for both pre- and post-assessment surveys using statistical software package (SAS version 9.2). Student demographic and credit hour information was collected directly from institution data sources and entered into the same database. Based on pre- and post-assessment survey results, analytic information was collected from open-ended responses. The purpose of the open-ended questions was to address students with follow-up questions about the data collected from the surveys, to allow students to respond to the results of the student survey, and to bring forth more specific observations and comments on the Road Map to Success program.

This study included 180 pre- and post-survey assessments with open-ended questions to obtain student reactions. The researcher reviewed all surveys collected by the institution from both completers and non-completers of the Road Map to Success program. The responses were reviewed and analyzed. All responses from participants provided information that was considered useful by the researcher.

Once the pre- and post-survey assessments were reviewed, the researcher transcribed her participants’ responses and completed the coding process. As detailed in Appendix D, the researcher utilized domain analysis, as outlined by Spradley (1979), to analyze the student reactions in the open-ended responses. As noted by Spradley (1979), an effective procedure utilized in identifying domains is the use of universal semantic relationships (p. 107). Research has suggested that in any
given culture there are a limited number of potential semantic relationships occur, often less than a dozen (p. 107). After the participant responses were reviewed, the researcher was responsible for the transcription and coding of each pre- and post-survey assessment.

In evaluating the data, it was important to rely on developing themes. The researcher analyzed the participant responses to seek explanations from the research questions. The subjectivity of the researcher played an important function in the evaluation of the data. While subjectivity of the researcher is regarded negatively in a quantitative study, it is an element of the research process in a qualitative case study. Kemmis (1999) concluded, “Case study consists in the imagination of the case and the invention of the study.” Glesne (2006) added, subjectivity should be monitored, and when it is monitored effectively, “You increase your awareness of the ways it might distort, but you also increase your awareness of its virtuous capacity” (p.123). Glesne (2006) further concluded, “It is not possible to be complete in the mapping of subjectivity, but one can learn enough that is consequential about selves generated in particular research situations to be able to make use of this knowledge and be responsible in one’s reporting” (p.124).

This study was intended to analyze collected data about factors and behaviors associated with successful completion of a community college Student Success program using quantitative data and anecdotal evidence from open ended survey responses in order for the results to have validity. According to Lincoln and Denzin (2000), data from both the quantitative data and the anecdotal evidence can be used to compare data gathered by different methods of collection (p. 445). After all the
statistical data were reviewed and analyzed, categories and themes for organizing the anecdotal participant responses were analyzed and identified. Stake (2000) characterized multiple methods of data collection as a result of “redundancy in collecting data” and procedural explanation of how the data are being interpreted (p. 442). To analyze the quantitative data and the written responses from participants together, the procedure for data collection are varied, as well as the sources. In this study, data collection was accomplished by analyzing statistical data from pre- and post-assessment surveys and analysis of the anecdotal data from open-ended responses addressed on each survey.

**Criterion**

The criterion is explained by a narrative analysis of the analytic information, disciplined subjectivity of the participant responses, and quantitative data. The criterion was considered collectively by the researcher as data were interpreted and presented. Due to the subjective relationship of the open-ended response data, difficulty of ensuring validity in a case study exists. Ratcliffe (1983) stated, “Data do not speak for themselves; there is always an interpreter or translator” (p. 149). The criterion was a guide to the analysis of the participant responses to ensure validity of the results and was met through a use of multiple methods of data collection. The instruments used in this study were created by the institution and remain intact. Validity was based on the results from previous data collected by the institution.

**Summary**

Robert K. Yin (1984) defined the case study research method as 1) an empirical inquiry to investigate a contemporary phenomenon within its real-life context, 2) when
the boundaries between phenomenon and context are not clearly evident, and 3) multiple sources of evidence to be used (p. 23). This case study investigated students within a particular community college Student Success program to identify factors associated with at-risk students. This chapter defined the research design, methodology, setting, population, data analysis and collection of this case study. Chapter 4 will provide the research findings for the case study, and Chapter 5 will provide conclusion and recommendations for further study.
Figure 3-1. Methodology for Data Collection
Table 3-1. Demographics of Study

Summary of Statistics  n=180

<table>
<thead>
<tr>
<th>Gender</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>27 % (49)</td>
</tr>
<tr>
<td>Female</td>
<td>73 % (131)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age in Years</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD)</td>
<td>23.7 (8.6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA Mean (SD)</td>
<td>3.2 (0.7)</td>
</tr>
<tr>
<td>Pre Credit Hour Mean (SD)</td>
<td>20.6 (16.0)</td>
</tr>
<tr>
<td>Post Credit Hour Mean (SD)</td>
<td>37.3 (17.9)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>3% (5)</td>
</tr>
<tr>
<td>Black</td>
<td>35% (63)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>29% (52)</td>
</tr>
<tr>
<td>Other</td>
<td>10% (19)</td>
</tr>
<tr>
<td>White</td>
<td>23% (41)</td>
</tr>
<tr>
<td>Credit Students</td>
<td>Number</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Age in Years Mean</td>
<td>23.4</td>
</tr>
<tr>
<td>Credit Enrollment</td>
<td>55,302</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23,844</td>
</tr>
<tr>
<td>Female</td>
<td>26,386</td>
</tr>
<tr>
<td>Unknown</td>
<td>213</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>2,741</td>
</tr>
<tr>
<td>Black</td>
<td>9,190</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15,200</td>
</tr>
<tr>
<td>Other</td>
<td>384</td>
</tr>
<tr>
<td>White</td>
<td>21,684</td>
</tr>
<tr>
<td>Unknown</td>
<td>6,102</td>
</tr>
<tr>
<td>Degree Status</td>
<td></td>
</tr>
<tr>
<td>AA</td>
<td>27,291</td>
</tr>
<tr>
<td>AAS</td>
<td>1,117</td>
</tr>
<tr>
<td>AS</td>
<td>8,344</td>
</tr>
<tr>
<td>Non-Degree</td>
<td>11,168</td>
</tr>
<tr>
<td>Awaiting</td>
<td>7,382</td>
</tr>
</tbody>
</table>
CHAPTER 4
DATA ANALYSIS

This chapter presents the quantitative data of the study and the identification of factors and behaviors of successful completion in a community college student success program. The specific data collected reflected factors such as gender, GPA, race, and credit hours enrolled while participating in the study, as well as the number of credit hours enrolled two semesters following the Student Success program. The data also reflected behaviors, such as the development of an education plan, financial plan, life goals and the identification of strengths and talents, during participation in the Road Map to Success program. All data are based on a level of significance of .05.

Research Question 1

- Does a significant difference exist in demographics (i.e., age, gender, and race) between students who completed a Student Success program and those who did not successfully complete a Student Success program?

Data were collected from students who participated in the Road Map to Success program in the Fall 2009 and Spring 2010 terms. Students submitted pre- and post-assessment surveys. Some surveys were incomplete or participants did not follow up with a post-assessment survey, which could not be used for this study, resulting in n=180. Tables 4-1 and 4-2 reveal the demographic data between students who completed the Road Map to Success program and those who did not successfully complete the Road Map to Success program.

