THE EFFECT OF SUPPORT SERVICES ON GPA AND TIMELY BACCALAUREATE ATTAINMENT AMONG COMMUNITY COLLEGE TRANSFER STUDENTS AT THE UNIVERSITY OF CALIFORNIA (UC) AT DAVIS

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A Dissertation

by

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DEDICATION

I want to dedicate this dissertation to my three children, Ayah, Tala, and Malek. When I started the EDD program, Malek, my youngest child, was five years old, and Tala was six. At first, they did not understand or accept my disappearance from the house every other Friday night and Saturday all day. When I explained to them about the new program I joined to get my doctorate, Tala told me that she did not want me to be a “doctor;” she only wanted me to be her mother. Gradually, the children understood the importance of the degree to me and became very supportive and showed pride in me. When Malek’s teacher once asked students about the occupations of their parents, very proudly, my son said that his mother was a “doctor,” when I was not.

This dissertation is also dedicated to my mother, my brother Emad, and to my two sisters, Mona and Hanna who have been supportive at all levels despite the distance between us. Their encouragements, support, and love kept me going in difficult times. If it were not for their love and support, I would not have made it to this degree.

This degree is dedicated to my three children: Ayah, Tala, and Malek; my mother, Dalal; my brother Emad Edlbi; my two sisters Mona and Hanna Edlbi, and to my father whose soul never left me. This is also dedicated to all Syrians, and to the country Syria where I came from. Peace for all!
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I am grateful for the support and encouragement that my committee members, program director, friends, and loved ones provided during the process of writing this dissertation. Writing this dissertation was very challenging, and the support I received lifted me up. I would like to acknowledge some people who I feel made special contributions to this dissertation.

First, I would like to thank my committee chair and members for assisting me through the process of writing this dissertation. I thank them all for sharing their time and expertise. My chair, Rosemary Blanchard, provided both the challenge and the support. Nadeen Ruiz provided both the support and the needed feedback to move forward. Jonathan Porteus and Marybeth Buchner provided invaluable assistance with the statistics, helpful input, and support.

A special acknowledgement to my family in Syria: mom, brother, and two sisters. Despite the distance, they have never failed to show their support and love. They are the source of my strength. They empower me to move on. Their hearts have always been and will continue to be my safe place.

Finally, words cannot express my gratitude for my three children, Ayah, Tala, and Malek, and my husband Waleed. Their encouragements and pride in me kept me going. Ayah took the burden of stacking up the dishes in the dishwasher; Malek brought me chocolate and asked, “Is this helping you with your research?” Tala often massaged my shoulders to ease the tensed muscles. They all put up with pizza, Baja Fresh, and in-n-out
dinners. My children, who were used to homemade food, tolerated bought food for over two months. I do know that the last two months were so hard on my children and my husband, but my success was important to them. I love them all.
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of

THE EFFECT OF SUPPORT SERVICES ON GPA AND TIMELY BACCALAUREATE ATTAINMENT AMONG COMMUNITY COLLEGE TRANSFER STUDENTS AT UC DAVIS

by

Maha Edlbi

The purpose of this study was to examine the effect of support services on grade point average (GPA) and timely baccalaureate attainment among community college transfer students. More specifically, the study investigated whether utilizing any of the five-support services (orientation, academic advising, tutoring, and counseling and psychology services) increased students’ success and timely graduation. GPA served as a mark of academic success. Timely graduation was defined as graduation in two or three years after transfer to the University of California at Davis (UC Davis). This study utilized two mixed methods surveys. Correlation, linear regression, and binary logistic regression analyses were used to analyze the five research questions.

Five research questions guided this study. The regression results showed that longer orientation, helpful tutoring, and financial aid could predict higher GPA. The results further showed that Counseling and Psychology Services (CAPS) retained students on campus through graduation. Moreover, the analysis of the qualitative data
showed that good quality of academic advisement and tutoring could increase students’ success.

While this study yielded important findings about how support services could support community college transfer students at four year institutions and increased the likelihood of their timely graduation (two or three after transfer), more research is needed on how to increase the success of community college transfer students at four-year institutions.
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Chapter 1
INTRODUCTION

Postsecondary education has positive effects on individuals’ career and economic achievement. Obtaining a baccalaureate degree helps individuals to improve their social and economic status. Pascarella and Terenzini (1991) described the baccalaureate degree as “a passport to the American middle class” (p. 369). There are two pathways to baccalaureate degree attainment: enrolling in a four-year institution (those students referred to as native students), or enrolling at a community college and then transferring to a four-year institution (those students referred to as transfer students). Studies have suggested that students who start their higher education at a community college do not earn a bachelor’s degree at the same rate as those who start at a four year institution (Alfonso, 2006; Christie, R., & Hutcheson, P., 2003; Falconetti, 2009; Long, B., & Kurlaender, M., 2009; Wang, 2009), which negatively impacts the potential public and private benefit of higher education.

Within the network of higher education institutions, community colleges occupy a unique position. They are the central means of transition between high schools and four-year institutions. According to the American Association of Community Colleges, in 2008, 11.5 million Americans were enrolled in community colleges in the United States (American Association of Community Colleges, 2008). About two-thirds of California’s first-time college students begin their undergraduate studies at a community college (Foundation for California Community Colleges, 2012).
Community colleges have been the primary postsecondary institutions to serve underrepresented populations (Levin, 2001). California community colleges are a cost-effective alternative for students who cannot afford the tuition of the four-year institutions for all four years. In addition to low tuition, there are many factors that make community colleges particularly convenient to students from low socioeconomic status and minority groups including open access and convenient locations.

Most students enrolled in community colleges intend to transfer to four-year institutions. Consequently, an important component of community college education is to provide the opportunity to make that intention a reality. The transfer function is important in maintaining access to higher education. Although community colleges are still committed to their original mission of preparing students for such transfer (Cohen & Brawer, 1996), they have adopted an expanded mission over the course of this century to provide the lower-division coursework for a baccalaureate degree for students who might not be eligible for admissions to four-year institutions, or cannot afford to attend them including disadvantaged and underrepresented students. However, the success of community colleges in satisfying the transfer mission has been debated by scholars (Bailey & Morest, 2004). Previous studies indicate students who transfer to four-year institutions are not well prepared academically (National Center for Education Statistics [NCES], 2003).

Adelman (2006) reported growth in the number of community college students applying to four-year institutions in the past few years. However, only half of the community college students who express their desire to transfer succeed in doing so (U.S.
Department of Education, 2003). Numerous studies have examined community college transfer students in conjunction with their academic performance, baccalaureate attainment, and persistence at four-year institutions (Class & Harrington, 2002; Pascarella & Terenzini, 2005). Research has focused on academic performance of transfer students. It has been found that transfer students experience a dip in their grade point average (GPA) during their first year at a four-year institution. Scholars explained this dip in GPA as a reaction to the transfer to a new institution and called it a transfer shock (Cejda, 1997; Diaz, 1992; Hills, 1965).

The literature indicates that the bachelor’s degree-seeking students who start their education at a two-year institution continue to be at a disadvantage in reaching a bachelor’s degree when compared to native students who start their education at a four-year institution (Pascarella & Terenzini, 2005).

While studies have examined the academic performance and baccalaureate attainments of community college transfer students at a four-year institution (Alfonso, 2006; Class & Harrington, 2002; Falconetti, 2009; Long & Kurlaender, 2009), the effect of transfer centers on transfer rates (Illinois Community College Board, 1996; McGrath & Van Buskirk, 1998), the effect of active collaboration partnership on successfully transferring students (Cameron, 2005; Case, 1999; Kisker, 2007;), and the transition process at the four-year institution (Flaga, 2006; Laanan, 2007; Townsend & Wilson, 2006a), there has been no focus on the effect of support services including orientation, academic advising, psychology and counseling, and financial aid on baccalaureate attainment among community college transfer students.
This study examines the effect of support services on transfer students’ GPA and timely baccalaureate attainment at University of California at Davis (UC Davis). This study uses the terms support services/programs interchangeably because scholars use these terms in research. The present study contributes to the knowledge of the effect of support services on community college transfer students’ baccalaureate attainment by addressing the limitations of the existing research. The findings from this study are important in that they provide insights as to how to improve educational attainment among community college students. Moreover, the findings from this study can be useful in directing greater focus towards institutional policies and programs that support community college students and help them transfer to four-year institutions to reach their goal of obtaining baccalaureate degree.

This chapter begins with the statement of the problem. Then the chapter describes the nature of the study and its purpose, the theoretical framework and definition of terms, scope and delimitations, significance of the study, and finally, the conclusion and the organization of the study.

**Statement of the Problem**

Too many community college transfer students are not attaining a bachelor’s degree. While many students choose to start their higher education in community colleges, studies have suggested that students who started their education in community colleges are less likely to earn a bachelor’s degree than those who started in a four-year institution (Alfonso, 2006). According to the American Association of Community Colleges (2008), only about half of the students who begin their higher education at a
community college earn an Associate in Arts degree or transfer within eight years. Many factors are contributing to this problem. Some of these factors include transfer articulation issues between two-year and four-year institutions as changing transfer requirements on transfer students in addition to the limited space and capacity at four-year institutions (Townsend & Wilson, 2006b).

Students’ lack of success has negative consequences for both the individuals and for society as a whole (Alliance for Excellent Education, 2006; Bernake, 2007; Rogers, 2009). At individual level, a college graduate is more likely to be employed and earn a higher salary than an individual without a college degree. An individual with a higher degree is more marketable and possesses greater career mobility. Moreover, the benefits of higher education are numerous. Individuals with higher degrees have higher median income than those with less education (NCES, 2006). A four-year college graduate earns nearly $1 million more over his/her working life than does a high school graduate, and about $500,000 more than a two-year college graduate (College Board, 2007). Finally, when minority students and students from low socio economic status obtain baccalaureate degree, they increase their own human capital and the overall level of educational attainment in the States.

At the societal level, the outcomes of higher education shape economic returns and determine the quality of life for the entire society. Decreasing personal income levels create a corresponding decline in the nation’s tax base. So, at the public level, higher income correlates to more tax revenues and less dependence on social programs such as welfare and unemployment benefits (Thorstensen, 2004). More than 60% of California
Community college students are from diverse ethnic backgrounds, and more than 55% are female (Foundation for California Community Colleges, 2012). If California wants to strengthen its economic condition, it needs to increase the percentage of minority students who graduate. By 2020 more than $101 billion would be added to California’s economy if students of color graduated at the same rate as their advantaged peers, that if California brought the outcomes of its least successful students up to the levels of its most successful students, the state would bring in hundreds of billions of dollars in added benefits through economic growth, added public revenues, and wage earnings. Low-income and minority students’ lack of success at the four-year institutions is counterproductive to the economic well being of the states since they are the fastest-growing population groups.

As noted earlier, the goal to transfer, held by many community college students, is not always met. Hoachlander, Sikora, Horn, and Carroll (2003) reported on 2001 transfer and baccalaureate degree attainment data from the National Educational Longitudinal study that found that while nearly 40% of community college students indicated their intentions to transfer, only about 29% succeeded in meeting their goal. For those who transferred, only 10.3% attained baccalaureate degrees. Among those who obtained their bachelor’s degree, white students graduated at 12% and were the most successful among their peers in attaining a baccalaureate degree. Percentages were smaller for other racial groups: 7% for Asian Americans, 3% for African Americans, and about 6% for Hispanics. Therefore, out of the 40% of students who entered community colleges with the intent to transfer, about 29% transferred and about 10% attained bachelor’s degrees.
When data are further disaggregated by race, it is obvious that disparities exist (Hoachlander, Sikora, Horn, & Carroll, 2003).

About 73% of California public undergraduates start their higher education at community colleges (Moore, Shulock, Ceja, & Lang, 2007). Glass and Harrington (2002) reported that students who transferred to four-year institutions had high dropout rates and did not attain a bachelor’s degree. Comparing baccalaureate attainment between community college transfer students and students who start their higher education at four-year institutions, studies have shown that baccalaureate attainment rates for transfer students were lower than the baccalaureate attainments for the students who started their postsecondary education at a four-year institution (Alfonso, 2006; Pascarella & Terenzini, 2005).

Improving baccalaureate attainment among community college transfer students is vital to the state of California’s well being (Moore, Shulock, Ceja, & Lang, 2007). The U.S. Census Bureau projects a growth in the minority population at a pace faster than the overall population. Figure 1 represents the increase in population of various groups between 2000 and 2010. It shows that in the past decade the Asian and Hispanic/Latino population have grown at 43% while White increased by almost 6%. Minorities are forming high percentages of states’ population. If their graduation rates remain the same relative to the growth in numbers, the national graduation rate could lag behind. Minorities’ lack of success will have a negative impact on the state’s well being. When the average education level of California’s workforce declines, the state’s per capita
income will decline as well. This translates into decrease in the state’s tax base, which may make it difficult for the state to provide services to its people.

Hecker (2005) reported on U.S. Department of Labor that 80% of the fastest-growing jobs in the United States require a postsecondary education at a minimum. If graduation rates among minority population, the fastest-growing population in the United States, remain low, the national graduation will fall because a growing number of minority students are left behind. Since the level of education in a country is reflected at its economical level, it is vital to increase the baccalaureate attainment among minority students to save the California’s economic condition (Alliance for Excellent Education, 2006).

Some scholars note that it is the responsibility of four-year institutions to facilitate attainment of the baccalaureate degree for all students—transfer and native students.
(Kuh, Kinzie, Whitt, & Associates, 2005). The four-year institutions are accused of not enrolling sufficiently large numbers of students from low socioeconomic backgrounds and underrepresented groups. Neither institution may solve the problem on its own. Both the community colleges and state universities must work together to create and sustain effective transfer practices. Expanding and strengthening support services that efficiently increase the success of the fastest-growing population groups is vital and should be a public priority.

**Nature of the Study**

In an effort to shed light on the importance of support services on transfer students’ baccalaureate attainment, this study examined community college transfer students’ timely degree attainment at UC Davis. Timely is defined in this research as graduating in two or three years after enrollment at UC Davis. The study relies on pre-existing data on students’ graduation and demographics from the years 2007 through 2010. The study used a mixed research method. Because the data required for this investigation could not be obtained through an experimental process, a survey research design was selected (Creswell, 2009). Surveys and questionnaires were used because they provided the researcher with a mechanism to collect data from a sample and then generalize it to a larger population (Creswell, 2009; Fowler, 2002). The survey was a web-based survey instrument that included multiple-choice questions, Likert scaled questions, and open-ended questions. The survey was sent to a random sample of community college transfer students who entered UC Davis in 2007, 2008, 2009, and 2010. Data was analyzed using Statistical Package for the Social Sciences (SPSS).
The purpose of this research was to examine academic success and degree completion among community college transfer students to UC Davis. This study included the following variables related to the subjects: (a) gender, (b) ethnicity, (c) parental educational, (d) language, (e) student’s socioeconomic status (students enrolled in Educational Opportunity Program [EOP] served as a proxy for first generation college students and students from low socio economic status), and (f) GPA earned at the four-year institution (earned GPA at the four-year institution served as indicators associated with social and academic integration and persistence).

**Research Questions**

1. For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and GPA at their four-year institution?

2. For matriculated community college transfer students, is there a relationship between students’ perceptions of the various services and GPA at their four-year institution?

3. For matriculated community college transfer students, which of the five support services and which demographic characteristics (ethnicity, gender, EOP) are the strongest predictors of students’ GPA at their four-year institution?

4. For graduates of a university baccalaureate program, is there a relationship between their use of the various student support services and timely graduation?

5. For graduates of a university baccalaureate program who were community college transfer students, which of the various support services predicted the likelihood of their timely graduation (two or three years).
Purpose of the Study

The purpose of the study was to examine factors in support services associated with GPA (academic success) and timely baccalaureate graduation outcomes for community college transfer students who transfer to UC Davis. It further sought to explore the effect of support services on baccalaureate completion among community college transfer students in a timely manner—that is in two years or three years. There were five primary objectives to this study: The first was to examine if there was a relationship between use of the support services, and students’ perceptions of the various support services and community college transfer students’ GPA (GPA marks the degree of academic success). The second was to find the strongest predictor to students’ GPA at UC Davis. The third objective was to examine if there was a relationship between use of the various services and timely graduation (two or three years). Finally, the last objective was to predict the likelihood of two- and three- year graduation of community college transfer students in relation to students’ use of the five support services.

Analyzing the role of support services (orientation, academic advising, tutoring, psychology and counseling, and financial aid) in aiding community college transfer students to attain a baccalaureate degree is critical as the federal government uses tax dollars to fund these support services which assist community college students in their path to degree completion. Increasing the graduation rates at four-year institutions translates into an increase in tax revenues and a decrease on dependence on public services. Students’ lack of success increases the range of costs the state now bears for
poverty, unemployment, crime, and health. Lower levels of education are associated with lower levels of income (College Board, 2007).

**Theoretical Framework**

The study will rely on organizational socialization theory (Merton, 1957) and retention theory (Tinto, 1987, 2005, 2009). These theories provide the framework for this study because they help explain the potential influence of support services on student’s social and academic integration into the receiving institution.

**Organizational Socialization Theory**

Organizational socialization theory focuses on information new members need to know about the new organization to effectively operate within the organization (Merton, 1957). In educational institutions, student orientations are examples of socialization methods employed by colleges and universities to help students successfully integrate into the new environment (Pascarella, E. T., Terenzini, P. T. & Wolfle, L. M., 1986). Pascarella, Terenzini, and Wolfle (1989) believed that colleges and universities employed student orientation to familiarize students with the new organization and to help them integrate into this new environment. Students need to seek academic, social, and financial support to commit to their own success.

**Retention Theory**

Retention theory explains students’ persistence or withdrawal at a community college or university. According to Tinto (1987), a student’s choice to persist or withdraw from an institution is driven by the student’s academic and social integration. A student’s decision to leave or stay at an institution is factored by the degree to which a student felt
connected to the institution through peer relationship. Furthermore, Tinto hypothesized that when students do not feel fully integrated and lack a sense of belonging to the academic and social life, they are less committed to the institution and more likely leave. The higher the level of academic and social integration is, the stronger the level of commitment to the institution is, resulting in persistence to stay at the institution through degree completion.

Three types of support that promote students’ success and degree completion: (a) financial, (b) social, and (c) academic. Tinto states that higher education and four-year institutions are not accessible to all students because of their high cost. Students from low socioeconomic backgrounds are less likely to attend four-year institutions than their peers from higher socioeconomic backgrounds due to financial constraints. Financial aid provides access to four-year institutions to those who may not have afforded it otherwise (Tinto, 2005). It is not enough to provide access to higher education, but higher education need to construct environment and support students to succeed beyond access, “access without support is not meaningful opportunity” (Tinto, 2005, p. 9). Tinto suggests that the social support can be in a form of counseling that become available to individuals or group of students who might find themselves out of setting in the new institution. He also argued that tutoring is an important academic support in order for students to continue enrolled in the university (Tinto V., 2009). Also Tinto believes that academic advising is important to students’ persistence and graduation. Academic advising should provide clear and consistent information about the requirements to graduate. Academic advisors should further explain to students choices they have to make about their program of
Academic advisors craft the road map to completion, and students need to know it and how to use it to graduate.

Tinto believed that if institutions desire students to be involved in their own learning and committed to the goals of education, then institutions must demonstrate involvement in, and commitment to, students’ learning and goals. “We cannot expect students to do what we are unable or unwilling to do” (Tinto, 1987, p. 188). Support services are aligned with Tinto’s research in that they seek to aid students academically (academic guidance and tutoring) and socially (orientations, counseling, peer tutoring).

**Operational Definitions**

The definitions listed below are used in the study. These definitions were developed to clarify terms used in the research literature regarding community college transfer students, persistence, and educational attainment (degree completion).

*Articulation or Transfer Agreements:* Formal agreements between community colleges and universities identifying the types of transfer credits to facilitate access to baccalaureate attainment.

*Baccalaureate Degree:* A degree requiring a minimum of 180 units. Of these units, 68 units must be earned in upper division courses.

*Community College:* A public regionally accredited institution that awards the associates degree as its highest degree (Cohen & Brawer, 2008)

*Community College Transfer Student:* A student who begins his or her postsecondary education at a community college and then transfers to the four-year institution.
**Degree Completion:** Transfer students who earn a degree after a specified amount of time. In this study, the term referred to the percentage of transfer students in multiple cohorts who earned a baccalaureate degree within two or three years of enrollment at a four-year institution.

**Ethnicity:** A student’s racial identity as defined by the student on the initial application for admission to the four-year institution.

**Grade Point Average (GPA):** The metric used by institutions to describe a student’s academic performance. GPA is calculated by dividing the total number of grade points earned by the total number of credits attempted. A student’s grade point average may range from 0.0 to a 4.0.

**Parental Level of Education Attainment:** Parents’ level of education.

**Student Support Services:** A prescribed set of services (including orientation, academic counseling, tutoring, financial aid, and psychological counseling) at a four-year institution to assist a student’s academic performance.

**Transfer GPA:** A grade point average students earned at their community colleges prior to matriculation at the four-year institution.

**Underrepresented Students:** low-income students, minority students, and first-generation college students.

**Limitations, Scope, and Delimitation**

This study focused on baccalaureate attainment among multiple cohorts of community college transfer students who matriculated at UC Davis. Specifically, the study focuses on the impact of support services on students’ GPA and timely graduation,
that is in two or three years, from the initial transfer to UC Davis. Furthermore, the scope of the study consists of an analysis of student surveys—students who matriculated in 2007, 2008, 2009, and 2010. Collected and analyzed data included responses collected from a web-based survey, analysis of open-ended questions, and pre-existing data on student demographics. This study was limited to UC Davis student population only, and the findings may not be generalized or applied to other four-year institutions. To achieve generalizability, the study needed to have been repeated in a variety of educational settings at four-year institutions.

**Significance of the Study**

Community colleges originated as transfer institutions where students received education for two years and transferred to four-year institutions. Students can complete two years of course work at the community college at a reduced cost. Also, community colleges serve most of the nation’s first-time freshmen, underrepresented students, and students from low socioeconomic backgrounds. Because of this, students who transfer from community colleges to four-year institutions are very diverse. These students vary in age, gender, racial and ethnic background, academic preparation, and employment pattern. The success of community colleges in fulfilling the transfer mission has been debated in the literature. Four-year institutions started to develop support programs for transfer students to enhance transfer students’ retention, persistence, and degree completion.

This study contributes to the body of research on transfer students by examining transfer students’ baccalaureate attainment at a four-year institution. Moreover, the study
investigates whether support services play an important role in baccalaureate attainment among community college transfer students. This study may increase the level of awareness of the need to develop support services at four-year institutions to enhance transfer students’ retention and baccalaureate attainments. Administrators at two-year and four-year institutions can use the findings from this study to select services supported by research to assist the transition of transfer students and attract students from the fastest-growing population groups.

**Conclusion and Organization of the Study**

This study will examine the effect of support services on GPA and baccalaureate attainments among community college transfer students at UC Davis. Students’ success is very important because earning a college degree helps improve both an individual’s personal income and the state of California’s tax revenues. California has a large stake in the success of its students. State taxpayers invest more than $14 billion annually into the state’s higher education system. Billions are spent in federal financial aid and support services to support college students. California’s taxpayers and students deserve a public postsecondary education system that enhances student success. About half of public high school graduates enter community college, yet only about 15% earn a baccalaureate degree in the decade after high school (California Postsecondary Education Commission, 2007).

Helping students to obtain baccalaureate degrees benefits both the state and the students. The state would collect hundreds of billions of dollars in added benefits, such as economic growth and increased public revenues, if the outcomes of low-income and
minority students are brought up to the levels of successful and advantaged students. Student success is measured through outcomes; degree completion is one of the important performance indicators for student success. Support services that assist transfer students to overcome the full spectrum of educational, emotional, social, and financial barriers to success are programs that need expanding or strengthening to ensure transfer students’ successful and timely attainment of baccalaureate degree.

Chapter 2 provides a review of research and literature related to transfer students. It summarizes key points to successful transfer to four-year institutions and highlights the gaps in the current literature. It further addresses the need for the current study. Chapter 3 describes the methodology utilized in this mixed-method research. The study includes two online surveys. Chapter 4 discusses data analysis. Data will be analyzed using correlational, linear regression, and binary analysis through SPSS program. The research questions will guide the interpretations of the findings. And finally, Chapter 5 expands on the data analysis and discusses the findings. The chapter will end with recommendations to increase student success at four-year institutions and suggestions for further research.
Chapter 2

REVIEW OF RELATED LITERATURE

A number of researchers have concluded that community college transfer students attain baccalaureate degrees at lower rates than native students who start their higher education at a four-year institution (Alfonso, 2006; Christie & Hutcheson, 2003; Falconetti, 2009; Long & Kurlaender, 2009; Wang, 2009). Doyle (2006) described the process of attaining a baccalaureate degree for community college transfer students as three stages or three stops to baccalaureate attainment: (a) students have to complete transferable courses at the community college, (b) students have to make a successful transition from two- to four-year colleges, and (c) students need to complete upper-division course work at the four-year institution.

This chapter reviews literature and research on students’ trajectory through the community college system to graduation with a baccalaureate degree. The literature on transfer students’ baccalaureate attainment investigates the (a) effect of transfer centers and transfer program partnerships between two- and four- year colleges on transfer rates, (b) transfer shock and the transition process at four-year institutions, (c) community college students’ baccalaureate attainment, and (d) an examination of five student support services.

Overview of Community Colleges

Cohen and Brawer (2008) define community colleges as “any institution regionally accredited to award the associate in arts or the associate in science as its highest degree” (p. 5). With continuous growth in student body, the mission of the
Community colleges have expanded. Community colleges were established to provide access to higher education for students in their first two years of studies towards their bachelor’s degree. The primary function of the community college evolved in the twentieth century to include academic transfer, vocational and technical education, continuing education, developmental education, and community service (Cohen & Brawer, 2008). Community colleges serve a large and diverse population. They enroll students from varying educational, socioeconomic, racial, gender, and cultural backgrounds. The community college literature suggests that students choose to begin their postsecondary education at community colleges for a variety of reasons such as open access, affordability, flexibility, and convenient location (Cohen & Brawer, 2008; Townsend & Wilson, 2006b).

**The Effect of Transfer Centers on Transfer Rates**

Community colleges are considered the most cost-effective way to pursue bachelor’s degree. Community colleges provide an economical means for students when finances are a constraining issue (Pascarella, 1999). Community colleges in the United States mostly attract the first-generation students who plan to transfer to four-year institutions (Pascarella, 1999). To facilitate a successful transfer process from two- to four-year institutions, an effective transfer system needed to be in place.

Scholars (McGrath & Van Buskirk, 1998; Illinois Community College Board, 1996) have investigated the effectiveness of the transfer centers (centers located at two-year colleges that assist students in the process of transfer to four-year institutions) at community colleges and whether they transferred students successfully to four-year
institutions. Other scholars went beyond transfer centers and focused on articulation agreements or on active collaboration between community colleges and four-year institutions (Cameron, 2005; Case, 1999; Kisker, 2007).

McGrath and Van Buskirk (1998) conducted a qualitative examination of the Summer Scholars Transfer Institute (SSTI). The program was created in 1993 and was sponsored by the National Center for Educational Alliances. The program worked with about 150 first-generation students annually during the summer months. The program—an eleven-day residential program—used a team approach involving Santa Ana College, numerous Los Angeles community colleges, and the University of California at Irvine (UC Irvine). The SSTI’s mission was to facilitate the transfer of underrepresented students to the UC Irvine. The program focused on assisting low-income students, predominantly Latino and African-American from urban community colleges, prepare for admission to the University of California system. Students were required to (a) hold a minimum GPA of 2.0, (b) meet eligibility for freshmen composition, and (c) have taken more than 30 credit hours. The program’s goals were to blend the institutional cultures of the participating colleges, structure strong academic courses, and strengthen the social support system to ensure success. Students had the option to select one of five courses that were three credit hours each. Students met with the instructor one month prior to the start of the academic semester to receive an overview of the course and substantial reading and writing assignments. Students attended class during the day for 11 days and participated in study groups in the evenings.
The authors reported that the number of underrepresented students who transferred from Santa Ana College to UC Irvine doubled from 1993 to 1998. The SSTI program raised Santa Ana College from 44th to 9th statewide for the number of Hispanic transfer students who enrolled in the University of California system. The findings from the study documented the effectiveness of the support program (SSTI) in transferring minority students from two-to four-year institutions and showed how the SSTI program met the challenge of student transfer from community colleges to a four-year college. However, the study did not address success of those students at the four-year institutions; it only provided evidence that the SSTI program was able to successfully help the low-income students enroll in a four-year college. Further research, however, is needed to examine the baccalaureate attainments of supported transfer students.

The Illinois Board of Higher Education (1996) provided 25 community colleges with funding to operate minority transfer centers. Each center had a director responsible for developing transfer or articulation agreements with four-year institutions. It was estimated that these minority centers served more than 25,000 students every year. As a result, from 1990 to 1994, transfer rates for African American students increased by 12.7% and by 38.6% for Hispanic community college students. Again this study examined transfer rates and proved the importance of transfer centers in increasing transfer rates, especially among minority students. Nevertheless, additional research is needed to follow students after their transfer and determine whether these support services had a positive impact on graduation from a 4-year university.
Active Collaboration Between Community Colleges and Universities

Research has also focused on articulation agreements or on active collaboration between community colleges and four-year institutions (Case, 1999; Kisker, 2007). Many scholars have argued that educators must move beyond articulation agreements if they hope to increase transfer rates and baccalaureate attainment. This section focuses on studies that went beyond articulation agreements and examined active collaboration partnerships between two-and four-year institutions.

Case (1999) described existing efforts to promote community college student transfer from the Los Rios Community College District to the University of California, Davis (UC Davis). UC Davis and the Los Rios Community College District funded a transfer opportunity program with nine Northern California community colleges to extend transfer services. Los Rios Community College transfer centers sponsored a College Transfer Day to inform students of transfer issues and discuss admissions and programs with university representatives. Other efforts were made by the University of California system and California Community Colleges to improve the transfer process. Some of these efforts included:

- Articulation System Stimulating Inter-institutional Student Transfer (ASSIST)—a computerized student-transfer information system that could be accessed over the World Wide Web.

- Transfer centers—a physical location of transfer centers in the Los Rios community Colleges District were provided and supported with a counselor/director and administrative support.
Transfer opportunity program—a jointly funded program with nine Northern California community colleges.

Transfer admission agreements—agreements that guaranteed admission to UC Davis to community college students, in their chosen major, one year in advance of their transfer.

Math, Engineering, Science Achievement/California Community College Program (MESA/CCCP) for non-traditional students.

Early academic outreach program (EAOP)—provided six program coordinators to 69 high school and middle school sites, and 2 elementary school sites in 17 school districts to provide guidance and university preparation to students and their families.

Ensuring Transfer Success Counselor Institutes—presented three counselor institutes per year to college counselors and staff that focused on transfer preparation issues.

To promote an active collaboration partnership, the University of California at Davis proposed several initiatives including faculty-to-faculty articulation dialogue and a transfer student recruitment campaign on the web. While these programs seem supportive to transfer students, none of the above mentioned programs supported transfer students at the four-year institution. Furthermore, the report does not provide information on whether the support services were linked to baccalaureate attainment.

Kisker (2007) conducted a qualitative study and utilized the theoretical framework of “network embeddedness” to examine the process involved in creating and maintaining transfer partnerships. Kisker conducted a case study analysis of a transfer partnership between a large public research university in Southern California and nine
community colleges in the surrounding area. Over a course of 12 weeks, the author conducted 13 one-on-one semi-structured interviews with partnership participants including two university administrators, faculty, and both senior and mid-level administrators at three of the nine community colleges. The author found that the effectiveness of community college-university transfer partnerships was impacted by the level of trust and quality of relationships between administrators at two- and four-year institutions. Kisker concluded that (a) faculty at the two-year institutions played an important role in determining course content and course equivalencies, and (b) faculty and administrators at both institutions had to believe in the importance of transfer partnerships in enhancing the transfer function in order to continue the sustainability of the program. While the study focused on the role of faculty at two- and four-year institutions in the transfer process and added a new perspective to the literature of transfer, the researcher did not interview community college transfer students and examined the transfer process from faculty and administrators’ point of view.

The reviewed literature examined the effect of transfer centers on increasing community college transfer rates among low-income and minority students and the role of collaborative partnerships between two- and four-year institutions in transferring students from two- to four-year institutions. However, the literature did not study baccalaureate attainments among those students. Transferring students to four-year institutions at high rates only means that students were able to successfully enroll at the four-year institutions, but the transfer service did not guarantee transfer students’
persistence and success at the four-year institution. Further research is needed to examine transfer students’ success and baccalaureate attainment at four-year institutions.

**Transfer Shock and the Transition Process at Four-Year Institutions**

A number of studies have explored the transition transfer students go through when moving from two- to four-year institutions. Studies showed that transfer students experienced “transfer shock” at four-year colleges (Hills, 1965). Transfer shock occurs when transfer students experience a dip in their GPAs during the first semester after transferring to four-year institutions (Hills, 1965). Driven by the notion of transfer shock, a number of studies have examined the differences in GPAs between transfer and native students (Cejda, 1997; Diaz, 1992; Hills, 1965; Ishitani, 2008; Porter, 1999; Rhine, Milligan, & Nelson, 2000).

Hills (1965) reviewed community college data of transferring students from 1928 through 1964 and found that transfer students experienced a decline in their GPA in their first year of transfer. He thought that transfer students should expect a decline in their GPA of at least .30 to .50 during the first year. Hills further warned that transfer students might take longer to graduate than their native student counterparts. In a meta-analysis of 62 studies, Diaz (1992) found that even though 79% of transfer students experienced transfer shock (a decrease in their GPA), the decrease was not dramatic; the decrease was about one-half of one grade point. Diaz further found that 67% of transfer students recovered from transfer shock within a year. In a more recent study comparing earned GPAs between community college transfer students and native students at a four-year
institution, the researcher found that transfer students earned lower GPAs when compared to their native student counterparts due to transfer shock (Porter, 1999).

Cejda (1997) examined transfer students’ academic performance by discipline. The author studied 100 students who transferred from community colleges to Benedictine College from spring 1991 through fall 1994. The author limited the sample to students who completed 24 semester hours at the community college and were enrolled full-time at Benedictine. The author found that transfer students did experience a decline in GPAs as a whole. However, in certain disciplines, including education, fine arts, humanities, and social science, transfer students experienced an increase in their GPAs. Discrepancies in the research findings about academic performance among community college transfer students. Cejda’s (1997) study was limited to 100 transfer students only, did not address students’ demographic backgrounds, and it was not clear whether those students were minorities, disadvantaged, or from underserved/underrepresented groups. Thus, the results of this study are limited and cannot be generalized to all community college transfer students.

To investigate the departure behavior of transfer students at a four-year institution, Ishitani (2008) utilized a longitudinal study that focused on how entry at different years (freshman, sophomore, and junior) affected transfer student departure or drop out. Ishitani further investigated whether GPA affected persistence behavior for transfer students over time. The author included three cohorts in the study (1999-2001) who matriculated to a four-year comprehensive public university. Ishitani found that higher semester GPAs were positively associated with higher persistence rates (Ishitani,
2008). The study pointed out the importance of GPA to persistence, but it did not investigate whether GPA can be affected by support services. Thus further research examining the effect of support services on transfer students’ GPA is warranted.

Even though the research on transfer shock enriches the line of literature on community college transfer students, the above referenced studies fail to address community college transfer students’ baccalaureate attainment at four-year institutions. Additionally, all of the referenced studies concluded that transfer shock was a temporary phenomenon. They also noted the effect of GPA on persistence. If student supports are available, transfer students may receive academic and social support to ease the transition to four-year institutions. Furthermore, student support services may aid transfer students in obtaining baccalaureate degrees in a timely manner.

**The Transition Process at the Four-Year Institution**

The transfer transition process requires students to persist long enough at the two-year institution to transfer successfully to a four-year institution and to adapt quickly enough to the new environment of the four-year institution to successfully persist and graduate. Thus, the transition to a four-year institution requires that students adapt to the new values and expectations that are embedded in the academic and social systems at the new four-year institution. Some researchers concluded that if transfer students wanted to reach their goal of attaining the baccalaureate degree, they needed to successfully transfer and adapt to the four-year institutions (Cameron, 2005; Flaga, 2006; Laanan, 2007; Townsend & Wilson, 2006a).
Cameron (2005) conducted a mixed-method study to explore the experience of transfer students in a collaborative baccalaureate-nursing program. The author conducted the study with community college transfer students majoring in nursing in Ontario, Canada. These students had participated in a collaborative articulated program and successfully completed two years at a community college before transferring to a Canadian university to complete years three and four in a system that did not support transfer students. The students were in their first year at the four-year institution. The university was a large urban multicultural commuter campus, and the community college partners were located in a more rural monoculture setting. Cameron explored students’ experiences during the transition; he examined if students coming from different community colleges shared common experiences at the university. Data were gathered by a survey—54 students responded to the survey—and 13 volunteer students were selected for in-depth interviews to better understand students’ experiences and perceptions. Cameron grouped the findings into six themes: (a) transition stress (related to new expectations, curriculum, and new living arrangements); (b) geographic relocation (learning new policies, understanding the university culture); (c) academic shock (academic abilities, increased faculty expectations, and increased workload); (d) professional transformation (transform their identities as nurses and adults); (e) social life (involvement in the university life, social clubs, extracurricular activities); and (f) adaptation (development of new skills to navigate the new culture, geography, and institutional policy). Cameron recommended that faculty at two- and four-year institutions need to develop relationships and scholarly exchanges to smooth out
students’ transition to four-year institutions. The author also recommended enhancing transfer orientation programs to alleviate students’ stress associated with the transfer. While the study was rich in terms of revealing the challenges that face transfer students at the four-year institutions, it did not examine transfer students’ baccalaureate attainments at the four-year institution.

Like Cameron, Flaga (2006) reached similar conclusions. Flaga used a qualitative research design with two data collection points to explain the dimensions and nature of the transfer experience and so as to better understand the transition of the community college transfer students. Flaga interviewed 35 community college transfer students during their second semester at Michigan State University (MSU) in January 2001. The students’ stories led to the development of five dimensions of transition: (a) learning resources, (b) connecting, (c) familiarity, (d) negotiating, and (e) integrating.

The first dimension, learning resources, described the need for transfer students to become familiar with the academic, social, and financial resources at the new institution. Some of the information the students needed was related to academics, such as how to get their transfer credits evaluated; other information needs included how to obtain a parking permit or get a meal plan. The second dimension was connecting. Connecting was the process by which students tried to develop relationships with advisors, peers, and faculty members at the four-year institution. When the students developed satisfying relationships, they felt connected and felt part of the community of the four-year institution.
Familiarity was the third dimension, and it developed when the students internalized the information and felt connected. At that point, the students understood the system at the four-year institution, were able to maneuver the system, and were able to direct others. The fourth dimension, negotiating such as informal classroom conversation with peers and faculty, occurred when students were able to adjust their behavior as needed to be successful within the academic, social, and physical environments. Finally, integrating was the change transfer students experienced when they felt that they belonged to the new community.

Flaga (2006) captured the experiences of transfer students at the four-year institution who did not participate in support or transfer programs. Flaga’s study shed light on the importance of student support services to ease transfer students’ transition into four-year colleges, yet further research needs to address baccalaureate attainment of community college transfer students who participated in support programs.

A similar study conducted by Townsend and Wilson (2006a) tried to understand factors affecting the academic and social integration of community college transfer students. Employing a qualitative method of research, the authors interviewed 19 transfer students who transferred to a large research-extensive-university in a suburban setting. A set of 14 questions were asked. Participants were first asked closed-ended questions, followed by an open-ended question that allowed for elaboration on topics such as transfer student support services and transfer orientations. Students compared their academic and social experiences at the four-year institution with their experiences at their community colleges. Townsend and Wilson (2006a) found that students felt that both
academic and social support networks were stronger at their community colleges. Students viewed community college faculty as more accessible and approachable than the university faculty. The authors noted that community college transfer students perceived the community college environment as supportive academically and socially. Transfer students who lacked a similar level of support were less integrated into the four-year institution’s academic and social life.

Laanan (2007) reached the same conclusion when he investigated the experiences and performance of community college transfer students at a research university. Laanan (2007) examined a cohort of 717 students at an urban multicultural university in Southern California. The students transferred from 64 California community colleges during 1994 and 1995. Using the Laanan-Transfer Students’ Questionnaire (L-TSQ), the study employed the concepts of quality of effort, student involvement, and culture shock as guiding theoretical frameworks.

Laanan (2007) found that although students were involved with academic counselors at their two-year institutions, they experienced challenges adjusting academically at the four-year institution. Students needed to learn to navigate the environment at the four-year institution. Laanan also found that students’ feelings of insecurity about the university environment were related to students’ academic adjustment. It seemed important to facilitate students' academic adjustment by reducing students’ apprehension and alleviating feelings of anxiety about the four-year institution. The author further found that students who performed well academically and who had intellectual self-confidence and high self-concept in their intellectual ability experienced
less difficulty adjusting to the four-year institution compared to their counterparts. The study highlighted the experiences of transfer students at a four-year institution, but the transfer students in the study did not receive counseling or support at their four-year institutions, which increased transfer students’ level of apprehension and anxiety about the four-year institution. The study’s focus on a single four-year college also limits the results to that specific institutions and does not allow for generalizability to other student populations. Further research at a range of universities is needed to examine the effectiveness of the social and academic factors provided by support programs on transfer students’ retention and success.

The studies referenced above captured the experiences of transfer students and discussed the challenges and barriers to success that transfer students faced at four-year institutions. The studies further highlighted the role of the academic and social factors in integrating students into the institutions. The findings from these studies are consistent with Merton’s (1957) organizational socialization theory and Tinto’s (1987) retention theory discussed in chapter one. The students in the above mentioned studies however did not receive support services at the four-year institutions. Thus, further research is needed to examine transfer students’ baccalaureate attainment when supported by services offered by the four-year institution.

**Baccalaureate Attainment of Transfer Students at Four-Year Institutions**

Research abounds around the low graduation rates among community college transfer students. Scholars (Alfonso, 2006; Christie & Hutcheson, 2003; Falconetti, 2009; Long & Kurlaender, 2009; Wang, 2009) have examined the impact of attending
community colleges on a bachelor’s degree and found a negative relationship between attending community colleges and baccalaureate attainment.

Controlling for the types of transfer students, Christie and Hutcheson (2003) examined 1,980 full-time traditional students who graduated from high school and matriculated to community colleges in 1982. To compare baccalaureate degree attainment of two and four-year college students, the authors utilized a longitudinal data set (1995) as a source for their data and excluded students who earned fewer than 12 equivalent semester hours of college credit at both two- and four-year institutions (Christie & Hutcheson, 2003). The authors included students with high educational attainment, students under the age of 19 during the senior year of high school, full-time students, and students who aspired to four-year degrees.

The researchers found that starting at two-year institutions reduced the probability of bachelor’s degree attainment by more than 10%. The researchers argue that the negative association of two-year institutions on baccalaureate attainment is not very significant when controlled for student characteristics that “clearly reflect opportunities for increased involvement and commitment” (Christie & Hutcheson, 2003, p. 5). However, controlling for student characteristics that predict opportunities for baccalaureate attainment (full-time traditional students) does not fully represent the population of community college students.

Similar studies showed that students who start their postsecondary education at community colleges attain baccalaureate degrees at low rates. Alfonso (2006) used the National Education Longitudinal Study (NELS) to examine the effect of attending
community colleges on baccalaureate attainment. NELS is a stratified survey, so both schools and students were randomly selected. NELS followed a cohort of 12,144 8th graders in 1988 for a period of 12 years. However, college transcript data were available for only 8,887 students. Students with missing transcript data were excluded from the analysis.

Alfonso (2006) found that those who started their postsecondary education at a community college, including those who had baccalaureate aspirations, were significantly less likely to attain a baccalaureate degree than those who began their postsecondary education at a four-year institution. While this longitudinal study contributes to the literature of transfer, it has its limitations. NELS has an eight-year duration limitation; in other words, NELS allows for an eight-year window of student activity within which to analyze baccalaureate attainment. Because many community college students delay enrollment at community colleges after high school graduation, attend part-time, or lose credits in the process of transfer, the eight-year window used with NELS may not be enough time for community college transfer students to complete a bachelor’s degree.

Using a detailed data set on students aged 17 to 20 years who entered Ohio public colleges and universities in fall 1998, Long and Kurlaender (2009) reached conclusions similar to Alfonso’s (2006) and Christie and Hutcheson’s (2003). Long and Kurlaender (2009) questioned the effectiveness of the transfer function and examined baccalaureate attainment among community college and native students. Tracking student outcomes for nine years, the authors examined the outcomes of community college participants and compared them with the outcomes of the native students. Long and Kurlaender (2009)
found that students who started their higher education at two-year institutions were 14.5% less likely than students who started their higher education at four-year institutions to complete bachelor’s degree within nine years. They further found that 44% of students who started their higher education at two-year institutions dropped out within six years, compared with 34% of students who started at nonselective four-year institutions, and 18% of students who started at selective four-year institutions (Long & Kurlaender, 2008). The drop out rates among students who started at community colleges were consistently higher than their counterparts who started at four-year institutions. Also, the authors found that only 26% of the community college transfer students who aspired to obtain a bachelor’s degree obtained the bachelor’s degree within nine years of starting (Long & Kurlaender, 2009).

Falconetti (2009) reported similar outcomes when she examined baccalaureate attainment among students who participated in 2 plus 2 articulation agreements in Florida. A 2 plus 2 articulation is an agreement between two- and four-year institutions that guarantees participating students can transfer every course they take at their two-year institutions to a four-year institution. It further locks degree requirements and guarantees that requirements do not change once students sign the agreement. The author compared academic success and persistence for 1,738 Florida transfer students and 874 native students at three universities. The participants in this descriptive study were transfer students from Florida’s public community college who held associate in arts (A.A.) degrees and native juniors from Florida Atlantic University (FAU), the University of North Florida (UNF), and the University of West Florida (UWF). The findings from this
study, like the previously reviewed studies in this section, indicated that community college transfer students dropped out at higher rates and graduated at lower rates than native students.

Students in Falconetti’s (2009) study participated in 2 plus 2 articulation agreements and were academically supported during their enrollment at two-year institutions. However, the academic support did not continue at the four-year institutions. Furthermore, the study was limited to Florida students and did not represent students in different states. Further studies need to scrutinize the role and effectiveness of support programs at four-year institutions and provide potential explanations for the baccalaureate attainment gap among transfer students.

Wang’s (2009) findings were not different from other researchers in the area of baccalaureate attainment gap between transfer and native students. Wang used the National Education Longitudinal Study (NELS) of 1988 and Postsecondary Education Transcripts Study (PETS) to examine the unique factors that predicted educational outcomes among community college transfer students. The research used logistic regression models to predict baccalaureate attainment and college persistence among 1992 high school graduates who attended community colleges and transferred to four-year institutions. The likelihood of attaining a bachelor’s degree among transfer students was significantly associated with gender, socioeconomic status (SES), high school curriculum, educational expectation upon entering college, grade point average earned from community colleges, and college involvement (Wang, 2009). Furthermore, the study found that female transfer students were more likely to attain a bachelor’s degree
than their male counterparts. The positive impact of social background and high SES on degree attainment among community college transfer students was not surprising because a previous study had confirmed that impact (Pascarella & Terenzini, 2005). Moreover, Wang found that students who were on academic paths at their high schools and had baccalaureate aspirations in the 12th grade were more likely to attain a bachelor’s degree than those on vocational tracks or with no baccalaureate aspiration. Lastly, Wang found that college involvement had a significant, positive effect on community college transfers’ baccalaureate attainment at four-year institutions (Wang, 2009).

While the study was limited to a specific group of students—the study followed a particular high school group and did not represent all community college transfer students because it excluded those who attended community colleges a few years after high school—it still added to the literature of transfer. The study highlighted characteristics associated with educational success of transfer students and revealed important factors that may predict bachelor’s degree attainment. Wang (2009) concluded that effective educational programs and practices can positively influence students’ educational outcomes and charged both two- and four-year institutions with developing such programs. This study did not however examine bachelor’s degree attainment among transfer students who participated in support programs at four-year institutions, which is needed to investigate the role of support programs on baccalaureate attainment among community college transfer students.

The findings from the referenced studies provided insight into how to improve educational attainment given the growing importance of community colleges as a
pathway to baccalaureate attainment. However, the studies compared baccalaureate attainment between transfer students who did not participate in support services to native students who differed demographically from transfer students. Furthermore, transfer students in the referenced studies did not receive support at the four-year institutions. Due to the diversity of community college students, establishing support programs to support community college students in their baccalaureate attainments is vital. Further research is needed to examine transfer students’ persistence and baccalaureate attainment when they receive support at four-year institutions.

**Relevance of Student Support Services: Situating this Study**

Minority, disadvantaged, and underserved college students lack college-related experience in their families and are often unable to navigate the higher education bureaucracy. They have to make complex academic, social, and cultural transitions when enrolled at higher education institutions (Cameron, 2005; Flaga, 2006; Townsend & Wilson, 2006a). Studies have shown that students’ effort and involvement in higher education are positively related to gains of educational outcomes (Terenzini, 1994). Many research studies indicate the importance of support services on persistence and degree attainment among first-generation college students, minorities, and students from low socioeconomic status (Dukakis, Bellm, Seer, & Lee, 2007; Nunez & Cuccaro-Alamin, 1998; Pike & Kuh, 2005; Terenzini, 1994).

Terenzini (1994) used a cross-sectional, focus group, interview research design to investigate community college transfer students’ involvement and engagement at four-year institutions. The author collected data by interviewing individuals and groups that
varied in size from two to eight students. Students from four higher education institutions participated in this study. All interview sessions were tape-recorded. Seven researchers who conducted the interviews transcribed the tapes. Individual and group analyses of the transcription were conducted. Some of the author’s findings were that academic and social validation of transfer students played an important role in their success. Faculty involvement was another factor. Student orientation programs were very important because they served as an early socialization factor. Including faculty members in the student orientation helped ease students’ transition to the institution, which aligns with Tinto’s (1987) and Merton’s (1957) integration theories. Nunez and Cuccaro-Alamin (1998) reached similar findings when they examined the participation, experiences, persistence, and degree attainment of first-generation college students at two- and four-year institutions. The authors collected data from the 1989-90 Beginning Postsecondary Longitudinal Study (BPS:90/94). The authors found that disadvantaged students had lower levels of academic performance when compared with their counterparts and were more likely to report low levels of integration, 30% compared to 19% respectively. The findings of this study revealed that the disadvantaged students had lower levels of social integration when compared with their counterparts, 17% compared to 29% respectively (Nunez & Cuccaro-Alamin, 1998).

Pike and Kuh (2005) also found that first-generation college students were less engaged and less integrated academically and socially. The authors examined engagement differences at four-year institutions between first- and second-generation college students using Astin’s (1970) input-environment-output (I-E-O) framework. The
authors used a stratified random sample of 3,000 undergraduates from across the nation. The students completed the College Student Experiences Questionnaire (CSEQ). Consequently, the research had 1,127 students after eliminating the non-freshmen students and students with missing data; 39% of the students were first-generation college students, 61% were second-generation college students, and 16% were students from historically underrepresented groups. Pike and Kuh found that first-generation college students did not compare favorably with their peers. They were less engaged and less integrated academically and socially. These students further perceived a lack of support from the colleges. The authors concluded that the lack of academic and social integration among first-generation college students was because students did not know how to engage on campus. The study confirmed the importance of support services in the life of first-generation college students.

Rhine, Milligan, and Nilson (2000) concurred with Nunez and Cuccaro-Alamin (1998) and recognized the social and academic difficulties community college transfer students face when transferring to four-year institutions. They further commented that failure of institutions to support their transfer students might result in students’ failure to complete a bachelor’s degree in a timely manner. Cejda, Kaylor, and Rewey (1998) reported that transfer students failed in the first semester of enrolling at four-year institutions at a rate between 18% to 22% due to lack of support.

Dukakis et al. (2007) explored efforts in California to support students from lower-socioeconomic statuses, specifically students enrolled in Early Care and Education (ECE) teacher preparation programs. The authors in the report presented an illustrative
sampling of current support service models in California grouping support services into five categories including academic advising, psychology and counseling and financial aid. Academic advisers helped students navigate the system and guided them through their course work. Psychology and counseling services helped students overcome personal and mental challenges that might impede students’ academic success, and financial aid offered students aid in forms of loans, grants, work-study, or scholarships. Dukakis et al. (2007) concluded the report by asserting the importance of support services and their effects on students in general, and on low-socioeconomic students in particular, on degree attainment.

The above referenced studies confirmed the positive role support services play in engaging students socially and academically. Due to the need to evaluate the types of support services that are most effective and have the most impact on students’ baccalaureate attainment, future research needs to examine the relationship among support services, persistence, and baccalaureate attainment and determine whether use of particular support service interventions increases the chances of transfer students to complete baccalaureate degrees in a timely manner—that is, completion in two years as compared to three or four.

**Review of Five Support Services**

Researchers have examined elements of student support services and their impact on student retention. Tinto (1999) indicated that 75% of students who drop out of college do so due to factors other than low academic preparation. “Student success does not arise by chance. It is the result of an intentional, structured, and proactive set of strategies that
are coherent and systematic in nature and carefully aligned to the same goal” (Tinto, 2000, p. 10). This section reviews five support services: orientation and transition programs (Gass, 1990; Hollins, 2009; Perigo & Upcraft, 1989), academic advising (Bahr, 2008; Metzner, 1989; Mohr, Eiche, & Sedlacek, 1998), tutoring (Hendriksen, Yang, Love, & Hall, 2005; Reinheimer & Mackenzie, 2011), psychology and counseling (Turner & Berry, 2000; Wilson & Mason, 1997), and financial aid (Desjardins, Ahlburg, & McCall, 2002; Dowd, Cheslock, & Melguizo, 2008; Stratton, O’Toole, & Wetzel, 2007).

**Orientations and Transition Programs**

Orientation and transition programs are designed to help students make an easy transition from their previous academic environment into the new institution’s environment (Perigo & Upcraft, 1989). The goals may include academic preparation, increased awareness of peer students, and assistance with personal adjustment (Perigo, & Upcraft, 1989). Few research studies however have found positive relationships between student orientations and student retention (Gass, 1990; Hollins, 2009).

Gass (1990) evaluated the longitudinal effects of a university retention program using three groups of incoming undergraduate students. The first group was comprised of 32 students who participated in a five-day, adventure-based, orientation program; the second group was composed of 62 students who participated in a discussion-oriented program; the last group was the control group of 62 students who did not participate in either program. Gass studied the three groups over three and a half years to evaluate the effects of these orientation/transition programs on student retention. The activities for the
first group included a range of outdoor physical activities that reinforced social goals related to student retention. The second group participated in a four-day program in a residential environment. The activities for this group included small-group activities and question-and-answer sessions. The third group did not participate in either program but participated in the required two-day program. The findings from this study revealed that retention rates for the first group were 15% higher than for the second group, and 25% higher than the third (focus) group for the first 12 months (Gass, 1990). The findings from this study align with Merton’s (1957) organizational socialization theory and Tinto’s (1987) retention theory. It seems that the more engaged and involved the students are, the more they will persist and graduate.

Like Gass, Hollins (2009) believed that orientation had a positive effect on student retention. Over the period of one semester, Hollins (2009) examined the impact of Student Orientation, Advising, and Registration (SOAR); group advising sessions; and SDV 100 orientation on student success at J. Sargeant Reynolds Community College (JSRCC). The SOAR program is a traditional orientation for new students that provides a general welcome to college—an opportunity to meet new students, an overview of student services, and class recommendation. JSECC also offers group-advising sessions, which are shorter than orientation, and provide students with an alternative to SOAR. SDV 100 is a one-credit orientation course that assists students with their transition into the institution.

Hollins (2009) examined 143 SOAR participants and 531 group-advising participants. More than 40% of the participants were minorities. About 282 students
participated in multiple orientation programs. Hollins found that students who participated in a combination of two interventions, either SOAR and SDV 100 or group advising and SDV 100, had higher GPA and retention rates than students who participated in a single orientation only. In conclusion, the researcher recommended that institutions could increase students’ GPA and retention rates by offering multiple orientation interventions, as these interventions serve to ease the transition process among new students and familiarize them with programs and services available to them. Furthermore, these orientations help students socialize and integrate into campus life (Hollins, 2009).

The referenced studies examined the impact of orientations and transition programs on student retention and persistence. Even though graduation was not examined in these studies, the authors anticipated student graduation because persistence leads to graduation. However, research has not examined the relationship between orientations and degree attainment. Future research needs to examine the effect of orientation on degree attainment.

**Academic Advising**

Students perform best when academic expectations are clear and consistent. These clear and consistent expectations are frequently expressed through academic advising. Advisors make it clear to students what expectations and requirements are needed for successful completion of both courses and programs of study (Tinto, 2000). Academic advising, especially high quality advising, increases retention and success among college students (Bahr, 2008; Metzner, 1989; Mohr, Eiche, & Sedlacek, 1998).
Bahr (2008) examined if academic advising cools out underprepared students hindering goal attainment, because academic counselors perceive these goals as overambitious and unattainable. Using two cohorts of first-time college freshmen, Bahr drew upon data from 107 of California’s 112 community colleges to analyze two separate outcomes: successful remediation in math and transfer to a four-year institution. Bahr observed each cohort for six years and found that academic advising seemed to increase students’ chances of success and did not cool out goal attainment, especially for the underprepared students who had academic deficiencies. However, Bahr found that less than one-third of the sample achieved the stated goal, remediation in math or transfer (Bahr, 2008).

Studying academic advising in depth, Metzner (1989) examined the effects of the perceived quality of academic advising on student attrition. Metzner studied the role of quality advising for 1,033 freshmen at a public university. Metzner argued that academic advising was vital for freshmen because it connected students’ goals with institutional resources. She further assumed that because academic advising was one of the most used services among students, improving the quality of advising might affect a large proportion of the student body and increase their retention. The findings from this study suggested that high-quality advising was positively related to greater retention; low-quality advising was related to attrition. However, low-quality advising was associated with less attrition when compared to no advisement (Metzner, 1989).