A Mantel-Haenszel Chi-Square test was used to evaluate the gender relationship between the completers and non-completers. No gender differences existed between completers and non-completers (p-value, 0.9643). Due to data sparseness in some of the category responses, a Fisher’s Exact Test was used to determine the relationship of
race between completers and non-completers. A significant relationship existed between race and successful completion (p-value, 0.0202). Approximately 29.3% of black students completed the program successfully; however, 55% did not successfully complete the Road Map to Success program. Approximately 26.4% of white students successfully completed the program, and only 10% were considered non-completers.

The relationship between age and successful completion was determined using a standard t-test. No significant relationship existed between age and completers or non-completers in the Road Map to Success program (p-value, 0.5742).

**Research Question 2**

- Does a significant difference exist in GPA between students who completed a Student Success program and those who did not successfully complete a Student Success program?

A strong correlation existed between a student's GPA and completion of the program. Completers have a mean GPA of 3.4 whereas non-completers have a mean GPA of 2.5 (p-value, <0.001). Table 4-3 identifies the GPA relationship between completers and non-completers in the Road Map to Success program.

**Research Questions 3 and 4**

- Does a significant difference exist in the number of credit hours enrolled between students who completed a Student Success program and those who did not successfully complete a Student Success program?

- Do students who complete a Student Success program demonstrate higher levels of persistence in college than those who did not successfully complete a Student Success program?

Participants of this study were enrolled in a Student Success course. As part of the Student Success class, students were eligible to participate in the Road Map to Success program. The number of credit hours was identified for students at the entry of
the program, reflecting the cumulative number of credit hours the participants earned while enrolled for the term in which they entered the Road Map to Success program. To determine student persistence, data were collected on the number of credit hours participants accumulated two semesters after participation in the program. Table 4-4 reflects the number of credit hours participants completed during and after the program.

The relationship between the number of credit hours students had accumulated when they entered the program showed significance (p-value, 0.0681). Completers were taking more credit hours (mean 21.6) when they enrolled in the Road Map to Success program. Completers continued to enroll in a greater number of credit hours after they completed the program (mean, 38.4). The numbers of credit hours that participants accumulated two semesters after the program also showed significance (0.0825). Non-completers completed fewer number of credit hours when they began the Road Map to Success program and continued taking fewer numbers of credit hours after the program, as opposed to the completers of the Road Map to Success program.

**Research Question 5**

- Does a significant difference exist in the development of an educational plan between students who completed a Student Success program and those who did not successfully complete a Student Success program?

As part of the Road Map to Success program, students were taught how to create and education plan based on the participants’ degree through the college’s developmental advising software model. Table 4-5 displays the survey results for the pre- and post-assessments for completers and non-completers for the development of an educational plan.
The relationship between the completers and non-completers for the pre-assessment survey revealed significance (p-value, 0.0429). Only 62.9% of Road Map completers indicated they had created an education plan before they began the Road Map to Success program. A higher percentage of non-completers indicated strongly agree, or agree on the pre-assessment survey. Approximately 87.5% of the non-completers indicated they had created an educational plan prior to the start of the Road Map to Success program.

The relationship between the completers and non-completers for the post-assessment survey showed significance (p-value, 0.0820). After the Road Map to Success program, 100% of completers indicated they had created an educational plan with a response of either strongly agree, or agree. One-hundred percent of the non-completers also responded they had created educational plans. Eighty percent of the non-completers answered strongly agree with a 20% response of agree.

**Research Question 6**

- Does a significant difference exist in the development of life goals between students who completed a Student Success program and those who did not successfully complete a Student Success program?

Throughout the Road Map to Success program and Student Success course curriculum, participants were encouraged to develop life goals. Table 4-6 displays the pre- and post-assessment survey results for completers and non-completers for the development of life goals.

No significant relationship existed between completers and non-completers of the Road Map to Success program for the pre-assessment survey and the development of life goals (p-value, 0.2460). A higher percentage of non-completers indicated they had developed life goals with 67.5% of participants with responses of strongly agree or
agree. Only 62.9% of the completers replied they had identified life goals prior to completion of the Road Map to Success program.

No significant relationship existed between completers and non-completers of the Road Map to Success program for the post-assessment survey and the development of life goals (p-value, 0.3610). However, more completers responded they developed life goals from the post-assessment survey. Approximately 97.2% of respondents answered strongly agree or agree for the development of life goals. Non-completers had fewer responses at 92.5%.

**Research Question 7**

- Does a significant difference exist in the development of a financial plan between students who completed a Student Success program and those who did not successfully complete a Student Success program?

During the Road Map to Success program and Student Success course curriculum, participants were provided instructions about how to develop a financial plan to fund their college education with use of the college electronic resources. Table 4-7 displays the pre- and post-assessment survey results for completers and non-completers for the completion of a financial plan.

No significant relationship existed between completers and non-completers of the Road Map to Success program for the pre-assessment survey and the development of a financial plan (p-value, 0.3748). A higher percentage of non-completers indicated they had developed a financial plan with 55% of participants with responses of strongly agree or agree. Only 53.6% of the completers replied they had developed a financial plan prior to completion of the Road Map to Success program.
No significant relationship existed between completers and non-completers of the Road Map to Success program for the post-assessment survey and the development of a financial plan (p-value, 0.2719). However, more completers responded they had developed a financial plan for their college education from the post-assessment survey. Approximately 90.8% of respondents answered strongly agree, or agree for the development of a financial plan. Non-completers had fewer responses at 80%. Fewer completers responded they did not have a financial plan than the non-completers on the post-assessment survey. Approximately 8.5% of completers either responded neither agree or disagree, disagree, or strongly disagree; as opposed to 20% of non-completers who indicated they did not have a financial plan to fund post-secondary education.

Research Question 8

- Does a significant difference exist in the identification of strengths and talents between students who completed a Student Success program and those who did not successfully complete a Student Success program?

With use of personality and inventory tests, participants in the Road Map to Success program were encouraged to identify their strengths and talents. Table 4-8 displays the pre- and post-assessment survey results for completers and non-completers and the identification of individual strengths and talents.

No significant relationship existed between completers and non-completers of the Road Map to Success program for the pre-assessment survey and the identification of strengths and talents (p-value, 0.05258). A higher percentage of completers indicated they had identified personal strengths and talents with 88.5% of participants with responses of strongly agree or agree. Only 85% of the non-completers replied they had
identified individual strengths and talents prior to completion of the Road Map to Success program.

No significant relationship existed between completers and non-completers of the Road Map to Success program for the post-assessment survey and the identification of strengths and talents (p-value, 0.1622). However, more completers responded they had identified strengths and talents from the post-assessment survey. Approximately 97.8% of respondents answered strongly agree, or agree for the identification of strengths and talents. Non-completers had slightly fewer responses at 92.5%. Fewer completers responded they had not identified strengths and talents than the non-completers on the post-assessment survey. Only 2.1% of completers either responded neither agree or disagree, disagree, or strongly disagree, as opposed to 7.5% of non-completers who did not identify their individual strengths and talents.