Freshmen were not the only population impacted by academic advising. Mohr, Eich, and Sedlacek (1998) found that dissatisfaction with academic advising caused
seniors to drop out of the institution. Mohr et al. identified reasons for disenrollment by non-returning seniors at a large Eastern public university. The ethnically and racially diverse participants were enrolled in the spring semester of 1996 and had earned at least 86 units by the end of spring 1996. Forty-two of the participants did not return to the university in the fall and did not complete their degrees; 48 of the participants returned one semester later. None of the non-returning students had been dismissed for academic reasons. The authors interviewed the participants by telephone; the 48 returning seniors served as a comparison group. The findings from the study revealed that senior attrition was best predicted by dissatisfaction with academic guidance, access to school-related information, quality of education, and feeling a “lack of belonging” at the institution. The authors further found that the quality of academic advising was predictive of senior attrition (Mohr, Eiche, & Sedlacek, 1998).

The referenced studies shed light on the importance of academic advising to students, especially high quality advising. Advisors play important roles in students’ lives because they both guide students academically and help to integrate students into the institution. The impact of advising on degree attainment, however, has not been examined and further research in this area is merited.

**Tutoring**

Tutoring is a support service normally offered to all college and university students free of charge. Tutoring services may include one-on-one, walk-ins, or study groups (Hendriksen et al., 2005; Reinheimer & Mackenzie, 2011).
Hendriksen et al. (2005) assessed the effectiveness of learning center services at a community college. The authors examined three goals of the tutoring service: (a) helping students meet the demands of their rigorous coursework; (b) helping students succeed and graduate; and (c) helping students develop self-awareness, self-direction, and self-confidence. The authors measured the outcomes of these goals by (a) examining whether students passed their tutored courses at the same rate as non-tutored students, (b) investigating whether students re-enrolled at the same rate as non-tutored students, and (c) collecting self-reports from students about their satisfaction with the service and students’ need to demonstrate independent application of learning strategies.

To track students’ performance as well as their perceptions, Hendriksen et al. (2005) utilized a mixed methods approach to assess the impact of tutoring on student learning and success. Hendriksen et al. compared the final grades earned in the tutored courses with 6,879 non-tutored students who were enrolled in the same course sections for the fall 2003. For the first objective, Hendriksen et al. found that tutored students earned an average grade of 2.78 in their tutored course, while the non-tutored students averaged 2.64. Seventy-five-percent of tutored students passed their tutored courses with a grade of C- or better and 88% completed their tutored courses, while 71% of non-tutored students earned a grade of C- and 86% completed their courses. To determine success toward goal, the authors looked at retention from the fall 2003 to spring 2004 semesters and found that 82% of tutored students re-enrolled as compared to an institutional average of 70%.
Hendriksen et al. (2005) utilized a qualitative approach to determine if tutoring helped students develop self-awareness, self-direction, and self-confidence. Tutored students reported improvement in GPA because of tutoring, 96% thought tutoring sessions were helpful, and 99% would recommend the tutoring service to others. Tutoring services played a role in integrating students socially because tutoring, whether it was one-on-one or in small groups, provides personal interaction and supports students in areas they might need (Tinto, 1999).

Reinheimer and Mackenzie (2011) reached similar conclusions when they investigated whether tutoring might improve the retention rates of undeclared college students. Undeclared students were those who did not make educational or vocational decisions upon entering college. Reinheimer and Mackenzie examined retention rates between undeclared students who received tutoring and undeclared students who did not receive tutoring. Students were enrolled at a mid-sized public university in Pennsylvania in the fall semester of 2004. Reinheimer and Mackenzie tracked 207 undeclared students for four cohort years, 2004 through 2008. Of 207 students, about 77 students (37%) received tutoring. During the study period, 57 students graduated, 85 withdrew from college, and 65 were still enrolled.

The findings from this study reinforce findings from Hindriksen et al. (2005). Tutoring had a positive impact on undeclared students’ persistence, retention, and degree attainment by enhancing the undeclared students’ chances of becoming more academically and socially integrated. This again aligns with Tinto’s (1987) retention theory. However, the Reinheimer and Mackenzie’s (2011) study was restricted in
application to undeclared students at that public university in Pennsylvania. Further research needs to investigate the impact of tutoring on students other than undeclared.

**Counseling and Psychology**

Students who are at risk of dropping out of college often have personal and psychological challenges. Counseling may assist students with such problems and students may seek counseling for many reasons: personal problems, social isolation, or lack of self-acceptance (Gallassi & Gallassi, 1973). Research related to the area of counseling has shown that students who make use of counseling services persist at higher rates when compared to those who do not use the services (Turner & Berry, 2000; Wilson & Mason, 1997).

Turner and Berry (2000) utilized a longitudinal study over a period of six years to examine the role of counseling center services on student retention at Western State University. Turner and Berry examined 2,365 students and found that about 45% of students thought about dropping out from the university because of personal problems. Furthermore, about 70% of students who sought help at the counseling center reported that their personal problems affected their academic grades and performance. More than 60% of students who received counseling reported that counseling had helped them to maintain or improve their academic performance and 44% reported that counseling helped them persist. When Turner and Berry examined the annual retention rates over five years, they found that students who received counseling had higher retention rates (85.2%) when compared to the general student population (73.8%) (Turner & Berry, 2000).
To investigate the impact of receiving counseling on student retention, Wilson and Mason (1997) examined the relationship between the number of counseling sessions attended and student persistence in the course of a year at Iowa State University. Wilson and Mason examined the retention rates of 562 students who requested counseling over that one-year period. The authors examined the data after a two-year interval to determine retention. The findings from the study showed that students who received counseling had 14% higher retention rates (either persisted or graduated) than the students who scheduled counseling appointments but did not follow through.

Wilson and Mason (1997) further conducted a probit analysis on the data. Probit analyses yield the familiar linear regression equation \( y = a + bx \), where \( y \) is the probability of students being retained and \( x \) is the base ten log of sessions. The findings of this analysis revealed that larger incremental gains of student retention occurred after the first six counseling sessions; adding additional sessions, however, had little impact in increasing persistence (Wilson & Mason, 1997).

The referenced studies found a positive relationship between the use of counseling services and student retention; the relationship of counseling services to baccalaureate attainment was not addressed. Future research needs to examine the effect of counseling services on students’ baccalaureate attainment.

**Financial Aid**

Underrepresented students tend to be disproportionately from low socioeconomic backgrounds. These students have difficulties paying for their tuition, books, food, and other necessities. In the past 50 years, the states and federal government have developed a
complex financing system for higher education. There are numerous components to the financing system including direct subsidies for public colleges and universities and financial aid for students. Further discounts are available to students through grants, scholarships, and loans (Desjardins et al., 2002; Dowd, 2004; Stratton et al., 2007).

Dowd (2004) utilized the Beginning Postsecondary Students (BPS) survey and analyzed BPS90/94, which has a National Postsecondary Student Aid Study (NPSAS) base year of 1989-1990 and a follow-up of student outcomes in the spring of 1994, to investigate the effect of financial aid on students’ persistence and bachelor’s degree attainment. The author found that financial aid and loans had a positive effect on persistence, but not on baccalaureate attainment.

Stratton et al. (2007) also utilized the BPS-90 survey and analyzed 1990/94 to distinguish between long-term dropout and short-term stop out behavior. The authors tested whether there were statistical differences between the factors associated with dropout behavior and stop out behavior. The data they used (BPS-90) was developed by the National Center for Education Statistics (NCES). This survey interviewed students who attended a postsecondary institution for the first time in the 1989-90 academic years. Stratton et al. limited their sample to the students who were re-interviewed in 1994 to generate a five-year longitudinal data set. First-time college students pursuing academic degrees were the focus of the study. Findings from this study revealed that students who received grants, work-study (a program that provided jobs to students with financial needs), and loan aids during their first year had the lowest probability of dropping out compared to those who did not receive any financial aid. Students who received grants
had the highest probability of continuous enrollment at their higher education institutions. The findings suggest that strong support for financial aid and work-study translates into students’ persistence towards a degree attainment (Stratton et al., 2007).

DesJardins et al. (2002) applied an event history model to 2,373 students who matriculated to the University of Minnesota-Twin Cities campus as freshmen in the fall of 1991. Event models are designed to study longitudinal events. To examined the impact of financial aid on students’ drop out or stop out from the university, the authors utilized institutional data collected from an internal database over six academic years and one term as well as information from the Student Profile Questionnaire. The findings from this study revealed that, in general, receiving financial aid reduced students’ “stop out.” The authors found a negative correlation (-0.22) between financial aid and students “stop out.” Thus financial aid indirectly improved graduation chances by reducing the stop out rates. Even though financial aid in this study did not seem to increase graduation, it indirectly promoted degree attainment by reducing student stop out (Desjardins et al., 2002).

The referenced studies indicate the positive relationship between financial aid and persistence. The researchers did not examine the relation between financial aid and graduation but anticipated an increase in graduation among students who used financial aid. To investigate the effect of financial aid on graduation, future research addressing the impact of financial aid on graduation is warranted. Throughout the examination of the role of support services, the authors found a positive relationship between support services variables and student retention.
Summary

The literature that is related to transfer students from two- year to four-year institutions examined the effect of transfer centers on transfer rates (Illinois Community College Board, 1996; McGrath & Van Buskirk, 1998), the effect of active collaboration partnership on successfully transferring students to four-year institutions (Cameron, 2005; Case, 1999; Kisker, 2007), the transition process at the four year institution (Flaga, 2006; Laanan, 2007; Townsend & Wilson, 2006b), the academic performance and baccalaureate attainments of community college transfer students at four-year institutions (Alfonso, 2006; Falconetti, 2009; Long & Kurlaender, 2009), and the important role support services play on student retention (Bahr, 2008; Desjardins et al., 2002; Dowd et al., 2008; Gass, 1990; Hendriksen et al., 2005; Hollins, 2009; Metzner, 1989; Mohr et al., 1998; Perigo & Upcraft, 1989; Reinheimer & Mackenzie, 2011; Stratton et al., 2007; Turner & Berry, 2000; Wilson & Mason, 1997). Moreover, the referenced studies about support services discussed one support service at a time and its relationship to persistence. Researchers did not, however, examine baccalaureate attainment among students who use more than two support programs at a four-year institution, nor did they examine configuration of support services that might affect timely baccalaureate attainment among community college transfer students.

Key findings from the literature review included: (a) transfer centers transferred community college students to four-year institutions at high rates, (b) transfer students experienced “transfer shock” and difficulties adjusting to the new environment, (c) transfer students graduated at lower rates from four-year colleges when compared to their
native counterparts, (d) scholars established the need for support services to help college students integrate and socialize into campus life by finding a positive relationship between support services (orientation, academic advising, tutoring, counseling and financial aid) and student retention. Based on the existing research on transfer students, there is a need to examine the role of support programs in supporting community college transfer students (who tend to be minorities and come from low socioeconomic backgrounds) at the four-year institution, in obtaining baccalaureate degree in a timely manner (two- or three- years).

This study advances the literature on social and academic integration and baccalaureate attainment among community college transfer students at UC Davis in fall 2007-2010. The purpose of the study was to examine persistence and degree completion of community college transfer students at UC Davis and to determine whether use of particular support service interventions (orientation, academic advising, tutoring, counseling, and financial aid) increased the chances of transfer students to complete baccalaureate degree in a timely manner—that is, completion in two or three years. The findings from this study may assist academic and student affairs professionals with developing support programs or enhancing existing support programs to improve retention and timely baccalaureate attainment among low-income and minority students.
Chapter 3

METHODOLOGY

Introduction

The purpose of this study was to examine GPA (selected academic and social integration indicator) and degree completion of community college transfer students at UC Davis and to determine whether the use of support service interventions was related to students’ GPA. The study further examined the strongest predictor of transfer students’ GPA as well as the probability that transfer students would complete baccalaureate degrees in a timely manner, that is two or three years. More specifically, the study examined five support services offered by UC Davis to determine their relationship to, if any, transfer students’ GPA at UC Davis and two or three year graduation. The target services included (a) orientations, (b) academic advising, (c) tutoring, (d) counseling and psychology services (CAPS), and (e) financial aid. This chapter contains the research questions; context, setting, and sample; research design; instrumentation and materials; data collection and data analysis; and finally, measures taken for ethical protection of participants.

Research Questions

The conceptual framework of the study, data collection, and data analysis were based on five research questions:

1. For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and GPA at their four-year institution?
2. For matriculated community college transfer students, is there a relationship between students’ perceptions of the various services and GPA at their four-year institution?

3. For matriculated community college transfer students, which of the five support services and which demographic characteristics (ethnicity, gender, EOP) are the strongest predictors of students’ GPA at their four-year institution?

4. For graduates of a university baccalaureate program, is there a relationship between their use of the various student support services and timely graduation?

5. For graduates of a university baccalaureate program who were community college transfer students, which of the various support services predicted the likelihood of their timely graduation (two or three years)?

**Context and Setting**

The UC Davis campus was established in 1905 as the university farm school of the University of California system in concert with UC Berkeley. In 1959, UC Davis was established as a separate UC campus. University units—including the School of Veterinary Medicine, the College of Letters and Science, the College of Engineering, the Medical School, and the Muir Institute of Environmental Sciences—were established in 1946, 1951, 1962, 1965, and 1998 respectively. Today, UC Davis is a comprehensive research university. Its academic offerings range from those mentioned above to colleges and institutions in humanities, computer science, social sciences, extensive biological sciences, law, and other disciplines (The Washington Advisory Group, 2010).

UC Davis’s location in the Sacramento Valley makes it an important contributor to the well being of the entire state of California, and the Sacramento region specifically.
UC Davis attracts students, researchers, and faculty because of its accomplishments in the life sciences, physical sciences, engineering, humanities, and social sciences (The Washington Advisory Group, 2010).

UC Davis enrolled 24,737 undergraduate students in the fall of 2010. Of these enrolled students, 2,219 were community college transfer students. Prior to fall enrollment, transfer students must have completed 60 semester or 90 quarter hours of transferable units. The participants in this study were all community college transfer students.

Community college transfer student population at UC Davis is diverse both ethnically and socio-economically. Asian/Pacific Islanders represent the largest racial/ethnic group (40%), followed by white (35%), Hispanic (15%), African American/Black (3%), American Indian/Alaskan Native (1%), and race/ethnicity unknown (5%). During 2008-09, 31% of UC Davis undergraduates were designated low income by the Federal government and were awarded federal Pell Grants (UC Davis Facts, 2010). Figure 1 presents the population of community college transfer students at UC Davis.
Transfer applicants are students who enroll at a two-year institution after graduating from high school. UC Davis grants priority over other transfer students to junior-level transfer students who have 90 quarter (60 semester) units of transferable coursework and possess a minimum grade point average of 2.4 (UC Davis, 2010). Full-time undergraduate transfer students are expected to complete an average of 15 units per quarter (three quarters a year) for two years to meet the 180-unit graduation requirement (UC Davis, 2010).

**Overview of Student Support Services**

The support services at UC Davis offer the same academic assistance to all UC Davis students. The services offered to students include orientation, workshops, tutoring
(drop-in and small group tutoring), academic advising, counseling and psychological services (CAPS), and financial aid (Student Academic Success Center, 2011).

**Orientation**

UC Davis offers orientation both for native students (those who matriculate from high school) and transfer students (those who transfer from two-year colleges). Transfer students have the option of attending a one-day orientation or a brief orientation at the beginning of the fall quarter. The one-day transfer orientation provides students with the following:

- Extensive academic advising and assistance registering for Fall Quarter classes.
- Information about the academic environment and undergraduate research.
- Information on how to get involved in campus activities.
- Introductions and meetings with UC Davis faculty, staff, and administrators.
- Discussions on important college issues for new students.
- Information about campus life from current UC Davis students.
- Meetings with other new students and friend-making activities.
- Answers to questions about coming to campus.

**Workshops and Tutoring**

Student Academic Success Services (SASC) offers workshops to all UC Davis students. The workshops are free and carry no credit. The workshops offered by SASC include study skills, writing and English as a Second Language, science skills, and mathematics.
Tutoring is provided free of charge to students enrolled in biology, chemistry, math, physics, and writing. Student Academic Success Services offer drop-in tutoring, small group tutoring, and appointments with specialists (Student Academic Success Center, 2011).

**Academic Advising**

Academic advisors help students plan their academic path and ensure students meet all the requirements needed to receive their degree. Undergraduate Education and Advising (UEA) at UC Davis offers both group and one-on-one advising with students. Students can access a wealth of advising information on the web as well as on the UC Davis general catalog.

**Counseling and Psychological Services (CAPS)**

Counseling and Psychological Services (CAPS) provides a variety of services to students including free, confidential, short-term individual therapy and/or weekly group therapy sessions to all UC Davis students. Career counseling is also offered for both groups and individuals. Career assessment services help students to explore more about who they are and where they might find the greatest career satisfaction.

**Financial Aid**

A number of financial aid and scholarship resources are available to help with the cost of attending UC Davis. Some of the financial resources include state or federal grants and loans. More than 70% of UC Davis’ undergraduate students received some form of financial aid, including scholarships (UC Davis, 2011).
Research Design

Research questions dictate the appropriate research design (Creswell, 2009). In this study, the research questions examined the relationship between the use of five support services (orientation, academic advising, tutoring, CAPS, and financial aid), students’ demographic characteristics (ethnicity, gender, EOP), and community college transfer students’ GPA. The second research question sought to examine the relationship between students’ perception of how helpful the services were and their GPA at the receiving institution. The third research question tried to find the support services that most strongly predict community college transfer students’ GPA. The fourth research question sought to examine the relationship between students’ use of the services and timely graduation. Finally, the last research question examined the relationship between the five support services and probability of students’ timely graduation (two or three years). These research questions required the collection and analysis of data on community college transfer students’ use of the five support services, and their perception of how helpful the services were to them. Data on the use of the support services and students’ perception of how helpful the services were obtained through a survey research design method.

This study, a mixed methods design, included both Likert scale and open-ended questions. The mixed methods approach helped to triangulate the data (Creswell, 2009). This two-survey design was appropriate because this study required knowledge of both measurable data (quantitative) and students’ perceptions and beliefs (qualitative) (Creswell, 2009). Asking participants questions and analyzing their answers is a common
method of collecting data. Survey questionnaires are frequently used because they provide numerical descriptions of opinions of a population (Creswell, 2009). Babbie (2002) suggests that survey research is the best method to utilize when the researcher is interested in collecting data for “describing a population that is too large to observe directly” (Babbie, 2002, p. 240). Surveys are used in social science research and provide a tool for the researcher to collect data from a sample that can be analyzed and generalized to a population (Creswell, 2009). The mixed methods design through a survey allowed for more insights from the amount of data. Creswell further believed that when both qualitative and quantitative approaches were combined, it facilitated a wider understanding and obtained more insights into the research questions.

This study surveyed a random sample of 3,781 community college transfer students who transferred to UC Davis in 2007, 2008, 2009, and 2010 about their use of five university support services. The study further utilized a quantitative and a qualitative method, which provided a foundation for broad generalizable outcomes (Barnes et al., 2005).

Two surveys were used in data collection: one survey was sent to matriculated community college students at UC Davis, the second survey was sent to community college transfer students who had graduated from UC Davis. Each survey included multiple-choice questions, Likert-scaled questions, and four to five open-ended questions (Appendices A and B). Participants received the survey via e-mail. The Institutional Analysis Unit (IAU) of UC Davis administered the web-based survey. The IAU sent the questionnaire to a random sample of its existing list of community college transfer
students using the e-mail addresses they have registered with UC Davis. SPSS was used to randomly select the participants from the population. The IAU provided the disaggregated responses to the researcher without any personally identifying information. Student demographic data were obtained from UC Davis’s existing database.

**Instrumentation and Materials**

In order to collect data on the effect of student support services on student’s GPA (selected academic and social integration indicator) and baccalaureate attainment, a survey instrument was used. This study utilized two types of data: quantitative and qualitative. The quantitative methodologies included correlations, linear regressions, and binary logistic regression analysis. The qualitative methodology focused on triangulating the quantitative findings.

**Quantitative Instrumentation**

The surveys were designed to measure the relationship between the independent variables—support services (orientation, academic advising, tutoring, CAPS, and financial aid)—and the dependent variables, GPA (degree of academic success indicator), and timely baccalaureate attainment. The survey questionnaire examined the relationship among various support services and GPA and timely attainment of the baccalaureate degree. The survey analysis examined whether using particular support service interventions increased the chances of transfer students completing their baccalaureate degree in a timely manner—that is, completion in two or three years. The survey questionnaire for matriculated students was comprised of 23 multiple choice and Likert-scaled and four open ended questions that provided data on relationships among variables
(See Appendix A). The survey questionnaire for alumni community college transfer students was comprised of 29 multiple choice and Likert-scaled questions and five open ended questions (See Appendix B).

The IAU at UC Davis provided the researcher with data student demographic characteristics including gender, ethnicity, UC Davis classification, major, parental education, Educational Opportunity Program (EOP), and Transfer Agreement Guarantee (TAG) status. Students’ GPA at UC Davis was also provided by the IAU. The surveys recorded the number of times students used the support services provided at UC Davis in the areas of orientation, academic advising, tutoring, counseling, and financial aid. Furthermore, the survey examined students’ perceptions of how helpful these services were to their academic lives. The responses to the Likert questions were based on four and five-point scales. The choices in the scale that measured the usefulness of these services included strongly agree, agree, disagree, and strongly disagree. The choices in the scale that rated the frequency of service use ranged from zero to seven or more visits (0, 1-2, 3-4, 5-6, to 7+).

Correlation, linear regression, and binary logistic regression analyses were administered using Statistical Package for Social Science (SPSS), Graduate Student Version for Mac, Release19, to analyze the survey responses. Correlation analysis was used to determine if there were relationships between the five support services and students’ GPA. Regression analysis determined how each independent variable related to the dependent variables and was used to make predictions about the future GPA. In this study GPA served to mark the degree of academic success. Binary logistic regression was
administered to predict timely graduation for community college transfer students in lights of the five support services (Green & Salkind, 2008). Table 1 lists the independent and dependent variables.

Table 1.

*Demographic, Independent, and Dependent Variables*

<table>
<thead>
<tr>
<th>Type of Variable</th>
<th>Variables</th>
<th>Descriptions</th>
</tr>
</thead>
</table>
| Demographic Variables    | Gender             | Male = 1  
                        | Female = 0                                                                  |
|                          | Ethnicity          | Other = 0  
                        | Hispanic = 1  
                        | Asian = 2  
                        | White = 3                                                                 |
|                          | Parents’ Educational Level | Did not attend college = 0  
                        | Attended College = 1                                                       |
| Independent Variable     | Orientation        | Did not attend orientation = 0  
                        | Attended orientation = 1                                                   |
|                          | Type of Orientation| Brief Orientation = 0  
<pre><code>                    | One-day orientation = 1                                                    |
</code></pre>
<p>|                          | Academic Advising  | The number of times a student used academic advising in one academic year (0, 1-2, 3-4, 5-6, 7+) |
|                          | Tutoring           | The number of times a student used tutoring service in one academic year (0, 1-2, 3-4, 5-6, 7+) |
|                          | Psychology and Counseling Services (CAPS) | The number of times a student used CAPS services in one academic year (0, 1-) |</p>
<table>
<thead>
<tr>
<th>Type of Variable</th>
<th>Variables</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variables</td>
<td>Financial aid</td>
<td>Did not receive financial aid = 0&lt;br&gt;Received financial aid = 1</td>
</tr>
<tr>
<td>GPA</td>
<td>Scale between 0 – 4</td>
<td></td>
</tr>
<tr>
<td>Baccalaureate attainment in two years</td>
<td>Did not graduate = 0&lt;br&gt;Graduated = 1</td>
<td></td>
</tr>
<tr>
<td>Baccalaureate attainment in three years</td>
<td>Did not graduate = 0&lt;br&gt;Graduated = 1</td>
<td></td>
</tr>
</tbody>
</table>

**Qualitative Instrumentation**

To gather the qualitative data for this study, the participants responded to open-ended questions. The questions allowed students to express their perceptions of the five support services offered at UC Davis. The open-ended questions asked students about their experiences with the use of the five support services (orientation, academic advising, tutoring, counseling and psychology services, and financial aid). The students were also asked if they faced any obstacles or difficulties while using any of the support services, and if they could suggest ways to improve these services to better meet students’ needs to progress towards completion. The open-ended questions helped elicit students’ opinions and their comments on the student services at UC Davis (Creswell, 2009).

The matriculated community college students responded to four open-ended questions, the alumni community college students responded to five. The last open-ended
question for the alumni students asked them to express their opinions about whether the use of the support services played a role in their timely graduation (two or three years). The steps taken to analyze the open-ended responses were as recommended by Merriam (2009). The researcher coded the responses by reading each open-ended question and jotted down notes and comments in the margins. The notes next to the students’ responses were relevant to the research questions (Merriam, 2009). Matriculated and alumni students’ responses were individually coded, grouped into similar themes, and then categorized (Merriam, 2009). After working through all the responses, the researcher went back to the marginal notes (codes) and grouped the comments and notes that seemed to go together. The researcher kept a running list of these groupings or themes in a table (Merriam, 2009). The same steps were taken to code and group students’ responses to every single question. The open-ended responses of the matriculated community college students were analyzed first because they became available before the data of the alumni students. Matriculated students’ and alumni students’ responses were compared to check whether they shared similarities or differences. The extracted list from each survey was compared and then merged into one master list. The master list reflected recurring patterns in the study. The recurring patterns became the categories that covered many individual examples.

Data Collection and Analysis

This research collected data in one stage. Participants were required to electronically indicate that they had read and consented to participate before they were able to respond to the survey questions.
Data Analysis

The quantitative analyses include performing correlation and regression statistical tests. The correlation method was suitable for data analysis of research questions one, two, and four. The Pearson product-moment correlation coefficient ($r$) assessed the relationship between variables (Green & Salkind, 2008). The correlation analysis allowed the questions, “For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and students’ GPA at UC Davis?” Research question two, “For matriculated community college transfer students, is there a relationship between students’ perceptions of the various services and students’ GPA?” Research question four, “For graduates of a university baccalaureate program, is there a relationship between their use of the various student support services and timely graduation?”

Linear regression analysis was suitable for research question three, “Which of the five support services and which of the demographic characteristics are the strongest predictor of transfer students’ GPA at a four-year institution?” The purpose of the third research question was to determine the strongest predictor among the independent variables on students’ GPA at UC Davis. The analysis used linear regression to predict transfer students’ GPA at UC Davis.

Binary logistic regression was used to analyze the last research question, “For graduates of a university baccalaureate program who were community college transfer students, which of the various support services predicted the likelihood of their timely
graduation (two or three years)? The binary logistic regression examined the likelihood of two- and three-year graduation in relation to the support services.

A linear regression analysis sought to determine the extent to which the various independent variables—the five support services—related to the dependent variables (GPA). Furthermore, the regression analysis provided a measure of how well future outcomes (GPA) were likely to be predicted by the independent variables. The binary regression predicted the likelihood of the dependent variable (two- or three-year graduation) of occurring in relation to the independent variables.

Qualitative data was analyzed using the constant comparative method of data analysis. To determine similarities and differences, the researcher compared one segment of data with another. Data were grouped together into similar themes. The themes were labeled and put into categories. Responses from both surveys were compared. The goal from the open-ended questions was to expand on the information gathered through the quantitative questions and triangulates the findings (Creswell, 2009).

**Participant Rights & Ethical Protection**

The Institutional Review Boards of California State University, Sacramento, and the University of California at Davis classified this study, in fall 2011, as “exempt” from review. The Institutional Analysis Unit (IAU) of UC Davis administered the web-based survey. The IAU sent the questionnaire to a random sample of its existing list of transfer students using the e-mail addresses registered with UC Davis. Students who were randomly selected using SPSS to participate in the survey received an invitation by email. The email included a statement explaining that participation in the survey was voluntary.
and could be discontinued at any time. The invitation included an incentive to complete the survey. Furthermore, the invitation included the consent to participate. The consent included a link to the survey instrument. Participants were required to electronically indicate that they read and consented to participate before they were able to respond to the survey questions (Appendix C). The IAU emailed the disaggregated responses to the researcher without any personally identifying information. The researcher was not involved in the process of random selection of the participants nor emailing the invitation and the surveys.

**Conclusion**

The purpose of the study was to determine if there was a relationship between students’ use and perceptions of UC Davis support services and GPA (indicator of academic success) among community college transfer students at UC Davis. Moreover, the study examined whether strong predictors existed between the independent variables and GPA, and finally examined if the use of the support services could predict the likelihood of two- and three-year graduation of community college transfer students. This study employed a mixed methods survey, which allowed for data triangulation and explanation of findings. The data analysis included correlation, linear regression, and binary logistic regression analysis. Chapter 4 explains the results from this study, and Chapter 5 makes recommendations to institutional policies and programs that support community college students in reaching their goal of obtaining a baccalaureate degree.
Chapter 4

ANALYSIS OF THE DATA

This chapter contains a detailed description of the data and its analysis. Both quantitative and qualitative data were collected using a two-part survey method; the results from the two parts were analyzed separately. The quantitative data analysis is presented first; relationships between the independent and dependent variables are identified. The qualitative data reflects the participants’ views of the support services.

Five research questions guided the study:

1. For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and GPA at a four-year institution?

2. For matriculated community college transfer students, is there a relationship between students’ perceptions of the various services and GPA at their four-year institution?

3. For matriculated community college transfer students, which of the five support services are the strongest predictors of transfer students’ GPA at their four-year institution?

4. For graduates of a university baccalaureate program who were community college transfer students, is there a relationship between students’ various services and their timely graduation (two and three years)?
5. For graduates of a university baccalaureate program who were community college transfer students, which of the various support services predicted the likelihood of their timely graduation (two or three years)?

**Data Collection**

The Likert-scale survey questions elicited responses based on the number of times students used the support/student services in each year they were enrolled at UC Davis. The survey questions also queried participants through scaled and open-ended questions about how helpful they perceived the services to be. Additionally, students who had graduated were asked to rank their perception on a four-point scale and respond to open-ended questions about whether they felt that using one or more of the available student services (orientation, academic advising, tutoring, CAPS, or financial aid) assisted in their timely graduation from UC Davis.

**Response Rate**

To increase students’ confidentiality, a research analyst at UC Davis selected a random sample of community college transfer students—those who were enrolled at the time of the research and those who had graduated. The survey was emailed to 3,781 community college transfer students who enrolled in 2007, 2008, 2009, and 2010; a total of 304 students agreed to participate and took the survey. Of the 304 who agreed, 146 students were enrolled at UC Davis at the time of the research and 158 students had graduated.
Analysis of Descriptive Statistics

The following section provides detailed descriptive statistics of the participants. The data have been separated into two groups: matriculated community college transfer students and alumni community college transfer students.

A total of 304 students agreed to participate and responded to the survey. After examining the data, 23 students were excluded from the study because they transferred from four-year institutions and not from community colleges; as a result, the study included a total of 280 participants. Of the 280 students, 134 were matriculated students and 146 were alumni. Of the 134 matriculated students, 45 (34%) were male and 89 (66%) were female. Of the 146 alumni, 57 (39%) were male and 89 (61%) were female. Because the Institutional Analysis Unit at UC Davis sent the invitations to participants, the researcher did not know if this ratio was reflective of the male/female composition of the subjects invited to participate. Gender, entry term, ethnicity, transfer admission, EOP, parents’ education, and language are presented in Table 2. EOP served as a proxy for minority, first generation college students, and students from low socioeconomic status.
Table 2.

**Student Demographic Variables**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Matriculated Community College Transfer Students</th>
<th>Alumni Community College Transfer Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Population</td>
<td>N = 134</td>
<td>N = 146</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45 (34%)</td>
<td>57 (39%)</td>
</tr>
<tr>
<td>Female</td>
<td>89 (66%)</td>
<td>89 (61%)</td>
</tr>
<tr>
<td>Entry Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>0%</td>
<td>55 (38%)</td>
</tr>
<tr>
<td>2008</td>
<td>7 (5%)</td>
<td>52 (36%)</td>
</tr>
<tr>
<td>2009</td>
<td>32 (24%)</td>
<td>39 (27%)</td>
</tr>
<tr>
<td>2010</td>
<td>95 (71%)</td>
<td>0%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>4 (3%)</td>
<td>0%</td>
</tr>
<tr>
<td>Chinese</td>
<td>19 (14%)</td>
<td>17 (12%)</td>
</tr>
<tr>
<td>East Indian</td>
<td>5 (4%)</td>
<td>3 (2%)</td>
</tr>
<tr>
<td>Filipino</td>
<td>6 (5%)</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>Japanese</td>
<td>4 (3%)</td>
<td>4 (3%)</td>
</tr>
<tr>
<td>Latino</td>
<td>6 (5%)</td>
<td>12 (8%)</td>
</tr>
<tr>
<td>Mexican</td>
<td>11 (8%)</td>
<td>20 (14%)</td>
</tr>
<tr>
<td>Other Asian</td>
<td>2 (2%)</td>
<td>1</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>2 (2%)</td>
<td>0%</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>3 (2%)</td>
<td>8 (6%)</td>
</tr>
<tr>
<td>Korean</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td>67 (50%)</td>
<td>63 (42%)</td>
</tr>
<tr>
<td>American Indian</td>
<td>0%</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>Other/Decline to state</td>
<td>5 (4%)</td>
<td>7 (5%)</td>
</tr>
<tr>
<td>Transfer Admission Guarantee (TAG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>63 (47%)</td>
<td>22 (15%)</td>
</tr>
<tr>
<td>No</td>
<td>71 (53%)</td>
<td>124 (85%)</td>
</tr>
<tr>
<td>Parents’ Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No College</td>
<td>28 (23%)</td>
<td>42 (29%)</td>
</tr>
<tr>
<td>College</td>
<td>96 (77%)</td>
<td>104 (71%)</td>
</tr>
<tr>
<td>EOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did Not Apply</td>
<td>89 (66%)</td>
<td>103 (71%)</td>
</tr>
<tr>
<td>Not Eligible</td>
<td>23 (17%)</td>
<td>21 (15%)</td>
</tr>
<tr>
<td>EOP</td>
<td>22 (16%)</td>
<td>22 (15%)</td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Only</td>
<td>89 (66%)</td>
<td>94 (64%)</td>
</tr>
<tr>
<td>English and Another Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Another Language</td>
<td>33 (25%)</td>
<td>33 (23%)</td>
</tr>
<tr>
<td></td>
<td>12 (9%)</td>
<td>19 (13%)</td>
</tr>
</tbody>
</table>

Of the 134 matriculated students, a total of 2 participants (2%) were classified as sophomores, 126 (94%) of student participants were juniors, and 6 (5%) were seniors in
fall 2011. Of the 134 participants, about 44% were employed. One hundred and eighteen (88%) students expected to graduate within two years from UC Davis or another four-year institution. Two students (2%) did not expect to graduate within two years, and 14 students (about 10%) didn’t respond.

Ethnicity

When examining baccalaureate attainment, previous research classified ethnicity into four ethnic groups: white, Asian/Asian American, African American, and Hispanic/Latino (Hoachlander, Sikora, Horn, & Carroll, 2003). Moreover, as discussed in chapter one, the U.S. Census Bureau projects a growth in the general minority population (Asian/Asian American and Hispanic) at a pace faster than the overall population (U.S. Census Bureau, 2010). Additionally, in the present study, certain ethnic groups whose trends have been specifically included in analyses were very underrepresented in the data, and therefore, a separate look at those groups was not possible. An important example of this data trend was for African Americans. Only four African American participated in the study as matriculated students, and none as graduates. Other ethnic groups were also small, including American Indian, East Indian, and Pacific Islander. Taking into account the numbers of ethnic groups represented in this study and ethnicity classifications in previous research, ethnicity was classified into four groups. The first group was a miscellaneous category called “other,” compiling several ethnic groups with very low numbers: American Indian, East Indian, Pacific Islander, African American, and “decline to state.” Then, Hispanic/Latino, Asian/Asian American, and White students were categorized into three separate categories.
Based on this classification, the matriculated students included 16 (12%) other, 17 (13%) Hispanic/Latino, 34 (25%) Asian/Asian American, and 67 (50%) white. The alumni sample included 12 (9%) other, 32 (24%) Hispanic/Latino, 32 (24%) Asian/Asian American, 63 (42%) white. The ethnic groups were assigned the following numbers for analysis: 0 = Other (American Indian, East Indian, Pacific Islander, African American, and decline to state), 1 = Hispanic/Latino, 2 = Asian/Asian American, and 3 = White.

**Transfer Admission Guarantee**

The Transfer Admission Guarantee (TAG) program increased access to the UC system for community college transfer students to achieve their academic goals. The UC Davis TAG program outlines the courses students must complete and the grade point average (GPA) they must earn before transferring to UC Davis. It furthers guarantees admission to UC Davis in the major of choice through a formal agreement when students fulfill the course and GPA requirements (UC Davis, 2011). Of the 280 participants, 63 (47%) of the matriculated students and 22 (15%) alumni were enrolled in the TAG agreement.

**EOP**

Educational Opportunity Program (EOP) is a program that supports historically low-income and educationally disadvantaged families. Of the 280 participants, 16% (n = 22) matriculated students and 15% (n = 22) alumni were enrolled in EOP. The program offers many services to students who are enrolled in EOP. These services include academic advising, tutoring, counseling, and financial aid. Of the matriculated students, 66% did not apply to EOP, and 71% of the alumni students did not either. However, it is
unknown to the researcher whether any of the students who did not apply to EOP could have been identified as EOP students under the definition of the program. The researcher did not have access to that datum.

Alumni’s Two- and Three- Years Graduation Descriptive Statistics

A separate analysis of alumni was conducted because data exist regarding the number of years required to successfully complete their degrees after transfer. Similar analysis of the 134 matriculated students was not conducted. However, current transfer students’ GPA was analyzed. The data indicated that matriculated transfer students had, on average, GPAs of 2.94

Of the 146 alumni participants, 102 (73%) graduated in two years after enrollment at UC Davis. Of the 73% who graduated in two years, 62% were female and 38% were male. Of the 22 EOP participants, 13 graduated in two years; all TAG participants \( n = 22 \) graduated in two years. When two-year graduation is aggregated by race, more white students graduated than their peers: 50 (52%) were white, 22 (23%) were Hispanic/Latino, 21 (22%) were Asian/Asian American, and 3 (3%) were other. However, two-year graduation within each ethnicity was 76% white, 76% Hispanic/Latino, 70% Asian, and 60% other. Figure 3 presents two-year graduation rates for alumni by ethnicity.
Table 3

Two-Year Graduation Within Ethnicity and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Two-Year Graduation</th>
<th>Ethnicity</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>No Count</td>
<td></td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33.3%</td>
<td>16.7%</td>
<td>30.0%</td>
<td>28.6%</td>
<td>26.5%</td>
</tr>
<tr>
<td></td>
<td>Yes Count</td>
<td></td>
<td>2</td>
<td>15</td>
<td>14</td>
<td>30</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>66.7%</td>
<td>83.3%</td>
<td>70.0%</td>
<td>71.4%</td>
<td>73.5%</td>
</tr>
<tr>
<td>Male</td>
<td>No Count</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50.0%</td>
<td>36.4%</td>
<td>30.0%</td>
<td>16.7%</td>
<td>25.5%</td>
</tr>
<tr>
<td></td>
<td>Yes Count</td>
<td></td>
<td>1</td>
<td>7</td>
<td>7</td>
<td>20</td>
<td>35</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>50.0%</td>
<td>63.6%</td>
<td>70.0%</td>
<td>83.3%</td>
<td>74.5%</td>
</tr>
</tbody>
</table>

Figure 3. Two-Year Graduation by Ethnicity
Of the 27% alumni who did not graduate in two-years, 87% graduated in the third year of enrollment. Of the 87% who graduated, 63% were female. Regarding ethnicity, 13 (45%) were white, 6 (22%) were Hispanic/Latino, 9 (31%) were Asian/Asian American, and 1 (3%) was other. Three-year graduation within each ethnicity was 87% white, 86% Hispanic/Latino, 100% Asian, and 50% other. Of the 146 alumni participants, four students did not graduate in the third year: two white, one Hispanic/Latino, and one other. These students graduated in the fourth year after enrolment at UC Davis. Figure 4 presents three-year graduation achievement by ethnicity. Table 4 represents three-year graduation by ethnicity and gender. Appendix D represents alumni’s graduation by major.
Table 4

*Three-Year Graduation Within Ethnicity and Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Three-Year Graduation</th>
<th>No</th>
<th>Count</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.0%</td>
<td>.0%</td>
<td>.0%</td>
<td>9.1%</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>90.9%</td>
<td>90.5%</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.0%</td>
<td>25.0%</td>
<td>.0%</td>
<td>25.0%</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>10</td>
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<td></td>
<td></td>
<td></td>
<td>100.0%</td>
<td>75.0%</td>
<td>100.0%</td>
<td>75.0%</td>
<td>83.3%</td>
</tr>
</tbody>
</table>

**Alumni’s Perception of the Effect of Support Services on Graduation and Persistence**

Of the 146 alumni participants, 72% believed academic advising put them on track for timely graduation; 68% believed financial aid was important for timely graduation; 45% thought orientation played a role in their timely graduation; 32% perceived tutoring as important for timely graduation; and 28% believed CAPS played a role in their timely graduation. Furthermore, 71% perceived financial aid important for their persistence; 69% believed academic advising helped them persist on campus; 54% reported orientation was important for their persistence; 33% stated that tutoring helped in their persistence, and 30% felt CAPS was important for their persistence. Tables 5 -8 represent alumni transfer students’ perception of the importance of support services within ethnicity and gender.
Table 5

*Students’ Perception of the Effects of Orientation on Timely Graduation*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
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<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Orientation No Count</td>
<td>2</td>
<td>9</td>
<td>10</td>
<td>22</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0%</td>
<td>50.0%</td>
<td>50.0%</td>
<td>55.0%</td>
<td>53.8%</td>
</tr>
<tr>
<td></td>
<td>Yes Count</td>
<td>0</td>
<td>9</td>
<td>10</td>
<td>18</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.0%</td>
<td>50.0%</td>
<td>50.0%</td>
<td>45.0%</td>
<td>46.3%</td>
</tr>
<tr>
<td>M</td>
<td>Orientation No Count</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.0%</td>
<td>66.7%</td>
<td>54.5%</td>
<td>59.1%</td>
<td>56.8%</td>
</tr>
<tr>
<td></td>
<td>Yes Count</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0%</td>
<td>33.3%</td>
<td>45.5%</td>
<td>40.9%</td>
<td>43.2%</td>
</tr>
</tbody>
</table>

Table 6

*Students’ Perception of the Effect of Academic Advising on Timely Graduation*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Academic Advising No Count</td>
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<td>3</td>
<td>4</td>
<td>10</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>33.3%</td>
<td>16.7%</td>
<td>20.0%</td>
<td>25.6%</td>
<td>22.5%</td>
</tr>
<tr>
<td></td>
<td>Yes Count</td>
<td>2</td>
<td>15</td>
<td>16</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66.7%</td>
<td>83.3%</td>
<td>80.0%</td>
<td>74.4%</td>
<td>77.5%</td>
</tr>
<tr>
<td>Male   Academic Advising No Count</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>10</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.0%</td>
<td>27.3%</td>
<td>36.4%</td>
<td>43.5%</td>
<td>36.2%</td>
</tr>
<tr>
<td></td>
<td>Yes Count</td>
<td>2</td>
<td>8</td>
<td>7</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0%</td>
<td>72.7%</td>
<td>63.6%</td>
<td>56.5%</td>
<td>63.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80.0%</td>
<td>79.3%</td>
<td>74.2%</td>
<td>67.7%</td>
<td>72.4%</td>
</tr>
</tbody>
</table>
Table 7

*Students’ Perception of the Effect of Tutoring on Timely Graduation*

<table>
<thead>
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<th>Gender</th>
<th>Ethnicity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other</td>
<td>Hispanic</td>
</tr>
<tr>
<td>F</td>
<td>No</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Yes</td>
<td>Count</td>
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<tr>
<td></td>
<td>.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>M</td>
<td>Tutoring</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>.0%</td>
<td>71.4%</td>
</tr>
<tr>
<td>Yes</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>28.6%</td>
</tr>
</tbody>
</table>

Table 8

*Students’ Perception of the Effect of CAPS on Timely Graduation*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>other</td>
<td>Hispanic</td>
</tr>
<tr>
<td>Female</td>
<td>No</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>50.0%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Yes</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>50.0%</td>
<td>46.7%</td>
</tr>
<tr>
<td>Male</td>
<td>CAPS</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Yes</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>
**Student Services and GPA Descriptive Statistics**

The variables representing student support services were orientation, academic advising, tutoring, counseling and psychology (CAPS), and financial aid. Data on these variables were collected from the survey instrument. Students’ GPAs were collected from the student record database. Summaries of the data for the support services variables are presented in Table 9.

The survey assessed how many times students used services in one academic year and their perception of how helpful the service was. For the linear regression analysis, the independent variables “use” of services were categorized into dichotomous: 0 = did not use the service and 1 = used the service, and the independent variables “helpfulness” of the services were categorized into dichotomous: 0 = disagree (not helpful) and 1 = agree (helpful). The dichotomous categories were reported in this section, as illustrated in Table 9. The use of the support services and the perception of how helpful the services were decreased from year one to year two among matriculated students. This might mean that students did not need to use the services in the second year of transfer as much as they needed it in the first year of transfer, thus they perceived the services to be less helpful in the second year of transfer. However, the use of academic advising and CAPS increased among alumni across years one, two, and three.
Table 9

*Student Support Services Variables*

<table>
<thead>
<tr>
<th>Service</th>
<th>Matriculated Transfer students</th>
<th>Alumni Transfer Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
<td>Year 2</td>
</tr>
<tr>
<td>Academic Advising No</td>
<td>17 (13%)</td>
<td>22 (17%)</td>
</tr>
<tr>
<td>Yes</td>
<td>115 (87%)</td>
<td>109 (83%)</td>
</tr>
<tr>
<td>Tutoring  No</td>
<td>92 (71%)</td>
<td>103 (81%)</td>
</tr>
<tr>
<td>Yes</td>
<td>38 (29%)</td>
<td>24 (19%)</td>
</tr>
<tr>
<td>CAPS      No</td>
<td>104 (78%)</td>
<td>108 (85%)</td>
</tr>
<tr>
<td>Yes</td>
<td>29 (22%)</td>
<td>19 (15%)</td>
</tr>
<tr>
<td>Helpfulness of Academic Advising Disagree</td>
<td>24 (19%)</td>
<td>25 (20%)</td>
</tr>
<tr>
<td>Agree</td>
<td>102 (81%)</td>
<td>101 (80%)</td>
</tr>
<tr>
<td>Helpfulness of Tutoring Disagree</td>
<td>43 (42%)</td>
<td>45 (46%)</td>
</tr>
<tr>
<td>Agree</td>
<td>60 (58%)</td>
<td>54 (55%)</td>
</tr>
<tr>
<td>Helpfulness of CAPS Disagree</td>
<td>45 (46%)</td>
<td>46 (47%)</td>
</tr>
<tr>
<td>Agree</td>
<td>53 (54%)</td>
<td>51 (53%)</td>
</tr>
<tr>
<td>Financial Aid Yes</td>
<td>94 (70%)</td>
<td>96 (72%)</td>
</tr>
<tr>
<td>No</td>
<td>39 (29%)</td>
<td>34 (25%)</td>
</tr>
</tbody>
</table>

When comparing service use based on gender of the matriculated students, 89% of the female students used academic services, 34% tutoring, and 24% CAPS in the first year after transfer to UC Davis; 84% of the male students used academic services, 20% tutoring, and 18% CAPS. In the second year of enrolment at UC Davis, 84% of the female students used academic services, 21% tutoring, and 18% CAPS; 82% of the male students used academic advising, 14% tutoring, and 7% used CAPS. Tables 10 - 13 and
Appendix E represent matriculated students’ use and perceived help of the services within ethnicity.

Table 10

*Matriculated Students’ Use of the Services in the first year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Academic Year 1</td>
<td>No</td>
<td>22.2%</td>
<td>.0%</td>
<td>12.9%</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>77.8%</td>
<td>100.0%</td>
<td>87.1%</td>
<td>83.3%</td>
</tr>
<tr>
<td>Use of Tutoring Year 1</td>
<td>No</td>
<td>50.0%</td>
<td>70.6%</td>
<td>67.7%</td>
<td>73.8%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>50.0%</td>
<td>29.4%</td>
<td>32.3%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Use of CAPS Year 1</td>
<td>No</td>
<td>66.7%</td>
<td>76.5%</td>
<td>75.0%</td>
<td>83.3%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>33.3%</td>
<td>23.5%</td>
<td>25.0%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Table 11

*Matriculated Students' Perceptions of the Services in the first year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help of Academic Year 1</td>
<td>No</td>
<td>33.3%</td>
<td>11.8%</td>
<td>10.3%</td>
<td>22.6%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>66.7%</td>
<td>88.2%</td>
<td>89.7%</td>
<td>77.4%</td>
</tr>
<tr>
<td>Help of Tutoring Year 1</td>
<td>No</td>
<td>44.4%</td>
<td>50.0%</td>
<td>26.9%</td>
<td>48.9%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>55.6%</td>
<td>50.0%</td>
<td>73.1%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Help of CAPS Year 1</td>
<td>No</td>
<td>55.6%</td>
<td>53.8%</td>
<td>34.6%</td>
<td>50.0%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>44.4%</td>
<td>46.2%</td>
<td>65.4%</td>
<td>50.0%</td>
</tr>
</tbody>
</table>
Table 12

*Matriculated Students' Use of the Services in the second year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Use of Academic Year 2</th>
<th>No</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>11.1%</td>
<td>.0%</td>
<td>9.7%</td>
<td>27.7%</td>
<td>18.0%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>88.9%</td>
<td>100.0%</td>
<td>90.3%</td>
<td>72.3%</td>
<td>82.0%</td>
</tr>
<tr>
<td>Use of Tutoring Year 2</td>
<td>No</td>
<td>55.6%</td>
<td>64.7%</td>
<td>87.1%</td>
<td>87.1%</td>
<td>81.5%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>44.4%</td>
<td>35.3%</td>
<td>12.9%</td>
<td>12.9%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Use of CAPS Year 2</td>
<td>No</td>
<td>66.7%</td>
<td>88.2%</td>
<td>80.6%</td>
<td>90.3%</td>
<td>85.7%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>33.3%</td>
<td>11.8%</td>
<td>19.4%</td>
<td>9.7%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

Table 13

*Matriculated Students' Perceptions of the Services in the second year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Help of Academic Year 2</th>
<th>No</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>33.3%</td>
<td>11.8%</td>
<td>6.9%</td>
<td>25.8%</td>
<td>19.7%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>66.7%</td>
<td>88.2%</td>
<td>93.1%</td>
<td>74.2%</td>
<td>80.3%</td>
</tr>
<tr>
<td>Help of Tutoring Year 2</td>
<td>No</td>
<td>62.5%</td>
<td>57.1%</td>
<td>28.0%</td>
<td>50.0%</td>
<td>46.2%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>37.5%</td>
<td>42.9%</td>
<td>72.0%</td>
<td>50.0%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Help of CAPS Year 2</td>
<td>No</td>
<td>66.7%</td>
<td>61.5%</td>
<td>32.0%</td>
<td>50.0%</td>
<td>48.4%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>33.3%</td>
<td>38.5%</td>
<td>68.0%</td>
<td>50.0%</td>
<td>51.6%</td>
</tr>
</tbody>
</table>
For the alumni students, 81% of the female students used academic services, 16% tutoring, and 23% CAPS in the first year after transfer to UC Davis; 71% of the male students used academic services, 25% tutoring, and 11% CAPS. In the second year of enrolment at UC Davis, 81% of the female students used academic services, 12% tutoring, and 28% CAPS; 77% of the male students used academic advising, 19% tutoring, and 7% used CAPS. Tables 14 – 17 and Appendix F represents alumni students’ use and perceived help of the services with ethnicity.

Table 14

*Alumni’s Use of the Services in the First year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Student Services</th>
<th>Ethnicity</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Academic</td>
<td>No</td>
<td>.0%</td>
<td>25.8%</td>
<td>12.9%</td>
<td>27.3%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Year 1</td>
<td>Yes</td>
<td>100.0%</td>
<td>74.2%</td>
<td>87.1%</td>
<td>72.7%</td>
<td>77.4%</td>
</tr>
<tr>
<td>Use of Tutoring</td>
<td>No</td>
<td>60.0%</td>
<td>83.9%</td>
<td>77.4%</td>
<td>82.5%</td>
<td>80.8%</td>
</tr>
<tr>
<td>Year 1</td>
<td>Yes</td>
<td>40.0%</td>
<td>16.1%</td>
<td>22.6%</td>
<td>17.5%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Use of CAPS Year</td>
<td>No</td>
<td>40.0%</td>
<td>80.6%</td>
<td>77.4%</td>
<td>85.7%</td>
<td>80.8%</td>
</tr>
<tr>
<td>1</td>
<td>Yes</td>
<td>60.0%</td>
<td>19.4%</td>
<td>22.6%</td>
<td>14.3%</td>
<td>19.2%</td>
</tr>
</tbody>
</table>
Table 15

*Alumni’s Perceptions of the Services in the First year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Student Services</th>
<th>Ethnicity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other</td>
<td>Hispanic</td>
<td>Asian</td>
<td>White</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Help of Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 No</td>
<td>20.0%</td>
<td>21.4%</td>
<td>23.3%</td>
<td>31.7%</td>
<td>27.0%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>80.0%</td>
<td>78.6%</td>
<td>76.7%</td>
<td>68.3%</td>
<td>73.0%</td>
<td></td>
</tr>
<tr>
<td>Help of Tutoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 No</td>
<td>66.7%</td>
<td>54.5%</td>
<td>33.3%</td>
<td>61.2%</td>
<td>53.1%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>33.3%</td>
<td>45.5%</td>
<td>66.7%</td>
<td>38.8%</td>
<td>46.9%</td>
<td></td>
</tr>
<tr>
<td>Help of CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1 No</td>
<td>33.3%</td>
<td>42.9%</td>
<td>42.3%</td>
<td>60.4%</td>
<td>51.0%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>66.7%</td>
<td>57.1%</td>
<td>57.7%</td>
<td>39.6%</td>
<td>49.0%</td>
<td></td>
</tr>
</tbody>
</table>

Table 16

*Alumni’s Use of the Services in the Second year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Student Services</th>
<th>Ethnicity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Other</td>
<td>Hispanic</td>
<td>Asian</td>
<td>White</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Use of Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 No</td>
<td>20.0%</td>
<td>12.9%</td>
<td>9.7%</td>
<td>30.3%</td>
<td>21.1%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>80.0%</td>
<td>87.1%</td>
<td>90.3%</td>
<td>69.7%</td>
<td>78.9%</td>
<td></td>
</tr>
<tr>
<td>Use of Tutoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 No</td>
<td>60.0%</td>
<td>87.1%</td>
<td>80.6%</td>
<td>90.8%</td>
<td>86.4%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40.0%</td>
<td>12.9%</td>
<td>19.4%</td>
<td>9.2%</td>
<td>13.6%</td>
<td></td>
</tr>
<tr>
<td>Use of CAPS Year 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>60.0%</td>
<td>73.3%</td>
<td>71.0%</td>
<td>87.7%</td>
<td>79.4%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40.0%</td>
<td>26.7%</td>
<td>29.0%</td>
<td>12.3%</td>
<td>20.6%</td>
<td></td>
</tr>
</tbody>
</table>
Table 17

*Alumni’s Perceptions of the Services in the Second year Within Ethnicity (Some Numbers are < 10)*

<table>
<thead>
<tr>
<th>Student Services</th>
<th>Ethnicity</th>
<th>Other</th>
<th>Hispanic</th>
<th>Asian</th>
<th>White</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help of Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 No</td>
<td></td>
<td>20.0%</td>
<td>13.8%</td>
<td>19.4%</td>
<td>25.8%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>80.0%</td>
<td>86.2%</td>
<td>80.6%</td>
<td>74.2%</td>
<td>78.7%</td>
</tr>
<tr>
<td>Help of Tutoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 No</td>
<td></td>
<td>66.7%</td>
<td>57.1%</td>
<td>36.0%</td>
<td>61.7%</td>
<td>54.2%</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>33.3%</td>
<td>42.9%</td>
<td>64.0%</td>
<td>38.3%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Help of CAPS Year 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>33.3%</td>
<td>35.0%</td>
<td>40.7%</td>
<td>59.2%</td>
<td>48.5%</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
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<td>65.0%</td>
<td>59.3%</td>
<td>40.8%</td>
<td>51.5%</td>
</tr>
</tbody>
</table>

**Quantitative Data Analysis**

Correlation, linear regression, and binary logistic regression analyses were administered using Statistical Package for Social Science (SPSS). Correlation analyses determined if there was a relationship between utilizing the five support services and students’ GPA and timely graduation. Regression and binary logistic regression analyses made predictions about future GPA and timely graduation.

**Variable Descriptions for Matriculated Students**

After collecting the survey data, the researcher conducted multiple correlation analyses to determine if relationships existed among the many independent variables and the single dependent variable. The independent variables for this study were students’ demographics data, students’ use of the five support services, and students’ perception of how helpful the services were. The dependent variable was students’ cumulative GPA at UC Davis.
The regression analysis revealed relationships between a number of independent variables and the dependent variable. Table 18 presents the correlation analyses of the dependent and independent variables. Table 19 presents the correlation analysis among the independent variables. Complete correlation tables for both matriculated students and alumni are in Appendixes G and H.