This chapter reported the outcomes for the factors associated with at-risk students in a community college Student Success program. It answered Research Questions 1 through 8. Chapter 5 will discuss the anecdotal evidence from this study, conclusions, and recommendations for further study.
Table 4-1. Gender and Race Differences between Completers and Non-Completers of the Road Map to Success Program

<table>
<thead>
<tr>
<th></th>
<th>Completers</th>
<th>Non-Completers</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>72.9 %</td>
<td>72.5 %</td>
<td>0.9643</td>
</tr>
<tr>
<td>Male</td>
<td>27.1 %</td>
<td>27.5 %</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>2.9 %</td>
<td>2.5 %</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>29.3 %</td>
<td>55.0 %</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>31.4 %</td>
<td>20.0 %</td>
<td>0.0202</td>
</tr>
<tr>
<td>Other</td>
<td>10.0 %</td>
<td>12.5 %</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>26.4 %</td>
<td>10.0 %</td>
<td></td>
</tr>
</tbody>
</table>

Note: A Mantel-Haenszel Chi-Square test was used to calculate gender statistics. Due to data sparseness, a Fisher's Exact test was used to calculate race statistics with a .05 level of significance.
Table 4-2. Age Differences between Completers and Non-Completers of the Road Map to Success Program

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean (SD)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completer</td>
<td>23.8 (8.9)</td>
<td>0.5742</td>
</tr>
<tr>
<td>Non-Completer</td>
<td>23.0 (7.7)</td>
<td></td>
</tr>
</tbody>
</table>

Note: A standard t-test was used to calculate age data with a .05 level of significance.

Table 4-3. Grade Point Averages (GPA) for Students Who Successfully Completed the Road Map to Success Program and Those Who Did Not Successfully Complete Road Map to Success Program

<table>
<thead>
<tr>
<th>GPA</th>
<th>Mean (SD)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completer</td>
<td>3.4 (0.5)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Non-Completer</td>
<td>2.5 (0.8)</td>
<td></td>
</tr>
</tbody>
</table>

Note: A standard t-test was used to calculate GPA data with a .05 level of significance.
Table 4-4. Credit Hours Accumulated While Enrolled in the Road Map to Success Program and Number of Credit Hours Accumulated Two Semesters After the Road Map to Success Program for Fall 2009 and Spring 2010 Participants

<table>
<thead>
<tr>
<th></th>
<th>Completion Status</th>
<th>Mean (SD)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Credit Hours Pre-RoadMap</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completer</td>
<td></td>
<td>21.6 (16.9)</td>
<td>0.0681</td>
</tr>
<tr>
<td>Non-Completer</td>
<td></td>
<td>17.2 (12.0)</td>
<td></td>
</tr>
<tr>
<td><strong>Number of Credit Hours Post-RoadMap</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completer</td>
<td></td>
<td>38.4 (18.6)</td>
<td>0.0825</td>
</tr>
<tr>
<td>Non-Completer</td>
<td></td>
<td>33.4 (14.9)</td>
<td></td>
</tr>
</tbody>
</table>

Note: A standard t-test was used to calculate credit hour data with a .05 level of significance.
Table 4-5. Development of an Educational Plan between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program

<table>
<thead>
<tr>
<th>Education Plan</th>
<th>Pre-Assessment Survey</th>
<th>Post-Assessment Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completer %</td>
<td>Non-Completer %</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>30.0 %</td>
<td>32.5 %</td>
</tr>
<tr>
<td>Agree</td>
<td>32.9 %</td>
<td>55.0 %</td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>20.7 %</td>
<td>7.5 %</td>
</tr>
<tr>
<td>Disagree</td>
<td>12.9 %</td>
<td>5.0 %</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3.6 %</td>
<td>0.0 %</td>
</tr>
</tbody>
</table>

Note: A Fischer’s Exact Test was used to calculate education plan data with a .05 level of significance.
Table 4-6. Development of Life Goals Between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program

<table>
<thead>
<tr>
<th>Life Goals</th>
<th>Pre-Assessment Survey</th>
<th></th>
<th>Post-Assessment Survey</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completer %</td>
<td>Non-Completer %</td>
<td>p-value</td>
<td>Completer %</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>22.1 %</td>
<td>37.5 %</td>
<td></td>
<td>67.9 %</td>
</tr>
<tr>
<td>Agree</td>
<td>42.1 %</td>
<td>30.0 %</td>
<td>0.2460</td>
<td>29.3 %</td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>23.6 %</td>
<td>27.5 %</td>
<td></td>
<td>2.9 %</td>
</tr>
<tr>
<td>Disagree</td>
<td>10.0 %</td>
<td>5.0 %</td>
<td></td>
<td>0.0 %</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2.1 %</td>
<td>0.0 %</td>
<td></td>
<td>0.0 %</td>
</tr>
</tbody>
</table>

Note: A Fischer's Exact Test was used to calculate data with a .05 level of significance.
Table 4-7. Development of a Financial Plan between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program

<table>
<thead>
<tr>
<th>Financial Plan</th>
<th>Pre-Assessment Survey</th>
<th>Post-Assessment Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completer %</td>
<td>Non-Completer %</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>19.3 %</td>
<td>27.5 %</td>
</tr>
<tr>
<td>Agree</td>
<td>34.3 %</td>
<td>27.5 %</td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>29.3 %</td>
<td>37.5 %</td>
</tr>
<tr>
<td>Disagree</td>
<td>12.1 %</td>
<td>7.5 %</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>5.0 %</td>
<td>0.0 %</td>
</tr>
</tbody>
</table>

Note: A Fischer's Exact Test was used to calculate data with a .05 level of significance.
### Table 4-8. Identification of Strengths and Talents between Students Who Completed the Road Map to Success Program and Those Who Did Not Successfully Complete the Road Map to Success Program

<table>
<thead>
<tr>
<th>Strengths and Talents</th>
<th>Pre-Assessment Survey</th>
<th>Post-Assessment Survey</th>
<th>p-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completer %</td>
<td>Non-Completer %</td>
<td>Completer %</td>
<td>Non-Completer %</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>37.1 %</td>
<td>45.0 %</td>
<td>65.7 %</td>
<td>57.5 %</td>
</tr>
<tr>
<td>Agree</td>
<td>51.4 %</td>
<td>40.0 %</td>
<td>32.1 %</td>
<td>35.0 %</td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>10.7 %</td>
<td>15.0 %</td>
<td>2.1 %</td>
<td>5.0 %</td>
</tr>
<tr>
<td>Disagree</td>
<td>0.0 %</td>
<td>0.0 %</td>
<td>0.0 %</td>
<td>2.5 %</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>.71 %</td>
<td>0.0 %</td>
<td>0.0 %</td>
<td>0.0 %</td>
</tr>
</tbody>
</table>

Note: A Fischer’s Exact Test was used to calculate data with a .05 level of significance.
Chapter 5 presents a case study analysis of the research questions in Chapter 4. Using the methodology described in Chapter 3, the emergent themes are presented to describe the factors associated with identifying at-risk students in a community college Student Success program based on the anecdotal written responses from the survey instrument. The findings are discussed from the quantitative data and anecdotal evidence from the pre- and post-assessment survey. Recommendations for the institution, implications for higher education administrators, and conclusions are summarized.