Table 18

*Variables that Correlated with GPA*

<table>
<thead>
<tr>
<th></th>
<th>UCD GPA</th>
<th>Type of Orientation</th>
<th>Ethnicity</th>
<th>EOP</th>
<th>Use of CAPS</th>
<th>Help of CAPS</th>
<th>Parents’ Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCD GPA</td>
<td>1</td>
<td>.349**</td>
<td>.257</td>
<td>-.177</td>
<td>-.174**</td>
<td>-.275**</td>
<td>.227</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.002</td>
<td>.003</td>
<td>.041</td>
<td>.046</td>
<td>.006</td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>134</td>
<td>78</td>
<td>134</td>
<td>134</td>
<td>133</td>
<td>98</td>
<td>124</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
## Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Type of Orient</th>
<th>Gen</th>
<th>Ethn</th>
<th>EOP</th>
<th>Use of Acad</th>
<th>Use of Tutor</th>
<th>Use of CAPS</th>
<th>Help of Acad</th>
<th>Help of Tutor</th>
<th>Help of CAPS</th>
<th>Fin Aid</th>
<th>Parent Ed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orient</td>
<td>1</td>
<td>-.039</td>
<td>.095</td>
<td>-.082</td>
<td>.175*</td>
<td>-.004</td>
<td>.096</td>
<td>.118</td>
<td>-.004</td>
<td>.088</td>
<td>.153</td>
<td>-.159</td>
</tr>
<tr>
<td>Type of Orient</td>
<td>-.039</td>
<td>1</td>
<td>-.265*</td>
<td>.070</td>
<td>-.129</td>
<td>-.003</td>
<td>-.027</td>
<td>-.092</td>
<td>.054</td>
<td>.009</td>
<td>-.169</td>
<td>-.085</td>
</tr>
<tr>
<td>Gender</td>
<td>.095</td>
<td>-.265*</td>
<td>1</td>
<td>.032</td>
<td>-.059</td>
<td>-.057</td>
<td>-.148</td>
<td>-.070</td>
<td>-.111</td>
<td>-.159</td>
<td>-.054</td>
<td>.007</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.082</td>
<td>.070</td>
<td>.032</td>
<td>1</td>
<td>-.134</td>
<td>-.083</td>
<td>-.115</td>
<td>-.115</td>
<td>-.088</td>
<td>-.122</td>
<td>-.005</td>
<td>.010</td>
</tr>
<tr>
<td>EOP</td>
<td>.175*</td>
<td>-.129</td>
<td>-.059</td>
<td>-.134</td>
<td>1</td>
<td>.051</td>
<td>.177*</td>
<td>.059</td>
<td>.010</td>
<td>.067</td>
<td>.014</td>
<td>.242**</td>
</tr>
<tr>
<td>Use of Acad</td>
<td>-.004</td>
<td>-.003</td>
<td>-.057</td>
<td>-.083</td>
<td>.051</td>
<td>1</td>
<td>.149</td>
<td>.089</td>
<td>.462**</td>
<td>.245*</td>
<td>.090</td>
<td>-.051</td>
</tr>
<tr>
<td>Use of Tutor</td>
<td>.096</td>
<td>-.027</td>
<td>-.148</td>
<td>-.115</td>
<td>.177*</td>
<td>.149</td>
<td>1</td>
<td>.213*</td>
<td>.134</td>
<td>.439*</td>
<td>.163</td>
<td>-.033</td>
</tr>
<tr>
<td>Use of CAPS</td>
<td>.118</td>
<td>-.092</td>
<td>-.070</td>
<td>-.115</td>
<td>.059</td>
<td>.089</td>
<td>.213*</td>
<td>1</td>
<td>.016</td>
<td>.146</td>
<td>.373**</td>
<td>.140</td>
</tr>
<tr>
<td>Help of Acad</td>
<td>-.004</td>
<td>.054</td>
<td>-.111</td>
<td>-.088</td>
<td>.010</td>
<td>.462**</td>
<td>.134</td>
<td>.016</td>
<td>1</td>
<td>.431**</td>
<td>.300**</td>
<td>-.120</td>
</tr>
<tr>
<td>Help of Tutor</td>
<td>-.011</td>
<td>.009</td>
<td>-.159</td>
<td>-.122</td>
<td>.067</td>
<td>.245*</td>
<td>.439**</td>
<td>.146</td>
<td>.431**</td>
<td>1</td>
<td>.603**</td>
<td>.039</td>
</tr>
<tr>
<td>Help of CAPS</td>
<td>.088</td>
<td>-.169</td>
<td>-.054</td>
<td>-.005</td>
<td>.014</td>
<td>.090</td>
<td>.163</td>
<td>.373**</td>
<td>.300**</td>
<td>.603**</td>
<td>1</td>
<td>.096</td>
</tr>
<tr>
<td>Fin Aid</td>
<td>.153</td>
<td>-.085</td>
<td>.007</td>
<td>.010</td>
<td>.242**</td>
<td>-.051</td>
<td>-.033</td>
<td>.140</td>
<td>-.120</td>
<td>.039</td>
<td>.096</td>
<td>1</td>
</tr>
<tr>
<td>Parent Ed</td>
<td>-.159</td>
<td>.003</td>
<td>.043</td>
<td>.083</td>
<td>-</td>
<td>.033</td>
<td>-.019</td>
<td>.054</td>
<td>.083</td>
<td>.232*</td>
<td>.123</td>
<td>-.170</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Correlation coefficients were computed among the variables. Using the Bonferroni approach to control for Type I error across the correlations, a $p$ value of less than 0.05 was required for significance. Six correlations were statistically significant with the dependent variable (GPA) as shown in Table 18. The correlation of UCD GPA with type of orientation, ethnicity, EOP, use of CAPS, a perception of how helpful CAPS was, and parent’s education were statistically significant.

The correlation between UCD GPA and type of orientation was significant, $r(76) = .34, p < .005$ (medium effect size). The results suggested that students who chose the one-day orientation had a higher GPA. The correlation between UCD GPA and ethnicity was significant, $r(132) = .25, p < .005$ (low to medium effect size). White students earned higher GPAs than their counterparts of other races and ethnicities. The correlation between UCD GPA and parents’ education was significant, $r(122) = .22, p < .05$ (low to medium effect size). Students who had parents with a college degree had higher GPAs than those whose parents did not go to college. The correlation between UCD GPA and EOP was significant, $r(132) = -.17, p < .05$ (low effect size). Students’ enrollment in EOP had a negative relationship to their GPA. The correlation between UCD GPA and use of CAPS was significant, $r(131) = -.17, p < .05$ (low effect size). Students’ use of CAPS had a negative correlation with UCD GPA. The correlation between UCD GPA and students’ perception of CAPS was significant, $r(96) = -.27, p < .01$ (low to medium effect size). Students’ perception of CAPS had a negative relationship with their earned UCD GPA. The results suggest that students who had lower GPA were more likely to use CAPS and find them helpful than their peers who had higher GPAs. This is an indication that
students who perceived CAPS to be helpful were in need of the services. Likewise, students who were enrolled in EOP were students who needed extra attention from the services.

Moreover, the type of orientation had a positive correlation with gender. Ninety-six percent of female respondents attended the one-day orientation, while 79% of the male respondents attended the one-day orientation. Parents’ education had a negative correlation with EOP students; 59% of EOP parents did not have a college degree and 41% had a college degree.

The use of CAPS was also found to have a positive relationship with the use of tutoring services, and a positive relationship to perception of satisfaction of the tutoring and CAPS services. In other words, students who used CAPS used tutoring services as well. The use of CAPS had a positive correlation with the perception of how helpful the service was. In other words, the more students used CAPS, the more helpful they found it to be. Moreover, the more they used CAPS, the more helpful they perceived the tutoring service as well. The correlation table also showed a positive relationship between the perception of how helpful CAPS was with helpfulness of academic tutoring services. Thus the more satisfied students were with the services of CAPS, the more satisfied they were with the academic services, and vice versa. Also, the more satisfied students were with CAPS, the more satisfied they were with the help they received from the tutoring service. Finally, the correlation table showed a positive correlation between parents’ education and students’ satisfaction with the tutoring service.
Linear Regression Analysis: Demographic Predictors

Out of the five demographic variables (gender, language, EOP, ethnicity, and parent’s education) used within this linear regression analysis, there was only one variable that was reported as statistically significant. The model summary in Table 20 shows how well the demographic variables related to the dependent variable, UC Davis GPA.

Table 20

*Significance: Demographic Variables Only*

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.412</td>
<td>.170</td>
<td>.134</td>
<td>.463746</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), gender, language, EOP, ethnicity, and parents’ education

Table 20 shows that using the adjusted R square value, the overall participant demographics can explain 13% variability in UC Davis GPA, keeping all other variables constant. The effect size in predicting the overall GPA was moderate. However, as shown by the complete linear regression analysis for the demographic variables (Table 21), the indicator that was statistically significant in affecting student GPA was ethnicity. The significance of the ethnicity variable was .008. The linear regression gave a 95% confidence interval that the ethnicity variable could explain a positive change in GPA from .074 (Lower Bound) to .470 (Upper Bound) if the participants’ ethnicity was White.
Table 21

*Coefficients*<sup>a</sup>: Demographic Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.653</td>
<td>.261</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>- .040</td>
<td>.090</td>
<td>-.037</td>
</tr>
<tr>
<td>EOP</td>
<td>- .074</td>
<td>.060</td>
<td>-.116</td>
</tr>
<tr>
<td>Language</td>
<td>.087</td>
<td>.115</td>
<td>.083</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.272</td>
<td>.100</td>
<td>.274</td>
</tr>
<tr>
<td>Parents’ Education</td>
<td>.121</td>
<td>.121</td>
<td>.102</td>
</tr>
</tbody>
</table>

N=124
P < .05

**Linear Regression Analysis: Factors Predictors**

The researcher chose GPA to serve as a dependent variable and the support services to be independent variables. The direction of the prediction could have analyzed in a different direction and different variables and might have produced different results.

Out of the nine variables (gender, EOP, language, ethnicity, use of academic advising, use of tutoring, use of CAPS, financial aid, and type of orientation) used within this linear regression analysis, there were only three variables that were reported statistically significant: use of CAPS, type of orientation, and financial aid. The model summary in Table 22 shows how well the nine independent variables (gender, EOP, language, ethnicity, use of academic advising, use of tutoring services, use of CAPS, financial aid, and type of orientation) relate to the dependent variable, UCD GPA.
Table 22

**Significance: Demographic Variables and Use of Service Factor Predictor**

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.552(^a)</td>
<td>.305</td>
<td>.211</td>
<td>.468704</td>
<td>.305</td>
<td>.002</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), gender, EOP, language, ethnicity, use of academic advising, use of tutoring services, use of CAPS, financial aid, and type of orientation

Using the adjusted R square value, keeping all over variables constant, the overall variables explained 21% variability in UC Davis GPA. The effect size in predicting the overall GPA was large. The indicator that proved to be the most statistically significant in affecting the dependent variables was type of orientation. The significance level of this variable was .002 (Table 22). Linear regression gave a 95% confidence interval that type of orientation could explain a positive change in GPA from .221 Lower Bound to almost a full grade point (.985) on the Upper Bound if participants attended the one-day orientation rather than the brief orientation. Furthermore, the financial aid variable had a significance of .026 and could explain an increase in the average GPA of participants who received financial aid (from .041 on the Lower Bound to .609 on the Upper Bound).
Table 23

**Coefficients**<sup>a</sup>. *Demographic Variables and Use of Service Factor Predictor*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.497</td>
<td>.294</td>
<td>8.505</td>
</tr>
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<td>Gender</td>
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<td>.120</td>
<td>.054</td>
</tr>
<tr>
<td>EOP</td>
<td>-.118</td>
<td>.073</td>
<td>-.182</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.018</td>
<td>.134</td>
<td>-.017</td>
</tr>
<tr>
<td>Language</td>
<td>.234</td>
<td>.138</td>
<td>.216</td>
</tr>
<tr>
<td>Use of Academic</td>
<td>-.251</td>
<td>.167</td>
<td>-.161</td>
</tr>
<tr>
<td>Use of Tutoring</td>
<td>-.074</td>
<td>.122</td>
<td>-.067</td>
</tr>
<tr>
<td>Use of CAPS</td>
<td>-.116</td>
<td>.132</td>
<td>-.095</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>.325</td>
<td>.142</td>
<td>.262</td>
</tr>
<tr>
<td>Type of Orientation</td>
<td>.583</td>
<td>.190</td>
<td>.339</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), gender, EOP, language, ethnicity, financial aid, helpfulness of tutoring, helpfulness of CAPS, and helpfulness of academic services.

The model summary in Table 24 presents how well the seven independent variables (gender, EOP, language, ethnicity, helpfulness of tutoring, helpfulness of CAPS, and helpfulness of academic services) related to the dependent variable, UCD GPA.

Table 24

**Significance: Demographic Variables and Helpfulness of Services**

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
<th>R Square Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>.445&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.198</td>
<td>.135</td>
<td>.464814</td>
<td>.198</td>
<td>.006</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), gender, EOP, language, ethnicity, financial aid, helpfulness of tutoring, helpfulness of CAPS, and helpfulness of academic services.

Using the adjusted R square value, keeping all over variables constant, the overall variables can explain 14% variability in UC Davis GPA. The effect size in predicting the overall GPA was moderate. The indicator that proved to be the most statistically
significant in predicting the dependent variables was helpfulness of CAPS, helpfulness of tutoring, and ethnicity. The significance level of the CAPS variable was .001. Linear regression gave a 95% confidence interval that this variable could explain a negative change in GPA from -.640 Lower Bound to -.165 on the Upper Bound if participants perceived CAPS to be helpful. Furthermore, the helpfulness of tutoring variable had a significance of .050 and could explain an increase in the average GPA of participants who perceived tutoring helpful (from .000 on the Lower Bound to .526 on the Upper Bound) as illustrated in Table 25.

Table 25

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Demographic Variables and Helpfulness of Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td>Model</td>
<td>B</td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.006</td>
</tr>
<tr>
<td>Gender</td>
<td>- .047</td>
</tr>
<tr>
<td>EOP</td>
<td>- .077</td>
</tr>
<tr>
<td>Language</td>
<td>.046</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.238</td>
</tr>
<tr>
<td>Help of Academic</td>
<td>- .062</td>
</tr>
<tr>
<td>Help of Tutoring</td>
<td>.263</td>
</tr>
<tr>
<td>Help of CAPS</td>
<td>- .403</td>
</tr>
</tbody>
</table>

A=96
p < .05

**Dependent Variable Descriptions for Alumni Students**

Of the 146 alumni participants, 102 students (72%) graduated in two years and 38 students (27%) did not. Almost all the remaining students graduated in the third year after enrollment at UC Davis except for four students who graduated in year four. The dependent variable is whether a student attained a baccalaureate degree in two years (a
dummy variable that equals one if the student graduated in two years and zero otherwise. The researcher ran a correlation analysis to determine relationship between dependent and independent variables. The binary logistic regression was run to determine the various services predicted the likelihood of community college transfer students’ timely graduation (two or three years).

**Correlation Analysis**

After collecting the survey data, the researcher conducted correlation analyses to determine if relationships existed among the many independent variables and the single dependent variable. The independent variables for this study were students’ demographic characteristics (gender, ethnicity, EOP) and students’ use of the five support services. The dependent variables were two-year graduation and three-year graduation. Table 26 presents the independent variables that correlated with the dependent variables; Table 27 presents the correlations among independent variables.
Table 26

Correlation Between Independent And Dependent Variables Among Alumni

<table>
<thead>
<tr>
<th></th>
<th>Two-Year Graduation</th>
<th>Three-Year Graduation</th>
<th>Use of CAPS</th>
<th>Transfer GPA</th>
<th>TAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Year Graduation Pearson Correlation</td>
<td>1</td>
<td>.a</td>
<td>-.199*</td>
<td>.238*</td>
<td>.256*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.020</td>
<td>.005</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>140</td>
<td>37</td>
<td>137</td>
<td>140</td>
<td>140</td>
</tr>
</tbody>
</table>

|                  | Three-Year Graduation Pearson Correlation | .a                   | 1           | -.064        | -.077 | .a |
| Sig. (2-tailed)  | .000                | .707                  | .650        | .000         |       |
| N                | 37                  | 37                    | 37          | 37           | 37   |

a. Cannot be computed because at least one of the variables is constant.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).
Table 27

Graduation Correlation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Tutor</td>
<td>.226**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of CAPS</td>
<td></td>
<td>.280**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Aid</td>
<td></td>
<td></td>
<td>.103</td>
<td>-.250**</td>
<td>.287**</td>
<td>-.214*</td>
</tr>
<tr>
<td>GPA</td>
<td></td>
<td></td>
<td></td>
<td>.094</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EOP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.094</td>
<td>-.013</td>
</tr>
<tr>
<td>Parents’ Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.115</td>
<td>.011</td>
<td>.766</td>
<td>.005</td>
<td>.875</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>144</td>
<td>141</td>
<td>141</td>
<td>142</td>
<td>146</td>
<td>146</td>
</tr>
</tbody>
</table>

a. Cannot be computed because at least one of the variables is constant.

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).
Correlation coefficients were computed among the variables. Using the Bonferroni approach to control for Type I error across the correlations, a $p$ value of less than .05 was required for significance.

Three correlations were statistically significant with the two-year graduation as shown in Table 27. The correlation between two-year graduation and use of CAPS was significant, $r(135) = .19, p < .05$. Use of CAPS had negative correlation with two-year graduation. The correlation between two-year graduation and use transfer GPA (students’ GPA from their community college) was significant, $r(138) = .23, p < .05$. The correlation between two-year graduation and TAG was significant, $r(138) = .25, p < .05$. Unlike GPA correlation, ethnicity did not show any statistical correlation with two-year graduation. None of the independent variables was statistically significant to three-year graduation. CAPS did not show statistical significance to three-year graduation. The potential explanation for this phenomenon was that CAPS helped students with their transition or emotional problems and retained them on campus. Those students then graduated in the third year.

The regression analysis revealed relationships between a number of independent variables and the dependent variable. Table 28 presents the correlation analyses of the variables.

**Binary Regression Analysis: Factors Predictors**

Out of the independent variables (demographics, use of the five support services in the first year, and GPA) used within this binary logistic regression analysis, there was one variable that was reported statistically significant, transfer GPA.
Of the 146 alumni, 73% graduated in two years. A unit increase on the GPA scale increased the odds of two-year graduation by a factor of 12.636, holding all other independent variables constant. Thus, in the first year of enrolment at UC Davis, for every increase of one-unit in transfer GPA, an alumni transfer student was 12.636 times as likely to graduate in two years. The results were statistically significant at $p < .05$.

Out of the independent variables (demographics, use of the support services in the second year after transfer, and GPA) used within this binary logistic regression analysis,
there were two variables that were reported statistically significant, transfer GPA and use of CAPS ($p < 0.05$).

Table 29

*Logistic Regression Parameter Estimate: Use of Services in the Second Year and Two-Year Graduation*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.106</td>
<td>.500</td>
<td>.045</td>
<td>.832</td>
<td>1.112</td>
</tr>
<tr>
<td>TAG</td>
<td>20.481</td>
<td>8673.221</td>
<td>.000</td>
<td>.998</td>
<td>784930563.761</td>
</tr>
<tr>
<td>Transfer GPA</td>
<td>1.444</td>
<td>.658</td>
<td>4.808</td>
<td>.028</td>
<td>4.236</td>
</tr>
<tr>
<td>EOP</td>
<td>-1.005</td>
<td>.758</td>
<td>1.795</td>
<td>.180</td>
<td>.366</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.014</td>
<td>.258</td>
<td>.003</td>
<td>.958</td>
<td>1.014</td>
</tr>
<tr>
<td>Parent's Education</td>
<td>.254</td>
<td>.558</td>
<td>.207</td>
<td>.649</td>
<td>1.289</td>
</tr>
<tr>
<td>Language</td>
<td>.140</td>
<td>.377</td>
<td>.137</td>
<td>.711</td>
<td>1.150</td>
</tr>
<tr>
<td>Use of Academic 2</td>
<td>.214</td>
<td>.225</td>
<td>.908</td>
<td>.341</td>
<td>1.239</td>
</tr>
<tr>
<td>Use of Tutor 2</td>
<td>-.054</td>
<td>.243</td>
<td>.049</td>
<td>.824</td>
<td>.947</td>
</tr>
<tr>
<td>Use of CAPS 2</td>
<td>-.536</td>
<td>.251</td>
<td>4.556</td>
<td>.033</td>
<td>.585</td>
</tr>
<tr>
<td>Financial Aid 2</td>
<td>.613</td>
<td>.511</td>
<td>1.440</td>
<td>.230</td>
<td>1.847</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.071</td>
<td>2.547</td>
<td>2.554</td>
<td>.110</td>
<td>.017</td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: Gender, TAG, GPA, EOP, Ethnicity, Parent Education, Language, Use of Academic 2, Use of Tutoring 2, Use of CAPS 2, Financial Aid 2

Of the 146 alumni, 73% graduated in two years. A unit increase on the GPA scale increased the odds of two-year graduation by a factor of 4.236, holding all other independent variables constant. Thus, in the second year of enrolment at UC Davis, for every increase on one-unit in GPA, an alumni transfer student was 4.236 times as likely to graduate in two years. The results were statistically significant at $p = .028$. A one-unit
increase on the CAPS scale (two visits) decreased the likelihood of two-year graduation by a factor of 0.585, \( p < .05 \). Therefore, the likelihood to graduate in two years is negatively correlated to CAPS (\( p < 0.05 \)). None of the independent variables included in this model predicted three-years graduation.

**Qualitative Data Analysis**

The qualitative research component consisted of four open-ended questions for matriculated community college transfer students and five open-ended questions for alumni community college transfer students. The open-ended questions were included in the online survey. The goal of the open-ended questions was to expand on the information gathered through the quantitative questions and to triangulate the quantitative findings. Students were able to share information regarding the five student services and include their personal experiences with the services.

The researcher compared one segment of data with another. Data were grouped together into similar themes. The themes were labeled and put into categories. The overall goal was to identify patterns in the data and to triangulate the quantitative findings (Creswell, 2009; Merriam, 2009). The findings from the qualitative analysis will be discussed to determine the extent to which the data answered the research questions. Matriculated students’ responses are in Appendix I, and alumni’s responses are in Appendix J.
The first open-ended question asked participants “What student services (orientation, academic advising, tutoring, CAPS, or financial aid) at UC Davis were most helpful to you? In what ways?” Ninety-five of the matriculated student and 119 of the alumni participants responded to this question. Students’ perceptions of the services are presented in percentages in Table 30.

Table 30.  
Matriculated and Alumni Students’ Perceptions of the Services

<table>
<thead>
<tr>
<th></th>
<th>Orientation</th>
<th>Academic Advising</th>
<th>Tutoring</th>
<th>CAPS</th>
<th>Financial Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matriculated</td>
<td>15%</td>
<td>49%</td>
<td>9%</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Alumni</td>
<td>8%</td>
<td>46%</td>
<td>10%</td>
<td>14%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Students’ answers were coded, grouped into themes, and then categorized. Then matriculated students’ responses were compared with the alumni’s responses. Two categories emerged from the analysis of the matriculated and the alumni’s responses: persistence and timely graduation. Persistence was used when students’ responses indicated that the services helped them financially, put them on track, or helped with the transition into the new institution. This interpretation of persistence is used throughout this section. For example:

- There is no way I can afford the expenses spent while studying in UCD without financial aid (matriculated Asian female).
• Academic advising helped stay on track with my major (matriculated white female).

• Summer orientation, financial aid, they helped me be prepared for the UC system in terms of logistics and paperwork and to retain me on campus (matriculated Asian male).

Alumni participants found academic advising and financial aid to be important services. Alumni students perceived academic advising as an important factor to timely graduation. For example:

• academic advising because they really helped me stay on track (Hispanic female alumna).

• Academic advising ensured I completed the correct courses required for graduation. Advising also helped me design course schedules that were not overwhelming and feasibly completed in a timely manner with passing grades. Though I understand this was not always the case for most students, my adviser (XXX) was fantastic and very hands on (White male alumnus).

A Hispanic male alumnus showed the importance of services, “Orientation definitely helped me adjust to the new environment I was going into from a community college atmosphere. I think I was better prepared as a result of it, along with the people that I met during orientation, who continue to be my friends to this day.” This student perceived orientation as a way to adjust to the new environment, especially that he met friends through orientation. He further added, “Financial Aid was another big plus since
that’s what allowed me to stay and continue my studies, without the worry of working as hard outside of school, thus allowing me to concentrate in my studies.”

The other category emerged when students linked the services to timely graduation. This study defines timely graduation as two or three years after transfer. However, students’ definition of timely graduation was not clear from their responses:

- Academic advising helps me organize my schedule so that I can graduate with my degree in a timely manner (matriculated Hispanic female).
- Academic advising was a Godsend. There was a lot to figure out in terms of scheduling and making sure that I graduated on time (matriculated white female).
- Academic advising from my major’s department … helped me figure out a game plan as far as what classes I needed to take and what hoops I needed to go through in order to graduate on time (matriculated Hispanic female).
- Academic advising and financial aid. I needed guidance on what classes I needed to take at UC Davis to complete my major (Asian female alumna).

The importance of academic advising was sensed when a female student perceived academic advising as a road map to graduation, “Academic advising helped me make a road map of what I needed to do to graduate.” A Hispanic male alumnus added, “Academic Advising was definitely a plus since it allowed me to continually check to see if I was doing the right amount of classes, and what classes I still need to take, along with ensuring completion of the right amount of units to graduate.”

The responses from both matriculated students and alumni showed their perceptions of the student services. Both groups of students (matriculated and alumni)
perceived the services as vehicles for degree completion, especially academic advising and financial aid. Some students were so excited about the services they received; they credited the person who helped them by mentioning her/his name. Likewise, students who were dissatisfied with the services referred to the provider by name in a negative way. For confidentiality reasons, the researcher excluded any employee name when quoting students in this research.

The second open-ended question asked students “What obstacle(s) did you face while utilizing any of the above mentioned support service? Please provide at least one example.” Eighty-nine of the matriculated participants and 117 alumni participants responded to the question. Even though matriculated and alumni transfer students found the services vital to their success at UC Davis, they faced some challenges while utilizing the services. Two categories emerged from the analysis: employees’ lack of training, and system flaws/needs. Employees’ attitude emerged as a sub category under “employees’ lack of training.”

Students reported that some advisors did not have answers to their questions or could not direct them to the right path; students thought that advisors lacked experience and knowledge in their specific areas. A matriculated white female wrote, “Some of the advisors were not aware of the TAG program so I was told that I needed a min-minor when I did not, and it delayed my graduating by a year.” A matriculated male wrote, “In my academic advising no one made a true attempt to really help me. I could not even add a class that I needed to graduate because they said it was reserved for freshman and sophomores.”
A male alumnus perceived advisors’ lack of knowledge as a way to hinder community college transfer students from graduating in a timely manner, “Academic advisers seemed intent on prolonging my class time at UC Davis and were unorganized and unhelpful.” The same student showed how damaging this could be by further elaborating, “at times it seemed that they were more intent on keeping me from graduating.” Another alumnus who was a white male shared the same feeling, “My initial academic counselor gave me incorrect information about class prerequisites.” The same student felt that the outcome of “incorrect information” provided by advisors was a delay in graduation, “As a result I was almost delayed a year in graduation.” A Hispanic female alumna who was frustrated with the lack of knowledge of some advisors wrote, “Some academic advisers do not know how to do their job.”

The other theme that emerged in the category of “employee’s lack of training” was employees’ attitude towards students. Some students felt that employees had negative attitudes towards them and simply did not want to help them.” A matriculated Hispanic male wrote, “the front desk of Economics department is suck, I remember I went there to make an appointment to see the counselor, the jerk just give me a sheet and told me go back and don’t let me make the appointment.” Another matriculated student who was a white male expressed the same opinion, “My advisor was a dick and yelled at me for calling his office. Enough said.” A white female alumna wrote, “Advising was never clear nor helpful. Seemed as if they didn’t care about the students.” A Hispanic male alumnus added, “they were annoying, unsure, unspecific.”
The second category that emerged from this question was system flaws/needs. Students reported difficulties scheduling appointments with advisors and counselors and reported advisors’ lack of availability:

- The obstacles with academic advising would be that there were limited appointments available and some advisers do not take into account that some transfer students do struggle especially the first quarter (matriculated Asian female).
- Long wait times for academic advising (matriculated white female)
- Long lines (matriculated white female)
- I tried to visit CAPS about three or four times, but each time they were closed for a staff meeting, or unable to see me (matriculated white male)
- I tried using the tutoring center once for organic chemistry, but the session was booked past capacity for it for the first few weeks (Hispanic male alumnus)

A white male alumnus added, “Overcrowded rooms with too many students and not enough tutors. Often times in the Math Department we would overcrowd the teaching assistant’s office and have to move into a small lecture room, which was not always available.” The student further explained the problem, “Sometimes people were standing in the doorway and hallway trying to listen in on what the tutor was saying.”

Flaws in the structure of the services was demonstrated when an alumnus reported how difficult it was for them to schedule an appointment, a Hispanic female wrote “difficulties scheduling the appointments.” This student elaborated further by writing, “there are so many students wanting to get an appointment.” Students sometimes felt
rushed in their academic advising session, a white female wrote, “Sometimes I felt like I
didn’t get enough time with my academic advisors.” The same student further felt that
they rushed their work through students in general, “It felt like they were rushing through
their work with students.” The structure flaw in terms of rushing was commented on by
an alumnus Asian male, “Counselors seemed to always be in a rush and when I did get a
chance to talk to them they were just showing me the negatives.” The responses from
both matriculated students and alumni revealed the type of obstacles or difficulties they
faced when they utilized the services.