**GPA**

According to the quantitative evidence revealed in Chapter 4, factors associated with at-risk students in a community college Student Success program are GPA, race, and student persistence. Students with a higher GPA are more likely to complete the Road Map to Success program than students with lower GPAs (p-value, <0.0001). This significance was also demonstrated by the anecdotal evidence reported by participants. More non-completers responded about improving GPA on the pre-assessment survey (22%) than the completer responses (2%). One non-completer female participant, whose GPA was 3.0, noted in the pre-assessment survey, “I would like to pass all my classes with straight A’s.”

Another non-completer male participant focused on grades by stating, “I want to become a master student.” His GPA was a 2.68 at the time of his written responses on the pre-assessment survey.
Only 2% of completer participants responded they wanted to increase their GPA. A male completer participant response stated, “I want to gain a 4.0 GPA and become more involved in clubs and activities.”

His GPA was a 3.25 when he completed the pre-assessment survey. The other participant was a female completer, whose GPA was 3.5, who indicated a desire to increase her GPA. She wrote, “I want to get straight A’s and get a scholarship.”

The responses from the completer participants were from those participants with GPAs were already considered high and indicated a factor of success for the program. Because GPA was a factor for successful completion of the program, faculty, advisors and staff can identify students at-risk for non-completion.

Similar data also aligned with GPA and student success from previous research discussed in Chapter 2. The collaboration and research conducted by Louisiana State University, University of Georgia and the University of Illinois at Chicago found a relationship between students with high GPAs and financially stability. This study found that students with higher GPAs were more likely to be financially fit, which led to higher success rates in college (Bodvarsson & Walker, 2004; Lyons, 2003).

Demographics

Gender

No gender differences were reported between completer and non-completer participants. Also, no significant anecdotal evidence was cited in student responses on the pre- and post-assessment survey that gender was a factor for the successful completion of the Road Map to Success program. The data previously discussed in Chapter 2 from the Faces of the Future report (2005) indicated that first-generation students were more likely to be women. Because this study was a combination of
traditional, nontraditional, and first-generation students, the data did not indicate any gender differences between completer and non-completers in the Road Map to Success program. However, more females (73%) participated in this study than males (27%).

**Race**

Race was a significant factor in identifying at-risk students (p-value, 0.0202). However, anecdotal data did not align with the quantitative data. Participants in both groups did not indicate in the student survey responses any discussion of race being a factor or concern for successful completion. The primary differences existed between black and white students. Black students were among the highest percentage of participants in the non-completer group at 55%, whereas white students comprised only 10% of the non-completers.

Hispanic participants had the largest percentage of the completer group at 31.4% whereas black students were close behind at 29.3%. Approximately 26.4% of the completer group participants were white, 2.9% were Asian and 10% of the completer group were of another race. The findings from this study related to the findings of first-generation study, The Faces of the Future (2005). Because Hispanic students were found with the largest population of first-generation (53%), the more positive impact this Student Success program had a more positive impact for Hispanic completers of the Road Map to Success program.

**Age**

Age was not a significant factor to identify at-risk student in the Road Map to Success program. No significant anecdotal evidence, as suggested by participant responses in the pre- and post-assessment survey, showed that age was a factor for successful completion.
In contrast, previous research on student success indicated that age as a factor for success. According to the Attitudes of Incoming Adult Learners Report (Noel-Levitz, 2008a) discussed in Chapter 2, adult learners were more difficult to retain in higher education, with many more of them failing to complete their educational goals than traditional-age students. The median age range for first-generation students was 24 (Nomi, 2005). Although first-generation students were starting college for the first time, they were not starting after high school graduation. The median age for this case study was approximately 24 years of age, which indicated that the majority of students who participated in this program were not of traditional age. As a result, retention can be increased and participants can be encouraged to make the needed connections at the college for success.

**Student Persistence**

According to this study, significance occurred in student persistence as an identifier of at-risk students in the Road Map to Success program. More completers enrolled in a higher number of credit hours after successful completion (mean = 38.4 credit hours) than the non-completer participants (mean = 33.4). Participants in both groups indicated continuing courses as part of accomplishments they hoped to gain as a result of the program either through their education plan or life goals.

A completer participant responded on her pre-assessment survey that she would like to, “Gain a better foundation to continue in school.”

Non-completers also made remarks regarding student persistence on the pre-assessment survey as accomplishments they hoped to gain from the Road Map to Success program.
One non-completer participant stated, “I hope to gain a better commitment to my education.” Another non-completer stated, “I want to learn how I can stay in school.”

Students who successfully completed the Road Map to Success program were more likely to continue taking a greater number of courses than the students who did not successfully complete the Road Map to Success program. Those participants who indicated that self-improvement, as a result of the Road Map to Success program, were at-risk for non-completion.

These pre-assessment comments regarding self-improvement were also completed at the end of convocation for the Road Map to Success program. Prior to the start of classes for each term, a motivational speaker attended convocation and addressed students eager to participate in the Road Map to Success program. Students left convocation enthusiastic, ready, and motivated to begin the college term. Because students completed the pre-assessment survey shortly after hearing the motivation speaker, the result in the high number of self-improvement responses written on the survey likely increased.

**Development of an Education Plan and Life Goals**

The anecdotal evidence from the open-ended responses on the pre and post-assessment survey revealed that more non-completers were interested in self improvement as a learning outcome for the program. On the pre-assessment survey, students were asked to list two to three accomplishments they hoped to gain from the Road Map to Success program. Sixty-six percent of the non-completer group responded with a form of self-improvement statement rather than help with creating an education plan or developing life goals.
One non-completer participant replied, “I hope to raise the quality of commitment to my education, raise the quality of my work, and accomplish a better understanding of my needs.”

Another non-completer participant declared, “I need to learn to stay in school so I can better myself and graduate.”

The non-completers of the program focused heavily on developing better skills for learning and motivation to continue taking courses in college. Only 18.5% of non-completers indicated that they wanted to develop an education plan.

The anecdotal evidence did not align with the quantitative data. For the non-completer group in the student responses, more focus was placed on life goals rather than the education plan. Approximately 87.5% of the non-completers indicated that they began the program with an education plan already in place. Because an education plan was already believed to be in place by non-completer participants, explained the primary focus towards the development of life goals. Only 67.5% of the non-completer participants indicated that they had life goals in place when they started the program. Twenty-nine percent of the non-completers indicated that they would like to gain a better understanding of their life goals as a result of the program in the open-ended responses.

A non-completer wanted clarity to his life goals when he stated, “I hope to gain a lifelong experience as to what the campus is all about. I hope that I will be able to develop goals that will send me on a smooth transition to my future career.”

Another non-completer responded, “I hope to have a better understanding of what I want to do in life and how to accomplish it.”
As previously stated, completer and non-completer participants both indicated that they developed an education plan before they began the program. Because the college implemented a developmental advising model, there is a component in the student electronic portal that allowed students to create an education plan based on the degree major indicated in the college system. The system identified which courses students need to complete, what they have successfully completed, and enabled them to create an education plan based on the college semester. The pre-assessment survey did not indicate the reference to the education plan using the college program. The question listed on the survey could likely be perceived differently by participants posing a limitation to the study. The survey question could be clarified to identify the education plan using the college computer system and a more accurate response from students on the pre-assessment survey would result.

Again, because these remarks were written by participants after convocation, students were motivated to succeed and eager to begin the college term. Speakers at convocation focused their speeches on students’ goals and ambitions. These messages were fresh in the minds of the students when they completed the pre-assessment survey at convocation.

Even though the non-completers were not successful in the Road Map to Success program, 92.5% of the participants indicated that they had developed life goals and 100% responded that they had developed an education plan in the post-assessment survey. Despite whether or not participants completed the program, participants reported to have established an education plan and life goals even if they thought they had them already in place before they started the Road Map to Success program.
In prior research, the Community College Survey of Student Engagement (2006) found a correlation between career advising and number of credit hours enrolled. Only 19% of part-time students indicated that they discussed a career plan with an advisor. On the other hand, 30% of full-time students stated they had developed an education plan (CCSSE, 2006). Even though 88% of students indicated advising as important on the CCSSE (2006), 36% of students reported they rarely or never used academic advising or planning services. Whether classified as part-time or full-time, these figures are low in comparison to the Road Map to Success program study. Both a high number of completers and non-completers indicated that they had an education plan before and after the program in this study.

The National Freshman Attitudes Report (2008) reported 89.3% of incoming freshmen stated they were committed to achieving personal goals. These findings were better aligned with findings of the Road Map to Success program. However, the National Freshman Attitudes Report (2008) also indicated that while incoming freshmen were highly committed, only half were likely to accomplish their goals due to lack of educational planning.

**Developing a Financial Plan**

The development of a financial plan had no significant relationship between the participants who completed the program versus the participants who did not complete the Road Map to Success program. However, an increase appeared in both groups who indicated that they had a financial plan before and after the program. Approximately 53.5% of completers and 55% of non-completers indicated that they had a financial plan by indicating agree or strongly agree on the pre-assessment survey. The numbers increased on the post-assessment survey. Approximately 90.8% of the
completers and 80% of the non-completers responded they had developed a financial plan while participating in the Road Map to Success program.

Participants referred to a financial plan in the written responses for both groups on the pre-assessment survey. Nineteen percent of the completers indicated that they would like to develop a financial plan as a result of the program. Eleven percent of the non-completers referenced a financial plan in the pre-assessment survey.

A completer stated he hoped the Road Map to Success program would, “help me find the financial resources to help pay for my college and achieve my goals.” Another completer replied, “I hope to gain a better understanding or responsibility, as well as attaining and keeping financial stability.”

Non-completer participants also referenced a financial plan as a potential learning outcome of the program on the pre-assessment survey. One non-completer participant wrote, “I would like to better know my available resources, services, and opportunities and use them so I can become financially confident and stable.”

Students also indicated on the post-assessment survey that the resources and creation of a financial plan were one of the most helpful requirements of the Road Map to Success program.

Participants were asked to list two or three important parts of the Road Map to Success program. The financial plan had the most responses from the non-completer participants at 29%. The completers also thought the financial plan was a valuable learning experience at 28%.

One completer stated, “I learned to set up a budget and I found some scholarships I hope to get into that I didn’t know about before this program.”
Another completer responded, “I learned how to gain financial support for my education; this will definitely help my plan.” The non-completers also responded with positive comments about the financial plan. One non-completer participant wrote, “I learned how to manage my time and money wisely; this will help save time and energy in the future.” Another non-completer participant replied, “There is money out here to get and there are people here at the college who really want to help me succeed.”

Although 80% of the non-completer group responded that they had a financial plan in place, 20% remained without a financial plan because they did not complete the Road Map to Success program. Only 8.5% of the completer group stated they did not have a financial plan.

Even though no significant relationship existed between the completers and non-completers in this study, prior research has found that financial stability is a factor for student success in higher education. Lyons (2004) found that one in three students reported his financial situation was “likely” or “somewhat likely” to affect the ability to complete a college degree. The National Freshman Attitudes Report (2008) found 63.7% of students would like to speak with an advisor about getting financial aid to fund their education. Additionally, almost half (45%) of adult learners indicated that they had financial problems that were “very distracting and troublesome” compared to approximately a quarter of the participants (27%) of traditional-age students highlighting the correlation between age and financial planning.

**Identifying Strengths and Talents**

No significant relationship existed between the Road Map to Success program completers and non-completers who had identified strengths and talents before or after the program. Approximately 88.5% of completers and 85% of non-completers indicated
that they identified their strengths and talents before entering the Road Map to Success program by selecting either strongly agree or agree on the pre-assessment survey. The written responses for the Road Map to Success completer were consistent with the statistical data. Sixteen percent of the Road Map to Success program completers indicated that they hoped to be able to identify their strengths and talents as a result of the program on the pre-assessment survey.

A completer wrote, “I need to learn more about myself and see what I’m good at to be successful.”

Another completer participant stated, “I would like to learn more on myself and how to deal with relationships.”

These statements indicated that the participants would like to identify and develop more identity as successful students. However, only 2% of the non-completer group indicated the identification of strengths and talents as an accomplishment that they hoped to gain as a result of the program on the pre-assessment survey. One non-completer stated, “I need to find out more about myself, I hope to take advantage of everything to better myself.”

Few participants specifically identified strengths and talents as an accomplishment they hoped to gain from the program on the pre-assessment survey. But the non-completers stated that some form of self-improvement was a high priority. As previously mentioned, 60% of non-completer participants responded they hoped to gain some form of self-improvement as a result of the Road Map to Success program. Many non-completers indicated that they hoped to gain “better study habits, time management skills, staying on track academically, and staying positive.”
Student responses increased from the pre-assessment to the post-assessment survey demonstrating that both completers and non-completers identified strengths and talents as a result of the Road Map to Success program. Completers increased the identification of strengths and talents from 88.5% on the pre-assessment to 97.8% on the post-assessment survey by responding either strongly agree or agree. Non-completers also increased from the pre-assessment survey (85%) to the post-assessment survey (92.5%) by responding strongly agree or agree to the identification of strengths and talents.

On the post-assessment survey, written responses also reflected learning gains for both the completers and non-completers of the Road Map to Success program. Nine percent of completers indicated that they learned to identify personal strengths and talents as a result of the program.

A completer responded, “I learned about myself which helped me choose a career I will be good at in the future.” Another completer wrote, “I learned many things about my strengths and my weaknesses, the workshops gave me many insights.” Other participants learned how their strengths and talents would affect their choices academically.