The third open-ended question was “How did you overcome the obstacles (if
any)?” Sixty-five matriculated participants and 110 alumni participants responded to this
question. Two categories emerged from the analysis: students who relied on outside
resources (friends and family members), and students who relied on themselves (tried to
educate themselves through online search). The researcher labeled the first category as
“social capital.” The advantage of social capital was reflected in students’ responses:

- Went out and talked to people other than them (matriculated Hispanic female)
- My own advising and asking other students (Hispanic female alumna)
- Talked to family and friends (matriculated female)

Alumni transfer students also depended on their peers and family for assistance. A
white female wrote, “I had family and previous friends that were really close so I
confided in them a lot.” This white female, however, acknowledged the social capital as a
privilege that other students may not have, “some don’t have this option.” An Asian male
wrote, “However, I know a lot of people are too scared to ask.”
The second category was “self-reliance.” Students searched for answers or solutions by surfing the web, trying to depend on themselves, or designing their own schedules:

- Tried doing it on my own (matriculated female)
- I had to pay for private tutors $20/hr, which is a lot of money on top of my tuition (matriculated white female explaining how she overcame inadequacy of campus tutors)

A matriculated White male wrote about the difficulty he faced with some services and how he went about overcoming the obstacles, “When advised to (get creative) after being misinformed and inappropriately advised, I spent many hours evaluating my major requirements, and sending emails and waiting outside of potential future professors’ offices trying to gain access to the courses I needed that quarter in order to graduate on time.”

Alumni students shared the same solutions:

- Self-reliance (Hispanic male alumnus)
- … by seeking out and talking to anyone with knowledge about how the system works (Asian male alumnus).
- I proactively researched things to help me be a more active student (Hispanic female alumna).

Therefore, the two major categories that emerged from the responses of matriculated students and alumni to overcome some of the obstacles were social capital and self-reliance.
The fourth open-ended question asked students “*What are some of the ways that you believe the student services provided to transfer students at UC Davis could be made more helpful?*” Sixty-nine matriculated participants and 96 alumni participants responded to the question. Three categories emerged from the analysis: (a) students expressed the need to increase the number of staff in the support services with increased knowledge in different disciplines; (b) they felt that they needed longer orientations to have details explained to them that geared towards their majors; and (c) students, especially the alumni, felt lonely and somehow out of place at UC Davis.

Increasing the number of experienced staff and accommodating longer, more convenient working hours is presented in the students’ responses.

- Sometimes advisors are not as knowledgeable regarding transfers/helping choose classes as they are to normal students (matriculated Asian female).

- If people knew more about what they were doing, it would be nice (matriculated female).

- Be nice and welcoming. I was intimidated by the size of UCD its services and size of the student body (matriculated White female).

- The hours of the student services are extremely inconvenient. There is a transfer hour once each week and this one-hour falls during the time that I have class (matriculated male).

A matriculated white male felt that students’ voices needed to be heard more by the student services program. He wrote, “Instill a review system for academic advisors that includes student’s input.”
In the second category, longer orientations geared towards students’ majors, students expressed their needs to have orientations targeted towards their own majors. A matriculated white male wrote, “Make orientation more useful, and specified. Tell chemistry majors how to get research. Our orientation leader was an economy major—a completely UNRELATED field.” A matriculated white female shared the same thought, “Have people at the orientation that are knowledgeable of all the majors.”

An Asian female felt the need for longer orientation, “Maybe have a little longer transfer orientation because it was so busy and kind of unorganized that I ended up not getting to eat a lunch that I paid for.”

The alumni’s responses to this question were slightly different. After coding alumni responses, grouping them into themes, and comparing them with the responses of the matriculated students, similar themes were found: increase the number of staff and better orientation. However, an additional recurring theme that emerged in the responses of the alumni was the need for social life on Davis’ campus. Alumni wished there had been a body of student organization for transfer students for social and emotional support.

Besides the categories of the needs for more experienced advisors and counselors, and better and longer orientation, student organizations for community college transfer students emerged as a main category in the fourth question. A white female wrote, “Have more transfer student organizations. Seems as though there is a lot of energy and effort put in for the freshman, but not the transfers.” An Asian female wrote, “When I transferred, I moved to Davis by myself and I really didn’t know anyone. My first year in Davis was really miserable, because I felt no bonding to the school and people.” The
same alumna added, “After my second year, I found out that many transfer students have felt the same way.” This student further offered a solution by writing, “Maybe making a club and having party/meeting monthly might help to help those sad transfers.”

Another white female wrote, “Probably integrating into the social community more—I mean the community of non-transfer students.” This student explained further by stating, “… because a lot of people make friends during their freshman year.” A male alumnus expressed the need for an organization for transfer students by writing, “Have a transfer lounge where there can be hangouts to get in touch with other transfers.” It is worth noting that the need for social life was mentioned more in the alumni’s responses than in the matriculated students’. Alumni transfer students indicated that they had felt lonely and needed to socialize with other transfer students; however, the feeling of loneliness did not emerge in the analysis of the question for the matriculated students as a major problem.

Alumni participants were asked a fifth open-ended question pertaining to their graduation, “Do you think that your use of any (or combination) of the following services (orientation, academic advising, tutoring, CAPS, or financial aid) played a positive role in your timely graduation from UC Davis? Please explain.” Of the 146 participants, 110 students responded to the question. This question was asked to students also in a quantitative form. Students’ responses in percentages to both questions (open-ended and quantitative) are presented in Table 31.
Table 31

Alumni’s Responses to Question Five in Both Forms in Percentages

<table>
<thead>
<tr>
<th></th>
<th>Orientation</th>
<th>Academic Advising</th>
<th>Tutoring</th>
<th>CAPS</th>
<th>Financial Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-ended Question</td>
<td>7%</td>
<td>47%</td>
<td>6%</td>
<td>12%</td>
<td>43%</td>
</tr>
<tr>
<td>Quantitative</td>
<td>45%</td>
<td>72%</td>
<td>32%</td>
<td>28%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Two categories emerged from the analysis, which on first view might seem contradictory: the services played a positive role in timely graduation, and the services held students back from graduating on time. Some students felt that the services put them on track to graduate in a timely manner. They especially valued financial aid and academic advising. A Hispanic female for example wrote, “Definitely. These resources made me feel like I was not alone in planning my classes and involving myself in the school. These resources gave me a sense of community and belonging.”

Other students had unpleasant experiences with the services either due to wrong advisement or negative attitude from advisors. A male student expressed the negativity of the services, “no they did not, and I believe that they played a large role in preventing me from graduating on time.” A Hispanic male wrote, “No. Academic advising would’ve had the opposite impact had I followed their suggestions.”

Data Analysis by Research Question

This study was guided by five research questions regarding transfer students’ GPA and timely graduation. The research questions and results of the statistical analysis are presented in this section.
Research Question One

The first research question sought to investigate if there was a relationship between transfer students’ GPAs and students’ use of the support services.

Research Question # 1: For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and GPA at their four-year institution?

The quantitative part of the survey instrument included questions about the number of times students used student services in one academic year. The correlation analysis allowed the researcher to examine any relationship between student support services and students’ GPAs.

Students’ reported use of orientation, academic advising, tutoring, CAPS, and financial aid was collected from the survey instrument. Students’ demographic status was provided to the researcher from the UC Davis database. The data were collected and analyzed using SPSS 19.0 for Mac. Appendices G and H present the correlation analysis.

The results of the correlation analysis showed positive correlation between GPA and students’ ethnicity, $p < .005$; type of orientation, $p < .005$; use of CAPS, $p < .05$; parents’ education, $p < .05$; EOP status with $p < .05$.

In general, the results suggest that students who chose the one-day orientation had higher GPAs than their peers who went to the brief orientation. Longer orientation was one of the themes that emerged from the qualitative analysis and triangulated the quantitative findings. Also, students’ whose parents went to college had higher GPAs than their peers whose parents did not attend college. White students earned higher GPAs
than their counterparts. Furthermore, students who used CAPS had lower GPAs than their peers who did not use CAPS. The analysis also showed that students’ enrollment in EOP had a negative relationship with their GPA. Students who enrolled in EOP were students who were historically underrepresented students, first generation college students, and students who came from low socioeconomic backgrounds. Students who applied to EOP were the ones who needed extra academic and social attention. Overall, the quantitative analysis revealed the importance of the services for the transfer students who enrolled at UC Davis at the time of research, and the qualitative analysis triangulated the findings.

**Research Question Two**

The second research question sought to determine if there was a relationship between students’ perception of how helpful the services were and their GPA.

*Research Question # 2:* For matriculated community college transfer students, is there a relationship between students’ perceptions of the services and current community college transfer students’ GPA at their four-year institution?

The quantitative part of the survey instrument asked students about their perception of the helpfulness of these services. The correlation analysis allowed the researcher to examine any relationship between students’ perception of the support services and students’ GPAs.

Students’ perceptions of the helpfulness of the services were collected from the survey instrument. Students’ demographic data was provided to the researcher from UC Davis database. The results of the correlation analysis showed negative correlation between GPA and helpfulness of CAPS, $p < .05$. 
In general, the results suggest that students who had higher GPA perceived CAPS not as helpful as those students with lower GPAs. Stated another way, students who had lower GPA perceived CAPS as helpful. This may mean that students who had higher GPA than their peers and perceived CAPS as unhelpful did not need the services as much as their counterparts who had lower GPA and perceived CAPS helpful to them. Even though students who perceived CAPS helpful earned lower GPA than their peers, CAPS helped retain those students on campus. It seems that CAPS has an equity function, that is, giving additional assistance to students who need it most to graduate.

The qualitative analysis revealed that students perceived academic advising and financial aid as the most helpful services. Forty-nine percent of matriculated students perceived academic advising as helpful, and 38% perceived financial aid as helpful. Furthermore, they related the services to timely graduation. The statistical analysis did not reveal such findings, but students’ perception of the academic advising and financial aid was important to understand students’ needs to succeed at UC Davis. Overall, the quantitative analysis revealed the importance of the services, especially CAPS, to matriculated students who enrolled at UC Davis at the time of research. The qualitative analysis added to the results by explaining students’ perceptions of the services. Students, who used the services and had good experiences with counselors or advisors, found the services helpful. Students who experienced difficulties with the services found the services less helpful.
**Research Question Three**

The third research question sought to investigate the strongest predictor of students’ GPA.

*Research Question # 3: For matriculated community college transfer students, which of the five support services and which demographic characteristic (gender, ethnicity, EOP) is the strongest predictor of transfer students’ GPA at a four-year institution?*

A linear regression analysis was conducted to evaluate the prediction of the GPA from the independent variables for community college transfer students and the extent to which they could explain variability in the transfer students’ GPA. The regression analysis found a relationship between the dependent variable (GPA) and a number of independent variables (GPA and type of orientation; GPA and financial aid, GPA and helpfulness of CAPS; GPA and helpfulness of tutoring; GPA and ethnicity). The findings indicated that the dependent variable was linearly related with the following independent variables (type of orientation, financial aid, helpfulness of CAPS, helpfulness of tutoring, and ethnicity).

Through the linear regression analysis of the orientation, $p < .005$, participants could experience an increase in GPA of .205 on the Lower Bound to over almost a full grade point (.962) on the Upper Bound. Furthermore, the linear regression analysis of the financial aid, $p < .05$, may explain an increase in the average GPA of participants who received financial aid from .041 on the Lower Bound to .609 on the Upper Bound. The linear regression analysis of how helpful students perceived the services, helpful of CAPS, $p < .005$, showed that the participants who perceived CAPS as helpful may
experience a decrease in their GPA from -.640 on the Lower Bound to -.165 on the Upper Bound. Furthermore, students who perceived tutoring helpful may experience an increase in their GPA from .000 on the Lower Bound, to .526 on the Upper Bound.

Longer orientation was one of the main categories that emerged in the qualitative analysis. The importance of financial aid to students and the need to longer orientation were triangulated through the qualitative analysis.

**Research Question Four**

The fourth research question sought to investigate if there were a relationship between the use of services and students’ timely graduation.

*Research Question # 4:* For graduates of a university baccalaureate program who were community college transfer students, is there a relationship between their use of the various student support services and timely graduation?

The quantitative part of the survey instrument included questions about the number of times students used student services in one academic year. The correlation analysis allowed the researcher to examine any relationship between student support services and timely graduation (two or three years). Correlation coefficients were computed among the variables. Three correlations were statistically significant with the two-year graduation: use of CAPS, transfer GPA, and TAG.

The use of CAPS had negative correlation with two-year graduation, *p* < .05 (low to medium effect size). Transfer GPA had positive correlation with two-year graduation, *p* = .005 (low to medium effect size), and TAG had positive correlation with two-year graduation, *p* < .005 (medium effect size). It is worth noting here that even though
ethnicity showed positive correlation with GPA among matriculated students, ethnicity did not show statistically significant correlation with timely graduation. None of the independent variables were statistically significant to three-year graduation. CAPS did not have a statistically significant relationship to three-year graduation.

**Research Question Five**

The last research question sought to investigate if any of the various support services predict the likelihood of timely graduation.

*Research Question # 5:* For graduates of a university baccalaureate program who were community college transfer students, which of the various support services predicted the likelihood of their timely graduation (two or three years)?

Students responded to questions about the number of times they used the services in one academic year. A binary logistic regression analysis was conducted to predict the likelihood of earning a baccalaureate degree in two and three years after transferring to UC Davis. Through the binary logistic regression analysis of the demographic variables and independent variables, it was found, \( p < .05 \), a one unit increase in transfer GPA was associated with an increase in the likelihood of earning the baccalaureate degree in two years by a factor of 12.636. The same analysis was run entering students’ use of the services in the second year after they enrolled at UC Davis. Through the binary regression analysis, it was found that a one-unit increase in transfer GPA increased the likelihood of earning the baccalaureate degree in two years by a factor of 4.122. The results were statistically significant at \( p < .05 \). Also, the likelihood of an alumnus community college transfer student who visited CAPS in the second year to graduate in
two years was 0.585. Each one-unit increase on the CAPS visit scale (two-visits) was associated with a decrease in the probability of two-year graduation by a factor .585, \( p < .05 \). None of the independent variables included in this model predicted a three-year graduation.

Even though the statistical analysis did not predict the probability of two-year graduation in relation to orientation, academic advising, tutoring, and financial aid, participants perceived these services as vehicles to timely graduation, as found in the qualitative question. Of the 146 alumni participants, 72% believed academic advising put them on track for timely graduation. 68% thought of financial aid as an important mean to timely graduation. Forty-five percent felt that orientation played an important role in their timely graduation. 32% perceived tutoring as an important service to timely graduation, and finally 28% felt CAPS played a role in their timely graduation. Students were asked the same question in the last open-ended question. Quantifying the responses of the qualitative question, students’ rates of importance of the services to their graduation were lower than their quantitative responses. In the qualitative response, 47% of alumni perceived academic advising as important to their timely graduation, 43% perceived financial aid, 7% felt it was orientation that helped them graduate on time, 6% perceived tutoring, and 12% perceived CAPS as helpful to timely graduation.

**Chapter Summary**

This chapter presented the descriptive statistics of the matriculated community college transfer students and community college transfer students who had graduated. The quantitative and qualitative data were analyzed separately, with much of the
qualitative data triangulating or elaborating on the quantitative. Linear analyses were conducted to determine the extent to which a change in the GPA could be explained by the independent variables. Binary logistic regression was conducted to investigate the likelihood of two- and three-year graduation. Qualitative responses to survey questions triangulated the data. Through the analysis of the qualitative data, it was found that students perceived academic advising as an important service to timely graduation. Those who were inadvertently misled by their academic advisors felt that the wrong advising delayed their timely graduation. Furthermore, both matriculated and alumni transfer students perceived financial aid as a vital component to baccalaureate attainment due to high cost of attending four-year institutions. Chapter Five provides a summary of the findings, conclusions of the study, recommendations, and areas for future research.
Chapter 5
SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary of the Study

The primary purpose of this study was to investigate the effect of student support services on community college transfer students’ GPA and timely graduation (within two or three years) at a four-year institution. Student support services (orientation, academic advising, tutoring, counseling and psychology (CAPS), and financial aid) were hypothesized to have a relationship with transfer students’ integration and timely graduation.

The following Five research questions guided the study:

1. For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and GPA at their four-year institution?

2. For matriculated community college transfer students, is there a relationship between students’ perceptions of the various services and GPA at their four-year institution?

3. For matriculated community college transfer students, which of the five support services and demographics (ethnicity, gender, low income, first generation college students) is the strongest predictor of transfer students’ GPA at a four-year institution?

4. For graduates of a university baccalaureate program who were community college transfer students, is there a relationship between their use of the various student support services and timely graduation?
5. For graduates of a university baccalaureate program who were community college transfer students, which of the various support services predicted the likelihood of their timely graduation (two or three years)?

The participants in this study were community college transfer students who transferred to UC Davis in 2007, 2008, 2009, and 2010. Student participants were divided into two groups: those who were still matriculated at UC Davis and those who had graduated. This study utilized two mixed method surveys to ask students about the number of times they used any of the identified student services and about their perceptions of how useful the services were. The surveys further allowed students to describe their experiences using the five support services.

This chapter presents a summary of the findings with comparisons of these results to previous research that was presented in Chapter 2. The conclusions drawn from the data, implications for institutional policy, leadership practice and future research, will be presented last.

**Discussion of Findings**

This study investigated whether there was a relationship between the perception and use of support services, and students’ GPAs (one mark of academic success) among community college transfer students. It further investigated if there was a relationship between the use of services and timely graduation (two or three years). The study further tried to identify the independent variables that most strongly predicted students’ UCD GPAs and timely graduation (two or three years). The independent variables were use of five support services and students’ perceptions of the support services. Students’ earned
GPA at UC Davis and whether they graduated in two or three years were the dependent variables.

Tinto’s retention theory (1987, 2005, 2009) and Merton’s (1957) organizational and socialization theories served as the theoretical framework for this study. Academic integration has been shown to affect whether students persisted in an institution through degree completion (Dukakis, Bellm, Seer, & Lee, 2007; Nunez & Cuccaro-Alamin, 1998; Pike & Kuh, 2005; Terenzini, 1994; Tinto, 1987). The participants’ academic and social integration were consistent with Tinto’s theory (1987, 2005, 2009) and Merton (1957).

There were statistically significant relationship between orientation and GPA, CAPS and GPA, help of tutoring and GPA, financial aid and GPA. The relationship between attending longer orientation and students’ GPA was consistent with Merton’s theory. Merton (1957) argued that it was vital for students to receive information about their new institution to successfully integrate into the new environment. One-day orientations provided students with the information needed about the receiving institution. The relationship between students’ use and perception of CAPS and their GPA; financial aid and GPA; perception of tutoring and GPA was consistent with Tinto’s integration and persistence theory. Tinto (1987) further argued that a student’s decision to stay or withdraw from the institution is driven by their social and academic integration. CAPS assisted students to integrate socially, especially students who felt out of place at the new institution. CAPS helped students who had emotional, social, or integration problems to overcome their difficulties and graduate on time. Financial aid provided community
college transfer students with access to four-year institutions. Tutoring provided students with the academic support.

Analysis of the qualitative data showed that students had strong perceptions of the importance of academic advising. Students viewed advising as a vehicle that put them on the right track to graduation. However, the analysis of the qualitative data showed that the quality of advisement affects their success. Good advisement put students on track to success and degree completion. The analysis of the qualitative data, further, triangulated the findings related to orientation, financial aid, and quality of tutoring. Data collected from student records database showed that on average matriculated students had GPA above 2.50. The alumni who responded to the survey graduated in a timely manner (two or three years). According to Tinto (1987) students’ academic and social integration will result in success and persistence and eventually graduation. Tinto (2005, 2009) argued that financial aid provides access to four-year institutions, CAPS provides social support to those who might feel out of place at the new institution, and academic advising and tutoring provide academic support. Merton (1957) emphasized the importance of orientations since they allow new members to learn about the new environment and the services provided by the new institution. Findings from this study were consistent with Tinto and Merton’s theories.

In Chapter 2, student services (orientation, academic advising, tutoring, counseling and psychology, and financial aid) were discussed because they have been shown to affect persistence to graduation. Some of the independent variables in this study were also found to have an effect on GPA and timely graduation, similar to findings of
previous research. Some of the variables in this study were not found to be statistically
significant; however, the findings from the qualitative data showed the importance of the
services, especially quality services, to community college transfer students’ success and
timely graduation. The findings for each variable will be discussed in the following
paragraphs followed by a discussion of the findings relative to the research questions.

**Findings Per Variable**

**Orientation**

The findings from the quantitative and qualitative analysis showed a relationship
between longer orientation and students GPA at UC Davis. Similar to previous research
presented in Chapter Two, this research found that attending a longer orientation had a
statistically significant positive relationship on matriculated students’ GPA at UC Davis,
with \( p < .005 \). Attending the one-day orientation rather than the brief orientation
predicted a higher GPA. Moreover, longer orientation emerged as one of the major
categories in the qualitative data analysis. A matriculated female requested longer
orientation, “Have a longer orientation to inform us more about the campus resources.” A
matriculated Asian female wrote, “Maybe have a little longer transfer orientation because
it was so busy and kind of unorganized that I ended up not getting to eat a lunch that I
paid for.” This finding is consistent with previous research. Previous research has found a
strong positive relationship between students’ attending longer and more engaging
orientations and their ultimate retention (Gass, 1990; Hollins, 2009).
**Academic Advising**

There was no statistically significant effect of academic advising neither on UCD GPA nor on timely graduation. The potential explanation could be because many students used the academic advising: 87% of matriculated students used the service in their first year, and 77% of the alumni did in the first year. Even though statistically there was no relationship between academic advising and students GPA at UC Davis or between academic advising and students’ timely graduation, the analysis of the qualitative data showed that 49% of the matriculated students perceived academic advising as an important service to their success, and 47% of the alumni reflected the importance of academic advising to their timely graduation. The alumni had also a quantitative question about their perception if the academic advising played a role in their timely graduation, and 72% of the alumni felt that academic advising played a role in their timely graduation.

Moreover, the qualitative analysis of the data showed that students who had a knowledgeable academic advisor experienced positive results. The first open-ended question asked participants about the services that was the most helpful to them and in what way. A white matriculated female wrote, “academic advising -- regarding course scheduling and graduation requirements.” A matriculated white male added, “Academic Advising. The class structure of UCD can be somewhat confusing. It was nice to be to have someone help guide class choices.” A Hispanic matriculated female commented, “academic advising to help keep me on track and plan out my classes.” An alumnus Hispanic female showed her appreciation to her advisor when she wrote, “. . . when XXX
was Nutrition Advisor, was amazing. You come in with [sic] a clue and leave with your whole two years planned out for you.” A white alumnus female wrote, “Academic advising kept me on track.” An Asian alumnus male added, “The academic advising center was able to properly guide me in selecting classes which fit my needs and interests.” Tinto (1987) argued that students are more likely to persist and graduate when they receive clear consistent information from advising centers.

On the other hand, students whose advisors lacked knowledge of the courses needed for transfer students or had negative attitude perceived academic advising as not helpful at all. A white matriculated male commented on advisor’s negative behavior by writing, “Academic advisers often act as if you are wasting their time.” A matriculated White male wrote, “My advisor was a dick and yelled at me for calling his office. Enough said.” Some students felt that low quality of advising contributed to their lack of timely graduation. A Hispanic male alumnus said, “No. Academic advising would’ve had the opposite impact had I followed their suggestions.” An alumnus Hispanic female expressed her experience with two different academic advisors,

Academic advising was very important and helpful during my undergraduate career. I transferred to UC Davis with an economics emphasis and changed it to a political science emphasis. After my second quarter, I was put on academic probation and after seeking services from my academic adviser, I focused on getting a second bachelor's degree in sociology which was my preferred degree at the time of graduation. My successful experience with academic advising in the Sociology department had a lot to due with my adviser, who was excellent. However, I had a different experience with my adviser at the political science department. My adviser didn't seem genuinely interested in my interests and goals which made me seek services only a couple times.
A Hispanic female alumna wrote,

Just make sure that everyone in the academic advising offices knows how to do their job. They should want us to graduate within two years after transferring. They should lay it out in a straightforward way, (This is what you have to take to graduate with this degree). Students are very easily influenced by people they think have knowledge or authority on a topic and suggestions to take classes that aren't "needed" are unhelpful.

The qualitative findings showed that students found that academic advising played a positive role in their successful education depending on the quality of advising they received. These qualitative findings are consistent with previous research. Metzner (1989) and Mohr, Eich, and Sedlacek (1998) concluded that quality of academic advisors was predictive of students’ retention and success. Metzner (1989) examined the effects of the perceived quality of academic advising on student attrition and found that high quality advising was positively related to greater retention. Metzner (1989) further assumed that because academic advising was one of the most used services among students, improving the quality of advising might affect a large proportion of the student body. To sum up, advisors’ approachability and the quality of advisement play an important role in transfer students’ success.

**Tutoring**

The correlational analysis and linear regression analysis did not show a statistically significant effect of use of tutoring on UCD GPA nor on timely graduation. However, the analysis showed a relationship between students’ perceptions of the tutoring services and their GPA. Matriculated students’ perceptions of the helpfulness of tutoring was statistically significant relevant to GPA. Linear regression analysis showed
that the help of tutoring variable had a significance of $p = .05$ and could explain an increase in the average UCD GPA.

Previous research stated that tutored students reported improvement in GPA (Hendriksen et al., 2005; Reinheimer & Mackenzie, 2011). This study did not show that the use of tutoring service related to students’ GPA, but it showed students’ perceptions of the services were related to GPA. In other words, students who perceived tutoring as helpful had increases in their GPA. Thus, good tutoring had a positive correlation with students’ GPA.

The analysis of the qualitative data revealed that some of the students found tutoring helpful, while others did not find it helpful either because the tutoring rooms were packed or because of the poor quality of the service. A Hispanic matriculated female expressed her experience with the tutoring center and related it to the quality of the service, “The only student service I have found helpful was the tutoring for physics. I had a great tutor for physics 7A.” The same student continued, “however, I had a different tutor for physics 7b and it was a complete waste of my time. The good tutor helped me do better on the quizzes for class.” An alumnus female wrote, “Tutoring services were not beneficial in any way because there were no tutors who knew how to help students with Biochemistry, Cell Metabolism and Function, and other difficult upper division undergrad courses.”

In summary, the results of the quantitative analysis indicated that students’ perceptions of tutoring predicted higher GPA. The qualitative analysis indicated that the
good quality of tutoring was helpful. In this instance, the qualitative data triangulated the quantitative finding.

**CAPS**

Both use and perception of CAPS had statistically significant relationship with GPA. The use of CAPS correlated with GPA, \( p < 0.05 \) (low effect size). The linear regression analysis showed that the help of CAPS could predict a decrease in GPA. Previous research showed that transfer students experienced “transfer shock” in the process of transitioning at four-year institutions (Cejda, 1997; Diaz, 1992; Hills, 1965; Ishitani, 2008). Transfer shock occurred when transfer students experienced a dip in their GPAs. It was possible that students who utilized the CAPS services experienced transitional difficulties, and therefore their GPA was lower than their peers. A matriculated Asian female wrote, “CAPS was extremely helpful for me because my first transfer year here was difficult for me to adjust to and just having that extra support really made a difference.” A matriculated white male expressed his difficulty into transitioning into UC Davis, “CAPS was highly helpful because it made dealing with the change difficult. The quarter system is incredibly difficult and crams a lot in.” A white female alumna wrote, “CAPS helped me remove the stress I had while I was at UC Davis.” And an Asian female alumna wrote, “CAPS helped me deal with transferring to a new school, place, and allowed me to explore old issues.” Students’ responses illustrated the importance of CAPS to ease students’ transition to UC Davis and help them integrate into the new environment. A female alumna wrote, “CAPS enabled me to deal with multiple situations that might have made it impossible for me to graduate had I not received help.”
This finding is similar to what has been found in previous research. Turner and Berry (2000) found that 70% of students who sought help at the counseling center reported that their personal problems affected their academic grades and performance. The students reported that counseling helped them personally and academically. Turner and Berry further reported that 60% of students who received counseling reported that counseling had helped them to maintain or improve their academic performance. Turner and Berry (2000) commented, “Counseling centers need to be encouraged to take an active and leading role in assessing the value of their services and their potential contributions to reducing the number of students who leave college due to personal difficulties” (p. 634).

Previous research reported that the largest incremental gains of student retention occurred within the first six counseling sessions, and any additional session had little impact on increasing persistence (Wilson & Mason, 1997). This research found that the likelihood for an alumnus community college transfer student who visited CAPS in the second year to graduate in two years was 0.585. Each one-unit increase on the CAPS visit scale (two-visits) decreased the likelihood of two-year graduation by a factor \(0.585, p < .05\). However, there was no statistically significant effect of the use of CAPS on three-year graduation. Students who used CAPS in the first two years of their enrollment at UC Davis and did not graduate in the second year, graduated in the third year of their enrollment. This suggests that the services of CAPS were able to retain students on campus till they graduated in the third year. Thus, one could conclude that there was a positive indirect relationship between the use of CAPS and three-year graduation.
Financial Aid

The financial aid variable had a statistically significant relationship on matriculated students’ UCD GPA. Financial aid had a significance of $p < .05$ and could explain an increase in the average GPA of participants who received financial aid. Similar to findings in previous research, a statistically significant relationship between financial aid and timely graduation was not found. Dowd (2004) found that financial aid and loans had a positive effect on persistence, but not on baccalaureate attainment. Desjardins et al. (2002) and Stratton et al. (2007) found a strong relationship between financial aid and persistence. The authors in these studies argued that financial aid indirectly promoted degree attainment by increasing retention.