A completer participant stated, “I learned some of the occupations I was headed for were not right for me and it taught me to become a better communicator.” Another completer wrote, “I learned that my career choice matches up with my strengths.” Non-completers also reported that they learned more about individual strengths and talents as a result of participating in the Road Map to Success program.
Thirteen percent of the non-completer group stated they gained more information about personal strengths and talents. One non-completer participant stated, “I learned more about my personality profile which will help in job/interviewing skills.” Another non-completer wrote on his post-assessment, “I learned more about myself with the inventory test I took, I think this will help me choose a career I want to pursue.” Although the responses came from the non-completer group, students gained a better understanding of where they were developmentally and who they were as students. This knowledge will assist them academically in the future.

**Recommendations for the Institution**

Academic Advising has undergone remarkable changes during the past decade in higher education. Advisors in higher education are no longer clerical personnel who simply discuss academic matters with students regarding courses to complete. Developmental advising models promote holistic development intellectually, personally, and socially for college students. The purpose of this study was to identify factors associated with at-risk students in a community college Student Success program at an institution where a developmental advising model was implemented.

Although not every student completed the Road Map to Success program, non-completers and at-risk students reported being positively impacted by the requirements for participation and course curriculum in the Student Success course. In the future, faculty can increase student success by identifying students at-risk for non-completion of the Road Map to Success program.

In Chapter 1, the significance of developmental advising was presented in two perspectives: (1) “a system of shared responsibility in which the primary goal is to help the student take responsibility for his or her decisions and actions” (Frost, 2003); (2) “to
advise from a developmental perspective by observing students at work on life tasks in the context of their whole life settings, including the college experience” (Raushi, 1993). For this Student Success program to remain an effective program for college students of the college, the following recommendations deserve consideration by the college administration.

**Mentoring**

The GPA and race were significant indicators for successful completion of the Road Map to Success program. The Student Success program and course should investigate options for student-to-student mentoring for those students participating in the Road Map to Success program. Students with higher GPAs would benefit by being paired with students who have lower GPAs. Students from various ethnic backgrounds could also work together in the program to increase student completers with lower GPAs.

**Advising**

It was evident from the data collected that college advisors continue to be important for both completers and non-completers of the Road Map to Success program. Both groups of students had positive remarks on post-assessment surveys regarding program advisors. Career activities and experiences in workshops were regarded as valuable learning components of the Road Map to Success program for both completers and non-completers. As financial pressures encroach on the college budget, and constant growth on the college campuses continues, the college will better serve at-risk students if they continue and increase the number of program advisors available to the Road Map to Success program students on each campus.
Financial Literacy Program

To increase the number of students who develop a financial plan, colleges should develop a financial literacy program, similar to the financial literacy program implemented at Texas Tech, as discussed in Chapter 2. A financial literacy program for students would promote financial life skills needed during the first year of college, which will encourage further personal growth for the future. Twenty percent of non-completers remained without a financial plan who participated in the Road Map to Success program. It is important for college administrators to understand that issues related to students’ financial management often extend beyond the financial aid office. It is essential for the college to continue to offer more workshops and resources not only for students who participate in the Road Map to Success program, but also for those students who do not participate in the Road Map to Success program.

Survey Instrument

As a result of this study, students indicated that they entered the program with an education plan already in place. The survey’s intent was to inquire about the education plan students create through the college’s student portal. It is recommended to revise both the pre-assessment and post-assessment survey question to read, “I have created an education plan using the college’s My Education Plan (MEP).” A future outcome to this survey statement is likely to end in a different result after clarification.

Because the non-completer groups of students do not successfully complete all requirements of the Road Map to Success program, obtaining post-assessment results can be problematic. For those students who complete the post-assessment survey, an additional question should be added to help obtain data on student motivation to
succeed. Adding the open-ended question, “What would motivate you to complete the Road Map to Success program?” would obtain more data for analysis in the future.

**Implications for Higher Education Administrators**

In considering recommendations for other higher education institutions, it is important to note that the institution used for this research has been considered a leader in developmental education initiatives, which includes the mandate of the Student Success course for students who place in two preparatory classes. The findings have the following implications for educators and administrators in higher education who are dedicated to improve student services and increase student persistence in post-secondary education:

- Explore opportunities for students to learn about the college, such as a mandated new student orientation or student success program. This orientation will help students and families understand the commitment necessary for student success and make personal connections with faculty and staff, which have shown evidence for student success (CCSSE, 2006).

- Design an effective early intervention program, similar to the Road Map to Success program, which will provide a connection for students to use campus resources during the first weeks of the first semester. This is critical for at-risk students identified by this study.

- Campus and student services should be evaluated on campuses to ensure services are adequate to meet student needs.

- Data from evaluations need to be reviewed and analyzed. Include findings in annual and strategic reports to implement in goal planning. Data will provide key information on what resources are needed to improve student services.

- Implement a developmental advising program- If one is not already in place on campus- that requires students to meet with advisors and/or mentors during high registration times throughout the academic year. Research from this study, as well as the Noel-Levitz studies, have shown students of all ages place a high value on academic advising (Noel-Levitz, 2008a,b,c).

- While student affairs professionals have done a remarkable job of integrating technology into many of the services provided to students (Hirt, Cain, Bryant, & Williams, 2003), this integration has been independent of the development of
distance education courses and academic programs. With several exceptions, student affairs professionals have been on the back burner in terms of topics associated with servicing distance students. Distance students, as with traditional and non-traditional students who attend campus, warrant the interest of student affairs professionals. After all, distance students are essentially the traditional students who use a different platform for education to attend higher education institutions. As technology enables institutions to offer distance education courses to students, it is important for student affairs to suggest opportunities for online students to connect with the institution.

Areas for Further Research

The findings of this study reflect there are factors associated with at-risk students in this community college Student Success program. For continuous improvement, the following recommendations for further study are suggested:

1. A longitudinal follow up study is recommended to determine student persistence and graduation rates among the Road Map to Success program participants in both the completer and non-completer groups of students.

2. After revisions to the survey questions, as previously mentioned in the recommendations, a follow-up study with a new group of students may lead to different outcomes for program analysis. The data collected from a follow-up study may lead to better recruiting and retention for the program.

3. A qualitative study is recommended for students in each completer and non-completer group. Focus groups could be formed to obtain further insight and retrospective comments that are important components of the improvement process in a learning-centered institution.

4. Prior to this study, the Student Success course was only taught by part-time adjunct faculty. Since the implementation of the study, three new tenure track faculty positions have been added to the college for the Student Success course. A comparison study between student success rates and faculty status could be conducted to determine if teacher preparedness is a factor for successful completion of the Road Map to Success program.

Conclusions

The majority of participants entered the Road Map to Success program highly motivated to complete the program, however, some participants were at-risk students and did not successfully complete the program. Race, GPA and number of credit hours
have been identified in this study as factors identifying at-risk students for successful completion of a community college Student Success program. Previous research also showed behaviors contributed to successful completion as well. The more students were actively engaged with faculty, staff and advisors, the more likely they were to persist and succeed in college (CCSSE, 2006).

In conducting the research from this study, as well as analyzing research in prior similar studies, factors identifying at-risk students were found to be interconnected. Students with high GPA’s were found to have an educational plan and financial plan in place. Traditional age students were less likely to worry about finances than non-traditional age students, which resulted in non-traditional age students altering academic goals and education plans. With the interconnections contained in these factors and behaviors, the necessity is obvious to identify students at risk for non-completion of a community college Student Success program.

Whether a first-generation, a traditional, or a non-traditional student, personal connections were the unforeseen success factor in a college course or in a Student Success program, which were critical variables that improved the odds of student persistence evidenced by the written responses from participants, as evidenced by the CCSSE (2006) research, establishing personal connections at a higher education institution is crucial. Based on this study, with a Student Success program and a developmental advising model combined, students reported the connection with faculty and advisors, and indicated that they were encouraged to develop and build personal relationships at the college.
**APPENDIX A**

**ROAD MAP ACTIVITY VERIFICATION FORM**

2009-2010

Road Map to Success Award

Activity Verification Form

**Award Amount: $500**

You must document the accomplishment of each activity through your academic transcript or by submitting an Activity Verification Form. An Academic Advisor will assist you through the process as you complete the 500 points and submit the appropriate paperwork.

**REMEMBER:** *Awards will be made on a first completed, first awarded basis, as long as funds are available.*

*Awards will be distributed during the first month of the following term. Students who earn a “D”, “F”, “W”, “WP”, “WF” or “I” in a preparatory course or in Student Success are ineligible for the award. Students applying for this award must be enrolled as a degree-seeking student.*

Student Name_________________________ VID# ___________

<table>
<thead>
<tr>
<th>Required Activities:</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earned</td>
<td></td>
</tr>
<tr>
<td>• Completion of SLS 1122 (Student Success)</td>
<td>100______</td>
</tr>
<tr>
<td>Completion of course with an “A”</td>
<td></td>
</tr>
<tr>
<td>Completion of course with a “B”</td>
<td>75______</td>
</tr>
<tr>
<td>Completion of course with a “C”</td>
<td>50______</td>
</tr>
<tr>
<td>• Completion of Preparatory Course(s) (if needed):</td>
<td></td>
</tr>
<tr>
<td>• ENC 0010 or ENC 0012 or EAP 1540 or 1640</td>
<td>100______</td>
</tr>
<tr>
<td>Completion of course with an “A”</td>
<td></td>
</tr>
<tr>
<td>Completion of course with a “B”</td>
<td>75______</td>
</tr>
<tr>
<td>Completion of course with a “C”</td>
<td>50______</td>
</tr>
<tr>
<td>• REA 0001 or REA 0002 or EAP 1520 or 1620</td>
<td>100______</td>
</tr>
<tr>
<td>Completion of course with an “A”</td>
<td></td>
</tr>
<tr>
<td>Completion of course with a “B”</td>
<td>75______</td>
</tr>
<tr>
<td>Completion of course with a “C”</td>
<td>50______</td>
</tr>
<tr>
<td>• MAT 0012C or MAT 0020C or MAT 0024C</td>
<td>100______</td>
</tr>
<tr>
<td>Completion of course with an “A”</td>
<td></td>
</tr>
<tr>
<td>Completion of course with a “B”</td>
<td>75______</td>
</tr>
<tr>
<td>Completion of course with a “C”</td>
<td>50______</td>
</tr>
<tr>
<td>• Completion of an Educational Plan</td>
<td>50______</td>
</tr>
<tr>
<td>• Completion of Developmental Advising Sequence (4 meetings)</td>
<td>100______</td>
</tr>
</tbody>
</table>
Optional Activities:

• Complete the Choices Inventory in the Career Development Services Office  50
• Participation in Tutoring Sessions (10 hours)  50
• Participation in the skillshops, workshops or campus event
  (each workshop or event, i.e., Start Right Convocation--25 points for each)  
• Member involvement in a college club or organization  25
• Serving as an Elected Officer in a college club or organization  50
• Serving as a Volunteer Registered through the Student Development Office
  (10 points for 1 hour served—Max 100)

I understand that I must complete all activities by the last Friday before finals begin in the semester I am applying. I understand the funds are disbursed on a first completed, first awarded basis, as long as funds are available.
APPENDIX B
ROAD MAP PRE-ASSESSMENT SURVEY

Term:__________________________ Campus:________________________
VID:__________________________

Road Map to Success Program Pre-Assessment
We are conducting a study to provide the college with feedback for program improvement. Participation in this pre-assessment should take about 5 minutes. There are no risks to you and all information will be submitted voluntarily.

All information is subject to the Family Educational Rights and Privacy Act (FERPA) of 1974, which is designed to protect the privacy of educational records. Your participation in this assessment is totally voluntary and you may stop at any time. Please feel free to contact the Dean of Students on your campus if you have any questions about the study. Or, for questions about survey participation, contact the Chair of the Institutional Review Board at irb@cc.edu.

Read each of the following statements and check the ones that best describe if you agree or disagree with the statement based on the scale listed below.

I am at least 18 years of age and completing this assessment constitutes my informed consent.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have developed an education plan</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2. I have developed my “Life Goals”</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3. I have developed a financial plan that will help fund my educational goals.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>4. I know my individual strengths and talents.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>5. Please list 2-3 accomplishments you hope to gain from this program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

97
APPENDIX C
ROAD MAP POST-ASSESSMENT SURVEY

Term:__________________ Campus:__________________
VID:__________________

Road Map to Success Program Post-Assessment
We are conducting a study to provide the college with feedback for program improvement. Participation in this pre-assessment should take about 5 minutes. There are no risks to you and all information will be submitted voluntarily.

All information is subject to the Family Educational Rights and Privacy Act (FERPA) of 1974, which is designed to protect the privacy of educational records. Your participation in this assessment is totally voluntary and you may stop at any time. Please feel free to contact the Dean of Students on your campus if you have any questions about the study. Or, for questions about survey participation, contact the Chair of the Institutional Review Board at irb@cc.edu.

Read each of the following statements and check the ones that best describe if you agree or disagree with the statement based on the scale listed below.

I am at least 18 years of age and completing this assessment constitutes my informed consent.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have developed an education plan</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. I have developed my “Life Goals”</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. I have developed a financial plan that will help fund my educational goals.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. I know my individual strengths and talents.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Please give us any suggestions you have for ways that we can improve the Road Map to Success Program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Please list two or three of the most important things you learned through this program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX D
SPRADLEY'S (1979) UNIVERSAL SEMANTIC RELATIONSHIPS

<table>
<thead>
<tr>
<th></th>
<th>Strict Inclusion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>X is a kind of Y</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Spatial</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Cause-effect</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Rationale</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Location for Action</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Function</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Means-end</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Sequence</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Attribution</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>X is a place in Y, X is a part of Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X is a result of Y, X is a cause of Y</td>
</tr>
<tr>
<td></td>
<td>X is a reason for doing Y</td>
</tr>
<tr>
<td></td>
<td>X is a place for doing Y</td>
</tr>
<tr>
<td></td>
<td>X is used for Y</td>
</tr>
<tr>
<td></td>
<td>X is a way to do Y</td>
</tr>
<tr>
<td></td>
<td>X is a step (stage) in Y</td>
</tr>
<tr>
<td></td>
<td>X is an attribute (characteristic) of Y</td>
</tr>
</tbody>
</table>
### APPENDIX E
DATABASE DICTIONARY