The analysis of the first qualitative question in this study found that 36% of matriculated students perceived financial aid helpful to them, and believed that they could not have afforded their education at UC Davis if it was not for financial aid, and 45% of the alumni shared the same feeling by stating that they could not have afforded the UC Davis education if it was not for financial aid. A matriculated white male wrote, “Financial Aid. Without financial aid, I would not have been able to afford to attend UC Davis.” Another matriculated white male showed the role financial aid played in his decision to matriculate to four-year institution, “Without financial aid I would not have been able to attend UC Davis. Financial aid was a large factor in my decision to go to UCD and has allowed me to afford a post-secondary education.” A matriculated Asian female wrote, “There's no way I can afford the expenses spent while studying in UCD
without financial aid.” Students’ responses indicated that financial aid helped students persist at UC Davis.

Furthermore, the quantitative analysis showed that about 68% of alumni felt financial aid played a role in their timely graduation, and the qualitative analysis showed that 43% of alumni perceived that financial aid played a role in their two-year graduation. An Asian female wrote, “Financial aid because without it I wouldn't be able to attend UC Davis.” An alumnus white male showed his gratitude to financial aid, “If it weren't for financial aid I definitely wouldn't have made it to graduation.” Since financial aid reduced the cost associated with obtaining a degree, financial aid positively influenced students’ decision to enroll at four-year institutions. From the analysis of both quantitative and qualitative data, one could conclude that financial aid had a direct relationship to students’ GPA, persistence, and it had an indirect relationship to students’ timely graduation.

**EOP**

EOP was used as a proxy for first generation college students, minorities, and students from low socioeconomic status. This study showed a negative correlation of EOP enrollment and GPA, with \( p < .05 \). However, running the linear regression analysis, EOP did not predict GPA. Even though students who were enrolled in EOP had slightly lower GPA than their counterparts who did not enroll in EOP, both groups of students had average GPAs higher than 3.00. Of the alumni participants, there were 22 EOP participants. All the 22 participants graduated in a timely manner (two or three years).
The data seemed to support the fact that the EOP program at UC Davis was successful at assisting students who may need extra help.

**Ethnicity**

Ethnicity had statistically significant relationship with UCD GPA; however, ethnicity did not show a statistically significant relationship with timely graduation. There was a statistically significant effect of ethnicity on UCD GPA, with $p < .005$, among current students. Even though white students had higher GPA than their counterparts, all groups (white, Asian/Asian American, Hispanic/Latino, and other) earned a GPA of 2.50 or higher. Two-year graduation within each ethnicity was 76% white, 76% Hispanic/Latino, 70% Asian, and 60% other. All remaining students, except for four, graduated in the third year of enrollment at UC Davis. Of the four remaining students who graduated in the four year after enrollment at UCD, two were white, one Hispanic/Latino, and one other. Timely graduation in this study has been defined as two or three year graduation. The findings from this study showed that alumni who responded to this survey graduated in a timely manner regardless of their ethnicity. This finding in this research somewhat contradicts the research of Hoachlander, Sikora, Horn, and Carroll (2003) who found white students graduated at higher rate than other racial groups. One could conclude that even though ethnicity had a relationship with GPA, it did not show a statistically significant relationship to timely graduation. However, this study surveyed students who had graduated and it is unknown to the researcher if there were students within the same cohort left the university without graduating.
Transfer GPA

Similar to previous research, transfer GPA had a statistically significant positive affect on two-year graduation among alumni students. A one-point increase in transfer GPA was associated with an increase in the odds of earning the baccalaureate degree in two years by a factor of 4.587. This is similar to a finding by Wang (2009) that the likelihood of community college transfer students attaining a baccalaureate degree was significantly associated with grade point average earned from community colleges. Laanan (2007) found that students who performed well academically and who had intellectual self-confidence and high self-concept in their intellectual ability experienced less difficulty adjusting to the four-year institution compared to their counterparts. The survey did not include a qualitative question on GPA.

Findings in Relation to the Research Questions

Research Question One: For matriculated community college transfer students, is there a relationship between the use of the five support services (orientation, academic advising, tutoring, CAPS, and financial aid) and GPA at their four-year institution?

Orientation and type of orientation was an important factor in students’ GPA at UC Davis. There was statistically significant difference in GPA between students who went to the one-day orientation and those who went to the brief orientation. This is consistent with Hollins’ (2009) conclusion that orientation could increase students’ GPA and retention rate. Merton (1957) has further argued that orientations ease students’ transition into the new institutions and familiarize them with new programs and services available to them.
Moreover, the results from the correlation analysis showed that students who used CAPS and perceived it helpful had lower GPA than those who did not. Students who used the CAP services were students who needed the services and needed assistance in some way. Previous research has indicated that students who have personal or psychological problems are at risk of dropping out (Gallassi & Gallassi, 1973). Tinto (2005) suggested that counseling might offer social support to students who might find themselves out of setting in the new institution. Furthermore, studies have shown that transfer students experienced a dip in their GPAs because they might find difficulty adjusting to the new environment of the four-year institutions (Cejda, 1997; Diaz, 1992; Hills, 1965; Ishitani, 2008). It was possible that students who utilized the CAPS services experienced transitional difficulties, and therefore their GPA was lower than their peers.

However, it is important to keep in mind that despite the lower GPA of the students who used CAPS, in the sample of matriculated transfer students, participants who utilized the CAPS services persisted at UC Davis. On average, students who did not use CAPS earned slightly higher GPA than those who did. Yet, the GPA average for both group was higher than 2.50. Additionally, the qualitative analysis revealed how CAPS helped students transition and integrate into the new institution. Students who sought the services of CAPS persisted at UC Davis. A matriculated Asian female wrote, “CAPS was extremely helpful for me because my first transfer year here was difficult for me to adjust to and just having that extra support really made a difference.” A matriculated White male shared the same thought, “CAPS was highly helpful because it made dealing with the change difficult. The quarter system is incredibly difficult and crams a lot in.”
Students’ enrollment at EOP had a negative correlation with their GPA at UC Davis. EOP served as a proxy for first generation college students, minorities, and students from low-income backgrounds. Even though EOP students had lower GPA than their peers, both groups earned a GPA higher than 2.50. Finally, parents’ education had a positive correlation with matriculated transfer students’ GPA. Those whose parents had a college degree had higher GPA than first-generation college students. The potential explanation for this correlation is that students whose parents had college degrees were better able to navigate the system of higher education and might had the benefit of social and academic capital. On average, both groups had GPA higher than 2.50.

Research Question Two: For matriculated community college transfer students, is there a relationship between students’ perceptions of the services and GPA at their four-year institution?

The correlation table showed statistically significant relation between students’ perceptions of CAPS and their GPA. Quantifying the qualitative results in the first open-ended question, it was found that 15% of matriculated students found orientation helpful, 49% perceived academic advising helpful, 9% reported tutoring helpful, 13% found CAPS helpful, and 38% perceived financial aid helpful.

While there was no statistical question about students’ perceptions of orientations, longer orientation emerged as a main category in the last open-ended question. The last open-ended question asked students about ways to improve the various services. Students requested longer orientations that are geared toward their majors. Thus students perceived orientations important as it introduced them to their new environment. A white female
wrote, “reconfigure orientation either make several shorter sessions where there is more
direction or make it longer.” Another matriculated female wrote, “I feel like during
orientation, advisors should enlighten students that the workload will be heavier than the
workload at the community college.” A white female wrote, “I think it would be more
helpful if students are informed more about the services available to them. Maybe
provide a quick cheat-sheet of all the services in transfer orientation.” This finding is
consistent with previous research. Previous research has found a strong positive
relationship between students’ attending longer and more engaging orientations and their
ultimate retention (Gass, 1990; Hollins, 2009). Merton (1957) argued that orientations
ease students’ transition into the new institutions and familiarize them with new programs
and services available to them.

There was no statistically significant effect between academic advising and
students’ GPA at UC Davis. However, the analysis of the qualitative data showed that
students perceived a positive relationship between the quality of advisement and their
success. The first open-ended question asked participants about the services that was the
most helpful to them and in what way. Students perceived academic advising as helpful
pending on its quality. A white matriculated female wrote, “academic advising --
regarding course scheduling and graduation requirements.” A matriculated white male
added, “Academic Advising. The class structure of UCD can be somewhat confusing. It
was nice to be to have someone help guide class choices.” A Hispanic matriculated
female commented, “academic advising to help keep me on track and plan out my
classes.” On the other hand, students whose advisors lacked knowledge of the courses
needed for transfer students or had negative attitude perceived academic advising as not helpful at all. A white matriculated male commented on an advisor’s negative behavior by writing, “Academic advisers often act as if you are wasting their time.” A matriculated White male wrote, “My advisor was a dick and yelled at me for calling his office. Enough said.” Tinto (1987) argued that students are more likely to persist and graduate when they receive clear consistent information from advising centers. The qualitative finding is consistent with previous research. Metzner (1989) and Mohr, Eich, and Sedlacek (1998) concluded that quality of academic advisors was predictive of students’ retention and success.

There was no statistically significant effect between students’ perception of tutoring and their GPA at UC Davis. However, the analysis of the qualitative data revealed that students found tutoring helpful depending on its quality. A Hispanic matriculated female had a positive and good quality experience with the tutoring center and felt that tutoring helped her pass Physics 7A class, but she did not have the same experience with the tutor of Physics 7B, “however, I had a different tutor for physics 7b and it was a complete waste of my time.” While previous research reported that tutored students reported improvement in GPA (Hendriksen et al., 2005; Reinheimer & Mackenzie, 2011), this study found that the quality of tutoring may increase students’ success. Tinto (2005) argued that tutoring and study group are forms of academic support that are so important and may impact students’ persistence and success at the four-year institution.
This study found statistically negative correlation between students’ perception of CAPS and their GPA. Previous research showed that transfer students experienced “transfer shock” in the process of transitioning at four-year institutions (Cejda, 1997; Diaz, 1992; Hills, 1965; Ishitani, 2008). Transfer shock occurred when transfer students experienced a dip in their GPAs. Tinto (2005) argued that CAPS may offer social support for students who might have difficulties adjusting to the new environment or feel out of place. It was possible that students who utilized the CAPS services experienced transitional difficulties, emotional problems, or even personal issues, and therefore their GPA was lower than their peers. A matriculated Asian female wrote, “CAPS was extremely helpful for me because my first transfer year here was difficult for me to adjust to and just having that extra support really made a difference.” A matriculated white male expressed his difficulty into transitioning into UC Davis, “CAPS was highly helpful because it made dealing with the change difficult. The quarter system is incredibly difficult and crams a lot in.” This finding is similar to what has been found in previous research. Turner and Berry (2000) found that 70% of students who sought help at the counseling center reported that their personal problems affected their academic grades and performance. The students reported that counseling helped them personally and academically. Turner and Berry further reported that 60% of students who received counseling reported that counseling had helped them to maintain or improve their academic performance. They further commented, “Counseling centers need to be encouraged to take an active and leading role in assessing the value of their services and
their potential contributions to reducing the number of students who leave college due to personal difficulties” (p. 634).

Even though there was no statistically significant correlation between financial aid and students GPA at UC Davis, the analysis of the qualitative data in this study found that 36% of matriculated students perceived financial aid helpful to them. Matriculated students believed that they could not have afforded their education at UC Davis if it was not for financial aid. Tinto (2005) added that for some families and students attending a four-year institution was restricted by their financial constraints. A matriculated white male wrote, “Financial Aid. Without financial aid, I would not have been able to afford to attend UC Davis.” Another matriculated white male expressed how his decision to matriculate to four-year institution was impacted by financial aid, “Without financial aid I would not have been able to attend UC Davis. Financial aid was a large factor in my decision to go to UCD and has allowed me to afford a post-secondary education.” A matriculated Asian female wrote, “There's no way I can afford the expenses spent while studying in UCD without financial aid.” Students’ responses indicated that financial aid provided community college transfer students with access and helped them persist at UC Davis. This finding is persistent with previous research. Dowd (2004) found that financial aid and had a positive effect on persistence. Desjardins et al. (2002) and Stratton et al. (2007) found a strong relationship between financial aid and persistence.

*Research Question Three: For matriculated community college transfer students, which of the five support services and which demographic characteristics (gender, ethnicity, EOP) is the strongest predictor of transfer students’ GPA at a four-year institution?*
The student demographic variables were included in the model when analyzing the data to answer the third research question. Correlation analysis showed a strong positive correlation between one-day orientation and students’ GPA at UC Davis. The linear regression analysis showed that one-day orientation predicted students’ GPA at UC Davis. This finding is consistent with previous research. Previous research found that orientations were important to students because they helped students socialize and integrate into the new institution (Gass, 1990; Hollins, 2009). In the analysis of the qualitative data, longer orientation emerged as an important category in the analysis. A white male alumnus wrote, “Transfer orientation was probably the biggest motivator, it gave an opportunity to talk to students who had time to experience and get used to get the school.” A matriculated female wrote, “Have a longer orientation to inform us more about the campus resources.” An Asian matriculated female also wrote when asked about ways to improve student services, “. . . a longer orientation.” Students perceived orientation important to their integration and asked for longer orientation. Orientations are important because they provide students with information needed about the receiving institution (Metron, 1957; Tinto, 1987).

Students found financial aid an essential service to afford the cost of higher education. This finding is persistent with previous research. Dowd (2004) found that financial aid and had a positive effect on persistence. Desjardins et al. (2002) and Stratton et al. (2007) found a strong relationship between financial aid and persistence. Tinto (2005) argued that financial aid provided students with access to four-year institutions. He further argued that financial aid alone was not enough; students needed social and
academic support as well. Financial aid was found to be one of the positive predictors of GPA at UC Davis. Students who took financial aid were able to achieve slightly higher GPA than their peers. In the regression model that included demographic and use of service variables, financial aid and type of orientation predicted students GPA and explained 21% variability in UCD GPA, holding all other variables constant. The effect size was large.

Moreover, students who perceived tutoring helpful earned higher GPAs than those who also used the services but perceived them as not helpful. A potential explanation for this result is that students who had knowledgeable tutors in the tutored subject were able to benefit from the service and that was reflected on their GPA. Reinheimer and Mackenzie (2011) found that tutoring had positive impacts on students’ persistence, retention, and degree attainment by enhancing students’ chances of becoming more academically and socially integrated. This study found that helpful tutoring was a predictor of higher GPA. Analysis of the qualitative results triangulated this finding. Students reported different experiences with the tutoring service and viewed the service helpful depending on their perception of the quality of the service. A Hispanic matriculatd female expressed her experience with the tutoring center and related it to the quality of the service, “The only student service I have found helpful was the tutoring for physics. I had a great tutor for physics 7A.” The same student continued, “however, I had a different tutor for physics 7b and it was a complete waste of my time. The good tutor helped me do better on the quizzes for class.” So, quality of tutoring was a predictor of students’ GPA.
Ethnicity was a predictor of GPA in this study. When comparing GPA among ethnicities, on average, White students earned the highest GPA, 3.29, and on average, Hispanic/Latino students earned the lowest GPA, 3.03. Even though Hispanic/Latino earned the lowest GPA among the ethnic groups, on average, their GPA was higher than 3.00.

Finally, this study found that students who perceived CAPS helpful also had lower GPA than their peers. The potential explanation for this finding was that students who found CAPS helpful needed counseling. Furthermore, perhaps students’ GPA had decreased prior to visiting CAPS because they might had difficulty adapting to the new environment, might had personal problems, or had experienced transfer shock. This implied that CAPS assisted students who needed counseling and was able to retain them on campus. Tinto (2005) pointed out the importance of CAPS for students’ social integration, especially for those who felt that they did not fit into the new environment. A matriculated Asian female emphasized the role CAPS played in helping her adjust to the new environment, “CAPS was extremely helpful for me because my first transfer year here was difficult for me to adjust to and just having that extra support really made a difference.” This finding is consistent with previous research. Previous research found that students who engaged in counseling experienced greater retention. Students who sought counseling persisted at higher rates than their peers who did not (Turner & Berry, 2000; Wilson & Mason, 1997). Turner and Berry (2000) reported that 70% of students who sought counseling said that their personal problems affected their grades and academic performance, and CAPS helped them solve their problems. In the regression
model that included demographic and perceptions of various services, ethnicity, help of tutoring and help of CAPS predicted students GPA and explained 14% variability in UCD GPA, holding all other variables constant. The effect size was moderate.

*Research Question Four: For graduates of a university baccalaureate program who were community college transfer students, is there a relationship between their use of the various student support services and timely graduation?*

The correlation table showed a statistically significant negative relationship between use of CAPS and two-year graduation, \( p < .05 \). Some of the students who had emotional, social, or transition problems may not graduate in two years. However, there was no statistically significant evidence of use of CAPS and three-year graduation. Students’ transfer GPA had a positive correlation with two-year graduation, \( p = .005 \). Students’ enrollment in TAG also had a positive correlation with two-year graduation, \( p < .005 \). Moreover, there was a positive correlation between the use of CAPS and use of tutoring and a positive correlation between financial aid and EOP. The correlation table also showed a negative correlation between transfer GPA and use of CAPS, transfer GPA and use of tutoring, and financial aid and parents’ education. The potential explanation could be that students who transfer with higher GPA could adapt to the environment of the receiving institution faster than their peers who transferred with lower GPA. Thus they utilized CAPS and the tutoring service less than their peers did. This is consistent with findings from previous research. Laanan (2007) found that students who performed well academically and had intellectual self-confidence and high self-concept in their intellectual ability experienced less difficulty adjusting to the four-year institution.
compared to their counterparts. Furthermore, the higher the education of parents was, the less likely students were to use financial aid.

Even though there was no statistically significant relationship between the use of academic advising, use of tutoring services, orientation, and financial aid, and students’ timely graduation, quantifying the qualitative question about students’ perceptions of the relationship between their use of the services and their timely graduation revealed some relationship. Of the 110 responses, 47% perceived academic advising as vital to their timely graduation, 43% thought it was financial aid, 12% felt CAPS assisted in their timely graduation, 7% reported it was orientation, and 6% perceived tutoring as a service that played a role in their timely graduation. An Asian female alumna wrote, “Yes. Without CAPS I wouldn't have been able to treat an illness which severely hindered my academic ability. Without academic advising I wouldn't be certain what courses to take in order to graduate quickly.” A white male alumnus commented on the various services, “Yes, academic advising kept me on track to graduate on time. Tutoring kept me actively involved in my education. Student loans and financial aid reminded me that I was paying gobs of money for a college education, and that I desired a timely graduation to save money. CAPS would have helped if I knew where the building was...” A White female alumna wrote, “Academic advising help me plan my schedule so that I could graduate on time.” Another White female alumna wrote, “yes. Without the right advising, I might have stayed longer than 2 years and the only person I could pay for school is with financial aid.” A Hispanic female alumna wrote, “Yes, it was so helpful that I didn't have to worry about financial burdens, so being kept in the loop about my finance was great.
Academic advising overall helped me take the classes I wanted and allowed me to graduate in the time I wanted.” A white female alumna showed her appreciation to various support services, “The use of tutoring and advising helped me in my graduation because it gave me goals and ways to obtain them. I have the personality where i need goals and i am determined to obtain them. CAPS helped smooth out some of the emotional rolls i experienced and made it more pleasant.” An Asian female alumna commented on the tutoring service, “Sort of, the thing that help a lot was the tutoring classes for the hard classes.” A white female alumna added, “yes, tutoring played a key role on being able to succeed in classes and move on.” A Hispanic female alumna wrote, “Tutoring and financial aid definitely help keep me on a steady path to graduate in 2 years.” A white male alumnus appreciated all of the support services wrote, “Absolutely, without Orientation, Advising, and financial aid I would not have been able to attend and graduate from UC Davis.” A white female alumna commented on the importance of financial aid to her graduation, “Yes- I probably would have taken less units or dropped out entirely had I not had financial aid in my second year.” Students’ responses are consistent with Merton (1957) and Tinto (1978, 2005, 2009). Students need financial aid for access and persistence. They further needed the various support services for academic and social success to complete their degrees and graduate.

When students were asked the same question quantitatively, they ranked the services higher in terms of their perceptions of the services to their timely graduation. Of the 146 alumni, 72% believed that academic advising put them on track for timely graduation, 68% perceived financial aid an important service to timely graduation, 28%
believed it was CAPS, 45% reported orientation, and 32% perceived tutoring as important to timely graduation. The qualitative data revealed how students perceived and related the various services to their timely graduation.

Research Question Five: For graduates of a university baccalaureate program who were community college transfer students, which of the various services predicted the likelihood of their timely graduation?

The binary logistic regression model included student demographic variables and students’ use of the five services when analyzing the data to answer the last research question. Transfer GPA increased the odds of timely graduation among community college transfer students. The findings from the logistic regression analysis showed that a one unit increase in transfer GPA increased the likelihood of two-year graduation by a factor of 12.636, \( p < .05 \).

The same analysis was run entering data on students’ use of the services in the second year after they enrolled at UC Davis. It was found that a one-unit increase in transfer GPA increased the likelihood of earning the baccalaureate degree in two years by a factor of 4.236. The results were statistically significant at \( p < .05 \). Thus a transfer student who transferred with high GPA had increased likelihood of two-year graduation in the first year after transfer by a factor of 12.636. However, this likelihood of timely graduation decreased in the second year to a factor of 4.236. Transfer GPA did not predict three-year graduation. We can conclude that transfer GPA could have a relationship to two-year graduation, but it loses its correlation if a transfer student stays longer than two years at the receiving institution.
In addition, the regression analysis showed that for every-one unit increase in visits to CAPS in the second year after transfer, there was a decrease in the likelihood of earning the baccalaureate degree in two years by a factor of .585, \( p < .05 \). However, this relationship did not show in the analysis of the three-year graduation. The potential explanation for this relationship was that CAPS retained students on campus and indirectly helped them graduate in three-years (timely manner).

The potential explanation to the likelihood of decreased two-year graduation among students who used CAPS is that when students have emotional, social, academic, or psychological challenges, they may need extra time to graduate. Previous research found a positive relationship between counseling and student retention (Turner & Berry, 2000; Wilson & Mason, 1997). Nevertheless, the impact of counseling on baccalaureate attainment or timely graduation as defined in this study (two to three years) was not examined.

Even though the logistic regression analysis showed that students’ use of CAPS in the second year was a predictor of a decreased likelihood of graduation within two years, there were no statistically significant findings in three-year graduation between students who sought CAPS and those who did not. Since students using CAPS persevered for two years, and the difference between transfer students who used CAPS and those who did not disappeared in the third year, the implication of this finding is that CAPS indirectly helped students graduate from UC Davis in three years. The qualitative analysis showed how helpful CAPS was to alumni students. A white female alumna expressed how CAPS assisted her at UC Davis, “CAPS helped me remove the stress I had while I was at UC
Davis.” An Asian female alumna wrote, “Caps was helpful dealing with a stressful time, wouldn't have gotten through school without it.” Another female alumna wrote, “CAPS for the emotional difficulties from being a transfer student.” A White male alumnus wrote, “CAPS, because i was very stressed and they helped me put things into perspective.” This finding aligns with Tinto (1978, 2005, 2009) and Merton (1957) arguments about the various support services.

**Implications for Institutional Policy**

In this study, GPA marked the degree of academic success. When students fully integrate into academic life, they are more likely to persist and graduate (Tinto, 1987; Morton, 1957). Results from this study showed that transfer students who participated in one-day orientations had higher GPAs than those who participated in the brief orientation. The one-day orientation could explain a positive change in GPA from .221 (on the Lower Bound) to almost a full grade point (.985 on the Upper Bound). Financial aid explained a positive change in GPA from .041 (on the Lower Bound) to more than half a grade point (.609 on the Upper Bound). Also, tutoring had a direct impact on students’ GPA when it was helpful and explained a positive change in GPA up to .526.

A one-point increase in transfer GPA was associated with an increase in the probability of earning the baccalaureate degree in two years by a factor of 12.636, holding all other independent variables constant. Thus, for every increase of one-point in transfer GPA, an alumnus transfer student was 12.636 times as likely to graduate in two years. The results were statistically significant at $p < .05$. The effect of transfer GPA had a reduced predictability in the second year after enrollment at UC Davis, to a factor of
4.236. Also for every one unit decrease in CAPS visits, a community college transfer students was .585 times as likely to graduate in two years. These findings from this study have important implications for students and four-year institutions.

 Recommendation One: Enhance longer orientations and offer multiple orientation interventions for transfer students in their first quarter/semester.

 Orientations are the first contact transfer students have with the receiving institutions. Students’ early experiences affect their outcomes. Furthermore, orientation goals include orientating students into the new environment and helping them integrate academically and socially. The findings from this study shows that orientations may have long term impacts on community college transfer students when students are integrated academically and socially. Hollins (2009) found that students who participated in multiple orientation interventions were retained from fall to spring. This study also showed that longer orientations had longer-term impacts by positively affecting students’ GPA. A matriculated female who found values in orientation wrote, “Orientation was helpful, but could be extended into a two-day program so that students have a chance to absorb information instead of trying to cram everything in one day.”

 Recommendation Two: Educate transfer students about the support services available to them.

 According to Tinto (1987), persistence and degree completion occur when students integrate into the receiving institution socially and academically. Higher institutions play an important role in students’ social and academic integration. However, students need to be informed of the services. In the open-ended questions, some students
expressed their lack of knowledge about student services in their first year and wished they had known about them. A white female alumna said, “I didn't even know you existed until my last quarters at Davis.” Another alumnus who was a Hispanic male expressed his lack of knowledge about orientation, “I was never told anything about orientation.” A white male alumnus wrote, “I had no idea until taking this survey that there were tutoring services available.” A white matriculated female wrote, “more advertisement—I hardly knew a lot of resources were available until my final year.” A matriculated Hispanic female wrote, “I didn't know they existed.” Because academic advising is the most used service among students, academic advisors at both two- and four- year institutions should educate transfer students about support services available to them at receiving institutions and encourage them to seek assistance when needed.

Recommending Three: Assess and improve the quality and quantity of support services.

The analysis of the qualitative data showed that students had both positive and negative experiences with the support services. Students perceived their experiences as positive when they had knowledgeable advisors who answered all the questions, and when they were able to schedule appointments with ease. Students perceived their experiences with the support services negatively when they had advisors who were not sure of the requirements, or were not able to answer their questions. “Access without support is not meaningful opportunity” (Tinto, 2005).

Collecting and maintaining data is vital to inform programmatic and policy decisions and to ensure efficient use of limited resources. It is important to monitor the impact of support services on student success and completion. When students were asked
about ways to improve the services, a matriculated white male wrote, “Instill a review system for academic advisors that includes student’s input.” Another matriculated white male wrote, “Respect, perhaps.” Another matriculated white male wrote, “My advisor was a dick and yelled at me for calling his office. Enough said.” A white male alumnus expressed his frustration because of the lack of available advisors, “Not enough advisors for the amount of students in my major.” Furthermore, students perceived support services negatively when the services had long lines, the operating hours were inconvenient, and when students experienced difficulties scheduling appointments.

One step to improve the services to better serve students would be to evaluate the services at two levels: structure (hour of operation and wait lines) and personal (attitude, and how well the staff at the support services are trained in their designated areas). An Asian female alumna wrote, “Hire nicer people.” Another female Asian alumna wrote, “The services could be open more hours.” It is vital to train advisors, counselors, and staff to develop willingness and skills to support students, especially transfer students. To ensure day-to-day integrity of the intervention services, sessions including tutoring, academic advising, and CAPS need to be evaluated continuously. Support services need to promote their work to advocate for additional staffing and budget in order to support high quality programs.

**Implications for Campus Leadership**

Administrators at the highest levels should include the education of transfer students in the campus mission. Furthermore, a welcoming environment needs to be created for community college transfer students:
• Community college transfer students’ success and timely graduation need to be included in the university’s mission statement.

• Community college transfer students need as much attention and use of services as freshmen do. Even though they have been in colleges before, they still need to use various support services.

• Offer transition classes for community college transfer students to ease the process of adapting to the new institution.

• Establish a “club” for transfer students to allow them to meet other transfer students.

• Monitor and assess the experiences of community college transfer students.

• Encourage collaboration between the various support services, especially CAPS. In this research, CAPS played an important role in students’ success and timely graduation. It is important for CAPS to collaborate with academic advising and tutoring services to increase the success of community college transfer students and their timely graduation.

Finally, receiving four-year institutions need to understand that there are obligations to bringing community college transfer students to their campuses. These obligations might include assessing their various support services and how the various services fit into and meet community college transfer students’ needs.

Terenzini (1994) indicated that support services had to be flexible and open to changes to accommodate the diverse needs of diverse students. “The burden of responsibility for taking advantage of transition support mechanisms cannot rest with the
student alone” (Terenzini, 1994, p. 72). Rosembaum, Del-Amen, and Person (2006) commented that higher education should “shift the burden of information from students to advisors, who take responsibility for assuring student progress … Mandatory frequent advising … could have the valuable benefits of keeping students on the right track and catching their mistakes early” (p. 241).