<table>
<thead>
<tr>
<th>Name</th>
<th>Variable Type</th>
<th>Type</th>
<th>Values</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gnd</td>
<td>Gender</td>
<td>Char</td>
<td>M = Male, F = Female</td>
<td>Gender of participant</td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
<td>Num</td>
<td></td>
<td>Age of participant</td>
</tr>
<tr>
<td>Race</td>
<td>Race</td>
<td>Char</td>
<td>A = Asian, B = Black, H = Hispanic, O = Other, W = White</td>
<td>Race of participant</td>
</tr>
<tr>
<td>GPA</td>
<td>GPA</td>
<td>Num</td>
<td></td>
<td>Cumulative GPA of participant after Road Map to Success</td>
</tr>
<tr>
<td>CHpre</td>
<td>Credit Hours</td>
<td>Num</td>
<td></td>
<td>Cumulative Number of Credit Hours earned by participant during Road Map participation</td>
</tr>
<tr>
<td>EdPl</td>
<td>Educational Plan</td>
<td>Char</td>
<td>SA = Strongly Agree, A = Agree, NAD = Neither Agree or Disagree, D = Disagree, SD = Strongly Disagree</td>
<td>Development of Educational Plan from participant</td>
</tr>
<tr>
<td>LG</td>
<td>Life Goals</td>
<td>Char</td>
<td>SA = Strongly Agree, A = Agree, NAD = Neither Agree or Disagree, D = Disagree, SD = Strongly Disagree</td>
<td>Development of Life Goal from participant</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Type</td>
<td>Rating</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------</td>
<td>------</td>
<td>--------</td>
<td>---------------------------------------------------------</td>
</tr>
</tbody>
</table>
| FinPl | Financial Plan                             | Char | SA= Strongly Agree  
A = Agree  
NAD = Neither Agree or Disagree  
D = Disagree  
SD = Strongly Disagree | Development of a Financial Plan from participant |
| ST    | Strengths and Talents                      | Char | SA= Strongly Agree  
A = Agree  
NAD = Neither Agree or Disagree  
D = Disagree  
SD = Strongly Disagree | Identification of Strengths and Talents from participant |
| CHpost| Credit Hours                               | Num  |        | Cumulative Number of Credit Hours completed by participant two terms after Road Map |
| SuccComp| Successful Completion of Road Map to Success | Bin  | Y = Yes  
N = No | Participant completion of the Road Map to Success program |
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Specific Aim</th>
<th>Test of Hypothesis (TOH)</th>
</tr>
</thead>
</table>
| # 1              | a. Does gender relate to the successful completion of the Road Map to Success program? | Ho: $\pi_{\text{male}} = \pi_{\text{female}}$  
Ha: $\pi_{\text{male}} \neq \pi_{\text{female}}$ |
| # 1              | b. Does age relate to the successful completion of the Road Map to Success program? | Ho: $\mu = 0$  
Ha: $\mu \neq 0$ |
| # 2              | c. Does GPA relate to the successful completion of the Road Map to Success program? | Ho: $\mu = 0$  
Ha: $\mu \neq 0$ |
| # 1              | d. Does race relate to the successful completion of the Road Map to Success program? | Ho: $\pi_{\text{succ comp}} = \pi_{\text{not succ}}$  
Ha: $\pi_{\text{succ comp}} \neq \pi_{\text{not succ}}$ |
| # 3              | e. Does the number of credit hours enrolled relate to the successful completion of the Road Map to Success program? | Ho: $\mu = 0$  
Ha: $\mu \neq 0$ |
| # 6              | f. Does the development of an education plan relate to the successful completion of the Road Map to Success program? | Ho: $\pi_{\text{succ comp}} = \pi_{\text{not succ}}$  
Ha: $\pi_{\text{succ comp}} \neq \pi_{\text{not succ}}$ |
| # 4              | g. Does the development of life goals relate to the successful completion of the Road Map to Success program? | Ho: $\pi_{\text{succ comp}} = \pi_{\text{not succ}}$  
Ha: $\pi_{\text{succ comp}} \neq \pi_{\text{not succ}}$ |
| # 5              | h. Does the development of a financial plan relate to the successful completion of the Road Map to Success program? | Ho: $\pi_{\text{succ comp}} = \pi_{\text{not succ}}$  
Ha: $\pi_{\text{succ comp}} \neq \pi_{\text{not succ}}$ |
| # 7  | i. Does the identification of personal strengths and talents relate to the successful completion of the Road Map to Success program? | Ho: \( \pi_{\text{succ comp}} = \pi_{\text{not succ}} \)  
Ha: \( \pi_{\text{succ comp}} \neq \pi_{\text{not succ}} \) |
|------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| # 8  | j. Does successful completion of the Road Map to Success program relate to credit hours after the Road Map program?            | Ho: \( \pi_{\text{succ comp}} = \pi_{\text{not succ}} \)  
Ha: \( \pi_{\text{succ comp}} \neq \pi_{\text{not succ}} \) |
REFERENCES


Association of Community College Trustees, the Center for Community College Student Engagement, the League for Innovation in the Community College, the National Organization for Staff and Organizational Development, Phi Theta Kappa. (2010). *Democracy’s colleges: A call to action*. Washington, DC: American Association of Colleges and Schools.


Burnett, S. (2006, December 18). Student engagement: More counseling, tutoring and better communication with professors are considered key to improving the success of community college students. *Community College Week*, pp. 6-8.


Community College Survey of Student Engagement (CCSSE). (2008). *High expectations and high support*. Austin: University of Texas at Austin, Community College Leadership Program.


Lyons, A.C. (2003). Credit practices and financial education needs of Midwest college students. Champaign, IL: Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign.


Southern Regional Education Board. (2010). *New Data Reveal Percent of College Credits taken by High School Students*. Atlanta: National Center for Education Statistics.


BIOGRAPHICAL SKETCH

Molly McIntire was born in Lancaster, Ohio, and has lived in Central Florida for 36 years. She attended elementary, middle and high school in the Polk County Public School system in Lakeland, Florida. While earning her Bachelor of Science degree in elementary education at the University of Alabama, she completed her internships working with elementary students. This teaching experience confirmed her desire to become an educator. Upon completing her degree in Alabama, she moved back to Lakeland and began teaching sixth grade math and science in the middle school she had attended as a student. She returned to school and pursued a master's degree in education at National-Louis University in Tampa, Florida.

While working on her Master of Education degree, she took an interest in higher education. She began teaching at Lakeland Senior High School to gain experience teaching in secondary education. Working with older students confirmed her interest in higher education. She was offered a position at Valencia Community College in Orlando, Florida and began her career in higher education working in student services as a health science advisor and teaching as an adjunct. After five years working in health sciences advisement, she assumed the role as Director for the Educator Preparation Institute, at Valencia Community College, where she is currently employed.

In the fall of 2007, Molly started her doctoral program at the University of Florida, one week after she married Brae McIntire. In May 2011, she was awarded the Doctor of Education degree in Higher Education Administration from the University of Florida.