Even though California is going through difficult fiscal times, policy makers need to recognize that student support services (orientation, academic advising, tutoring, CAPS, and financial aid) provide the social and academic capital to community college transfer students to successfully navigate four-year institutions. Providing continuous funding to these services, despite the difficult economic times, is critical to students’ degree attainment. A Hispanic female alumna wrote, “Jobs without an education don't pay enough to support the cost of living.” A four-year college graduate earns nearly $1 million more over his/her working life than does a high school graduate, and about $500,000 more than a two-year college graduate (College Board, 2007). Higher individual income translates into increased tax revenues. Investing in community college transfer students today will ultimately pay off and benefit the economy of California. Today’s support services consumers are tomorrow’s taxpayers.

**Recommendations for Future Research**

The results of this study suggest several directions for future research about the success of transfer students. Recommendations for future research include (a) the use of alternative research design; (b) the impact of general institutional environments on community college transfer students; (c) the impact of transfer agreement guarantees
(TAG) or transfer/articulation agreements on timely degree graduation; and (d) the impact of support services on EOP students’ timely graduation.

**Recommendation One: The Use of an Alternative Research Design**

Use of alternative research designs should be explored. A longitudinal research design could be utilized to determine if there are changes in community college transfer students’ academic and social integrations during their first year at UC Davis.

Longitudinal research designs also allow researcher to follow transfer students over time to determine if there are significant changes in academic and social integrations and timely graduation among community college transfer students. Also, a longitudinal study may capture if students’ academic or social experiences are mediated by their race/ethnicity and gender. Furthermore, future studies may include interviews with transfer students to generate an in-depth analysis of students’ experiences with the support services.

A qualitative study allows for an understanding of the various nuances of support programs. A qualitative study might investigate the reasons counselors and advisors lacked knowledge in some areas and reasons for their occasional frustration with students. Future research may focus on CAPS. CAPS proved to be a statistically significant predictor of students’ GPA and timely graduation. Perhaps future studies could investigate the impact of CAPS from students’ perspectives as well as from the perspectives of the CAPS counselors, particularly in regard to some of the reasons students seek CAPS’, and the steps counselors take to help them. Finally, future studies might capture students who were not successful at UC Davis. Participants in this study
(matriculated and alumni) demonstrated success at UC Davis. Current transfer students earned GPAs higher than 2.0, and alumni transfer students graduated in a timely manner (two or three years). Thus, this study does not capture the experiences of transfer students from community colleges who entered a baccalaureate program at UC Davis but did not finish it.

**Recommendation Two: The Impact of General Institution Environment on Community College Transfer Students**

Future research could include an exploration of how transfer students experience the receiving four-year institution: if they felt welcomed, if they found a sense of belonging, and if they experienced a sense of community. A white female alumna wrote, “More support from the counselors, and more friendly/welcoming office staff and counselors.” Another alumna, who was a Hispanic female who felt unwelcomed at UC Davis wrote, “By somehow getting students to feel more comfortable or open to making use of those services.” The same student compared her experience at UC Davis with the community college support services’ staff, “That was my biggest (personal) trouble at Davis, but I didn’t have that in my junior college. Might have just been the smaller scale and friendlier staff.” A white female alumna wrote about obstacles she faced,

One obstacle I encountered was one that every student faces with a new environment ... making friends and finding their way. At this level it is very difficult because you need to keep your grades up as well as your social skills so you can function in society. Finding things to do outside of classes isn't hard, it was finding it within myself to grow. UC Davis does a great job of offering a variety of activities, but needs to advertise and be a little more hands on with the transfers. We come from very small schools and are very intimidated. It takes a lot of emotional strength for the transition.
A Hispanic female alumna thought that she faced only one obstacle, “The one (obstacle) was really to make friends. I found that it was more difficult for transfer students to make friends because everyone who came in as freshmen already had their group of friends.” An Asian male alumnus expressed his perception of the environment by asking for information about how transfer students meet. This student wrote, “Send transfer students weekly updates with clubs and services that they could attend to meet other transfer students.” A matriculated female wrote, “More transfer students being introduced to other transfer students as well as more info about the campus and services available.” It is notable that these sentiments were more often expressed by alumni than by matriculated students. It is possible that the university has instituted some strategies for increasing the avenues for integration into the social life of the campus for transfer students. Such strategies would be important and should be further explored. The feeling of belonging is important to student success. To strengthen the success of community college transfer students, it is important for receiving four-year institutions to assess the impact of the institution environment on community college transfer students.

Recommendation Three: The Impact of Transfer Agreement Guarantee (TAG) or Transfer/Articulation Agreements on Timely Graduation

Previous research examined the effect of transfer agreements on increasing community college transfer rates among low-income and minority students (Case, 1999; Kisker, 2007). Falconetti (2009) has criticized community college transfer students who transfer through transfer agreements and found that those students dropped out at higher rates and graduated at lower rates when compared to students who started their higher education at four-year institutions. Of the 146 alumni participants, 22 students transferred
to UC Davis through Transfer Agreement Guarantees. All 22 students graduated in two years after transfer. The correlation analysis showed a positive relationship between TAG and two-year graduation with \( p < .005 \). Since the TAG sample was small, 22 students only, this finding cannot be generalized to other institutions and all TAG participants. Further research might investigate the effect of articulation and transfer agreements on timely graduation (two or three years) at four-year institutions.

**Recommendation Four: The Impact of Support Services on EOP Students’ Timely Graduation (Two Or Three Years)**

Previous research has found that minority, disadvantaged, and underserved college students lacked college-related experience in their families. They often face difficulties while navigating the higher education bureaucracy. Those students have to make complex academic, social, and cultural transitions at four-year institutions (Cameron, 2005; Flaga, 2006; Townsend & Wilson, 2006a). Previous research found that support services were needed to increase persistence and degree attainment among first-generation college students, minorities, and students from low socioeconomic status (Dukakis et al., 2007; Nunez & Cuccaro-Alamin, 1998; Pike & Kuh, 2005; Terenzini, 1994). In this study, EOP students served as a proxy for first-generation college students, minorities, and students from low socioeconomic status. Each sample, the matriculated transfer students and the alumni, included 22 EOP students. In the matriculated transfer student sample, on average, EOP students had a GPA greater than 3.00. Of the 22 EOP in the alumni sample, 62% graduated in two years after transfer to UC Davis. The remaining students graduated after three years of enrollment. Due to the small number of EOP participants, this study did not find a statistically significant finding related to the effect
of EOP on timely graduation (two or three years). Further research needs to investigate the impact of support services on timely graduation among first-generation college students, minorities, and students from low socioeconomic status.

**Limitations, Scope, and Delimitation**

This study focused on GPA and baccalaureate attainment among multiple cohorts of community college transfer students who matriculated at UC Davis. Specifically, the study focused on the impact of support services on students’ GPA and timely graduation, that is in two or three years, from the initial transfer to UC Davis. Furthermore, the scope of the study consisted of an analysis of student surveys—students who matriculated in 2007, 2008, 2009, and 2010. Collected and analyzed data included responses collected from a web-based survey, analysis of open-ended questions, and pre-existing data on student demographics. This study was limited to UC Davis student population only, and the findings may not be generalized or applied to other four-year institutions. To achieve generalizability, the study needs to have been repeated in a variety of educational settings at four-year institutions.

The quantitative results in the research are limited because they provide numerical description. Quantitative methods have their structural bias because the answer choices are limited. Even though the qualitative results triangulated the quantitative findings, the qualitative method had its limitations. The open-ended responses did not provide detailed narratives because students answered specific questions. Moreover, students had to write in their responses. Writing may not be appealing to all students. Sample bias is one of the
research limitations as well. This research included community college transfer students only. It did not include students who transferred from different four-year institutions.

Additionally, each sample (matriculated and alumni community college transfer students) included 22 EOP students only. Findings about EOP students may not be generalized to other EOP students due to the small sample size. Furthermore, each survey included a small sample size of students who transferred to UC Davis through transfer agreement guarantee (TAG). Thus the findings may not be generalized to other students who use transfer agreements to transfer to four-year institutions.

**Reflection on the Mixed Methods Data Analysis Process**

The researcher’s decision to utilize a mixed-methods approach to this study was based on the desire to triangulate the findings. Quantitative analysis of data provides numbers and shows the big picture. Qualitative analysis of the open-ended questions enhances the findings in the study by learning about students’ feelings and hearing their voices. The analysis of the qualitative data in this study revealed that students had mixed feelings towards the support services depending on their experiences with the services. The open-ended questions allowed the students to tell their positive and negative short stories and experiences with the support services.

It is worth noting that the researcher analyzed the qualitative data before the quantitative data in the survey of matriculated students, and “longer orientation” emerged as one of the major categories in the qualitative analysis. After conducting the quantitative analysis, the correlation and linear regression analysis showed the same positive correlation between longer orientation and students’ GPA. The researcher found
it interesting that students felt the importance of longer orientations and requested them. Students did not know the effect of orientation on their GPA and integration; however, the open-ended responses showed that students felt the benefits of longer orientations. The linear regression analysis showed a numerical connection between longer orientations and UC Davis GPA, while the students’ open-ended responses showed students’ needs for longer orientations.

Furthermore, it was insightful to read students’ comments and perceptions of the support services. The qualitative analysis revealed students’ positive perceptions towards some services, including academic advising, when the numerical analysis did not find a statistically significant relationship of the services with GPA or graduation.

**Conclusion/Chapter Summary**

Many students chose to start their higher education in community colleges for many reasons. These reasons include open access, low tuition, and convenient locations. Several studies have examined baccalaureate attainment among community college transfer students. Previous research found that attending community colleges decreased students’ chances of baccalaureate attainment. This study shed light on community college transfer students’ success (GPA and timely graduation) at UC Davis. This study found that community college transfer students can be successful at four-year institutions and can attain their baccalaureate degree in a timely manner (two or three years) when supported by the receiving institution.

Chapter 1 included the statement of the problem, the nature of the study and its purpose, theoretical framework, and definition of terms. Chapter 2 provided a review of
research and literature related to community college transfer students. Chapter 3 described the methodology utilized in this mixed-method research. Chapter 4 discussed data analysis. And finally, this chapter provided an overview of the study, discussion of the findings, reflection on the mixed methods data analysis, implications for future research, and implications for institutional policy and leadership.
APPENDICES
Appendix A
Survey Questionnaire for Matriculated Students
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(11) These services were helpful in the first year

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<th>Disagree</th>
<th>Strongly Disagree</th>
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<td>Tutoring</td>
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</table>

(12) I received financial aid in the first year.

- Yes
- No

(13) Number of times I used these services in my second year at UC Davis

<table>
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<tr>
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<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7+</th>
</tr>
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<td>0</td>
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<td>0</td>
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(14) These services were helpful in the second year

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<th>Disagree</th>
<th>Strongly Disagree</th>
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<td>0</td>
<td>0</td>
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<tr>
<td>Tutoring</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Counseling and Psychological Services (CAPS)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(15) I received financial aid in the second year.

- Yes
- No

(16) Number of times I used these services in the third year at UC Davis

<table>
<thead>
<tr>
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<th>3-4</th>
<th>5-6</th>
<th>7+</th>
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### Third Year Services

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<tr>
<td>Counseling and Psychological Services (CAPS)</td>
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### Financial Aid in the Third Year

- [ ] Yes
- [x] No

### Number of Times Used Services in the Fourth Year

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<th>3-4</th>
<th>5-6</th>
<th>7+</th>
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</thead>
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<td>Counseling and Psychological Services (CAPS)</td>
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### Fourth Year Services

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<th>Strongly Disagree</th>
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<tr>
<td>Academic Advising</td>
<td></td>
<td></td>
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<td>Tutoring</td>
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<tr>
<td>Counseling and Psychological Services (CAPS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Financial Aid in the Fourth Year

- [ ] Yes
- [x] No

### Anticipate Graduating

- [x] Yes
- [ ] No

### Student Services

What student services (orientation, academic advising, tutoring, CAPS, or financial aid) at UC Davis do you think were most helpful to you? In what ways?

What obstacles did you face while utilizing any of the above-mentioned support services? Please provide at least one example.
25. How did you overcome the obstacles (if any)?

26. What are some of the ways that you believe the student services provided to transfer students at UC Davis could be made more helpful?

27. Was your financial aid
   - [ ] Primarily grant aid (does not need to be repaid)
   - [ ] Primarily loan aid (must be repaid)
   - [ ] A fairly even mix of grant and loan aid
Appendix B
Survey Questionnaire for Alumni
## Survey Generator II

**Management**
- Admin
- Create a Survey
- Manage a Survey
- Stop a Survey
- Review Surveys

**Results**
- Compile
- Run Report
- Not Completed

---

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Were you employed for pay while enrolled at UC Davis?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>(3) In general, how many hours per week did you work?</td>
<td>Less than 10 hours, Between 10 and 15 hours, More than 20 hours</td>
</tr>
<tr>
<td>(4) Did you participate in student groups or activities?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>(5) How often did you participate in student groups or activities?</td>
<td>Often, Sometimes, Seldom, Never</td>
</tr>
<tr>
<td>(6) Did you belong to any student organizations?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>(7) Would you describe your participation as</td>
<td>Very frequent, Occasional, Infrequent, Inactive</td>
</tr>
<tr>
<td>(8) Did you attend any transfer orientation activities after transferred to UC Davis?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>(9) Which transfer orientation did you go to?</td>
<td>One-day summer orientation session for transfer students, Brief session at the beginning of the fall session, Others</td>
</tr>
<tr>
<td>(10) Number of times I used these services in my first year at UC Davis</td>
<td></td>
</tr>
<tr>
<td>(11) These services were helpful in the first year</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
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</tr>
<tr>
<td>Academic Advising Services</td>
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<td>Tutoring</td>
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<td>Counseling and Psychological Services (CAPS)</td>
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<tr>
<td>(12) I received financial aid in the first year</td>
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</tr>
<tr>
<td>Yes</td>
<td>O</td>
</tr>
<tr>
<td>No</td>
<td></td>
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<td>(13) Number of times I used these services in my second year at UC Davis</td>
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<td>Academic Advising Services</td>
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<tr>
<td>Tutoring</td>
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<td>Counseling and Psychological Services (CAPS)</td>
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<td>(14) These services were helpful in the second year</td>
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<tr>
<td>Academic Advising Services</td>
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<td>Tutoring</td>
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<tr>
<td>Counseling and Psychological Services (CAPS)</td>
<td></td>
</tr>
<tr>
<td>(15) I received financial aid in the second year</td>
<td></td>
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<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(16) Did you graduate from UC Davis at the end of the second year?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
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<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>(17) Number of times I used these services in the third year at UC Davis</td>
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<td>Academic Advising Services</td>
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<td>Tutoring</td>
<td></td>
</tr>
<tr>
<td>Counseling and Psychological Services (CAPS)</td>
<td></td>
</tr>
</tbody>
</table>
26. What student services (orientation, academic advising, tutoring, CAPS, or financial aid) at UC Davis do you think were most helpful to you? In what ways?

27. What obstacle(s) did you encounter when using any of the above mentioned student services? Please provide at least one example.

28. How did you overcome the obstacles (if any)?

29. What are some of the ways that you believe the student services provided at UC Davis could be made more helpful?

30. Was your financial aid:

- Primarily grant aid (does not need to be repaid)
- Primarily loan aid (needs to be repaid)
- A fairly even mix of grant and loan aid

31. Do you think that your use of any (or combination) of the following student services (orientation, academic advising, tutoring, CAPS, or financial aid) played a positive role in your timely graduation from UC Davis? Please explain.

32. Use of the following student services helped me graduate from UC Davis on time (two or three years from transfer).

- Orientation
- Academic Advising
- Tutoring
- Counseling and Psychological Services (CAPS)
- Financial Aid

33. Parental Education at the time of admission to UC Davis (Parent with the highest degree):

- Less than 12 years
- Possess a high school diploma
- Possess a UC degree
### Use of Student Services

Use of the following student services helped make it possible for me to remain enrolled at UC Davis.

<table>
<thead>
<tr>
<th>Service</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tr>
<td>Orientation</td>
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<td>Counseling and Psychology Services</td>
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<tr>
<td>Financial Aid</td>
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</tr>
</tbody>
</table>

Submit  | Reset  | Cancel
Appendix C
Survey Invitation and Consent

E-mail invite: Cover Letter

Dear Aggie:

We are contacting transfer students to ask about the use of student services at UC Davis. This survey gives you an opportunity to provide honest and confidential feedback about your use of student services (orientation, academic advising, tutoring, psychological services, and financial aid). 

This survey includes questions about how often you have used any of the above mentioned student services. It also gathers information about the usefulness of these services for transfer students. The information will be carefully analyzed and used by the campus to evaluate student services, identify opportunities for improvement. I can assure you that transfer student input is critically important to assess the usefulness of student services. It is important for us to hear from each of you.

The estimated time to complete the questionnaire is 10-12 minutes. To thank you for your time, you will be included in an electronic drawing to win one of the four $25 Visa gift cards if you respond. Participation is entirely voluntary and responses to all questions are optional. There is no risk to participating in this study and your responses are entirely anonymous. No personally identifiable information about you will be available to the researcher or included in the survey analysis and results.

If you agree to participate please click this link: <<surveyurl>>.
If you do not wish to participate, click on the Opt-Out link below.

If you have any question or concern, contact Gillian Butler at gbutler@ucdavis.edu.

We look forward to receiving your input and perspectives. Thank you.

Sincerely,

Gillian Butler,
Project Coordinator
University of California, Davis
Appendix D

Alumni Graduation by Majors
<table>
<thead>
<tr>
<th>MAJOR</th>
<th>Two-Year Graduation</th>
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<tbody>
<tr>
<td></td>
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</tr>
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<td>Aerospace Sci &amp; Engr</td>
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<tr>
<td>American Studies</td>
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<td>1</td>
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Matriculated Students' Use of the Services in the second year Within Ethnicity

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|     | Other            | Hispanic          | Asian    | White    | Total    |
| Use of Academic Year 2        | No                | Count            | 1        |           | 0        | 3        | 18       | 22       |
|     |                    | % within Ethnicity| 11.1%    | .0%      | 9.7%     | 27.7%    | 18.0%    |
|     | Yes               | Count            | 8        |           | 17       | 28       | 47       | 100      |
|     |                    | % within Ethnicity| 88.9%    | 100.0%   | 90.3%    | 72.3%    | 82.0%    |
| Total| Count             | 9                 | 17       | 31       | 65       | 122      |
|     | % within Ethnicity| 100.0%            | 100.0%   | 100.0%   | 100.0%   | 100.0%   |
| Use of Tutoring Year 2        | No                | Count            | 5        |           | 11       | 27       | 54       | 97       |
|     |                    | % within Ethnicity| 55.6%    | 64.7%    | 87.1%    | 87.1%    | 81.5%    |
|     | Yes               | Count            | 4        |           | 6        | 4        | 8        | 22       |
|     |                    | % within Ethnicity| 44.4%    | 35.3%    | 12.9%    | 12.9%    | 18.5%    |
| Total| Count             | 9                 | 17       | 31       | 62       | 119      |
|     | % within Ethnicity| 100.0%            | 100.0%   | 100.0%   | 100.0%   | 100.0%   |
| Use of CAPS Year 2            | No                | Count            | 6        |           | 15       | 25       | 56       | 102      |
|     |                    | % within Ethnicity| 66.7%    | 88.2%    | 80.6%    | 90.3%    | 85.7%    |
|     | Yes               | Count            | 3        |           | 2        | 6        | 6        | 17       |
|     |                    | % within Ethnicity| 33.3%    | 11.8%    | 19.4%    | 9.7%     | 14.3%    |
| Total| Count             | 9                 | 17       | 31       | 62       | 119      |
|     | % within Ethnicity| 100.0%            | 100.0%   | 100.0%   | 100.0%   | 100.0%   |
Matriculated Students' Perceptions of the Services in the second year Within Ethnicity

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Alumni’s Use and Perceived Help of the Services

Alumni’s Use of the Services in the First year Within Ethnicity

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- Help of Tutoring Year 2: 66.7% Other, 57.1% Hispanic, 36.0% Asian, 61.7% White, 54.2% Total
- Help of CAPS Year 2: 33.3% Other, 35.0% Hispanic, 40.7% Asian, 59.2% White, 48.5% Total

Total:
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- Help of Tutoring Year 2: 100.0% Other, 100.0% Hispanic, 100.0% Asian, 100.0% White, 100.0% Total
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**Appendix G**

**Correlation Analysis for Matriculated Students**

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Appendix H

Correlation Analysis for Alumni
Two-Year Graduation
Appendix I

Open-Ended Responses for Matriculated Students

Q 1: What students services (orientation, academic advising, tutoring, CAPS, or financial aid) at UC Davis you think were most helpful to you? In what ways?

• The Design Program adviser has been really helpful to me since I have transferred financial aid and academic advising are "the" most important and helpful services at UC Davis. The financial aid allows me to attend college while academic advising helps me organize my schedule so that I can graduate with my degree in a timely manner.
• Financial Aid was most helpful. I work full time, am a full time student, and I co-handle my mother-in-law who has Parkinson's and Psychotic Disorder. Any money and the guidance of the people in the financial aid office was invaluable.
• HAHA orientation! that was the worst experience of my life. i rather be pepper sprayed. i didn't get to sign up for any classes i wanted. i got the bottom of the barrel. i wasted the whole day for nothing. i didn't learn anything from the orientation. academic advisors for religious studies don’t even know what is going on or the requirements to graduate. you should fire joey. you should pepper spray the professor adviser too. the psychiatrist (DR XXX) from CAPS personally offended me. He is not professional. he should be taken ….
• Grad Orientations-Learn what is needed to get into grad school.
• I think that orientation, academic advising, financial aid and the student disability center/Mobility Assistance Shuttle were the most helpful student services for me personally. I would not have managed to get around campus without the aid of the MAS program or the SDC (and my counselor) and I wouldn’t have been able to attend Davis without financial aid being that I live on a small income from SSI tutoring, better understanding if class
• Academic advising (for setting up a path to follow in college), financial aid (to help make actually going to college possible), and CAPS (self care).
• academic advising -- regarding course scheduling and graduation requirements.
• Transfer Center my first quarter was very helpful. Academic advising was very helpful and the advisors were very kind. CAPS and financial aid have been very helpful. All of these programs at UC Davis have made my experience and transition better.
• Transfer center and health advising office were most helpful. Transfer center offered services such as free printing, study space, and counseling services that were great. Health advising office was specific towards my medical school goal so the advisors
• I have appreciated the ready availability of all of these services during my time at UCD. The service that benefited me the most as a full time employee and single parent was, naturally, financial aid. Their staff and department has been super helpful.
• I think all of them are very helpful but it depends on who the person you are seeing or talking too. I have special people that I like to go to all the time and I've tried out many counselors and advisers to test out which one I like or who are most helpful
• Orientation and academic advising are helpful in planning classes, especially since I will be changing majors.
• I found the tutoring to be the most helpful, especially the "drop-in tutoring" for organic chemistry courses. Also, the academic advising was helpful in advising what courses would be a good balance and also what is required for my major and how to best manage my time concerning class schedule.
• Academic Advising. The class structure of UCD can be somewhat confusing. It was nice to be to have someone help guide class choices.
• Orientation for transfer and freshman students needs to be revamped to help students understand SISWEB. Degree Navigator needs to be replaced with a more accurate and user friendly interface like the kind academic counselors have access to. Financial Aid's policy of dispersing funds so close to the payment deadline it totally ridiculous and needs to be much farther before the payment date
• Advising was helpful. Orientation was terrible, they set me up with classes I did not need and put me behind.
• orientation very helpful, academic advising very helpful
• CAPS was extremely helpful for me because my first transfer year here was difficult for me to adjust to and just having that extra support really made a difference. Financial aid is always helpful. Academic advising was helpful in that they help you stay on track.
• The high tuition of college is the reason I attended a community college before attending a four year institution so the financial aid I received at Davis was very helpful.
• the academic advisors for computer science are pretty worthless except for XXXX.
• Financial aid was especially helpful my first year at UCD (third year in college), when I was automatically enrolled in the Blue and Gold program, and basically didn't have to pay tuition.
• Academic advising and the transfer center. It is great to walk in at any time and ask for advice.
• CAPS
• Academic Success Center for helping me write my essays for UWP101.
• Orientation, academic advising and tutoring were very helpful. Orientation helped with the transition, academic advising to help keep me on track and plan out my classes and tutoring help immensely with my math classes.
Financial Aid, Academic Advising

Financial Aid: I am a single mother of a young child with no family in this country. Without Financial Aid, I would not be able to get my degree.

CAPS. They have been the most beneficial

I went to my major adviser quite often. She was a sweetheart and very helpful with my needs. CAPS is also good. My problem was that I commuted from the east bay, hence when I was in school I was in class.

financial aid and caps

Orientation because it showed us the campus from the perspective of our majors so we knew where the important buildings for the major are. Financial aid was important because I wouldn't be able to afford college otherwise

Tutoring and financial aid were most helpful to me.

CAPS

Financial Aid. Without financial aid, I would not have been able to afford to attend UC Davis.

Orientation was helpful in hearing about activities and familiarizing myself with the campus. Things were different once I actually got here and started getting involved with classes etc. Advising was mixed. Some info could have been presented earlier like substituting classes for another to still meet a requirement. I would have structured my classes slightly different. It worked out ok though. Financial aid has been great for the most part. I never needed tutoring or CAPS services.

Fin aid was helpful, would not have been able to attend without it. The orientation was rather useless, too much info, too scattered packed into one day and we had to pay for it!

nope

CAPS I need accommodations the process was a little long, as I was already receiving accommodations at my community college and it shouldn’t have taken that much time

Peer advising at both CA&ES and for my major were extremely helpful. They were always my first stop, and could direct me to what I needed to do next.

Academic advising was useful because it helped my plan and implement my class schedules for each quarter.

I work through the school. It's very convenient and has been good experience.

For me the most helpful resource was guaranteed on campus housing for my first year, it was a pleasure living with other transfers and getting to meet new people.

Academic Advising: they advised

Academic advising, for general help preparing for graduation; and financial aid, without which I would not have been able to enroll at all.

Without financial aid I would not have been able to attend UC Davis. Financial aid was a large factor in my decision to go to UCD and has allowed me to afford a post-secondary education.
• I think the counsellor in Letter of Science is very helpful, they make an education plan for me and tell me how to do step by step. Also, they are nice.
• Financial aid is most helpful. I wouldn't be here without it!
• Academic advising was a godsend. There was a lot to figure out in terms of scheduling and making sure that I graduated on time. Joan Chandler was THE BEST and I swear I wouldn't be here without her help.
• I didn't go to any
• Financial aid was most helpful. I wouldn't be here without it.
• I feel that the advising at the Dean's office is very helpful. Financial aid is helpful if you get the right person to help you.
• The only student service I have found helpful was the tutoring for physics. I had a great tutor for physics 7A; however, I had a different tutor for physics 7B and it was a complete waste of my time. The good tutor helped me do better on the quizzes for class, as well as help me understand the information.
• I think the financial aid is the most beneficial as it would be impossible for me to attend UC Davis without it. The other important services are the academic advising and tutoring.
• Academic advising from my major's department (history) was incredibly helpful. XXXXXXX helped me figure out a game plan as far as what classes I needed to take and what hoops I needed to go through in order to graduate on time. I also received help from the pre-law advisor. She was helpful in pointing me in the right direction but I wish she would have been more helpful with specifics.
• Financial aid was very helpful.
• Academic advising was helpful because I made an academic plan that showed me how I would progress in the next years.
• Orientation was helpful in choosing classes.
• Math tutoring was very helpful, though the tutors were often overwhelmed with students.
• Financial Aid, because it's the only reason that I can attend UC Davis. But my financial aid comes from state and federal grants. If it didn't, I'm sure that the UC system would steal that too in order to further privatize "public education."
• I really like the Writing Success Center. It helped improve my writing and catch onto my grammatically mistakes. I also like the Student Recruitment and Retention center because it helps transfer students retain in school and also recruits high schools for higher education for those who are underrepresented.
• Orientation was helpful, but could be extended into a two day program so that students have a chance to absorb information instead of trying to cram everything in in one day. CAPS was helpful after learning about it by my training to be an orientation leader

• Orientation and CAPS. Orientation gave me an opportunity to meet others in my major and see the campus.
• Academic Advising, it helps you know how you are doing in regards to your major and can help prep you for grad school.
• Advising and the transfer center
• Academic Advising was the most helpful because I met with my major advisor on a regular basis. Always helpful in providing major orientation.
• Academic advising because you need to know what classes to take to graduate on time.
• financial aid, because it helps pay for college. Everything else is just a waste of my time and my tuition dollars to coddle someone who can't pull his or her own weight.
• academic advising. helped me stay on track with my major
• financial aid was helpful. also, please allocate the money you use at the transfer center more wisely. pizza, and other food as free lunch is not helpful or needed.
• I didn't find any helpful. To get things done properly here I was on my own.
• Academic advising has been incredibly helpful, transferring from a 2 year and entering into UCD, things move very quickly and its important to either to stay on goal or transition that goal to make it right for you. Academic advising did that for me
• none
• Financial Aid, because I transferred here at 23, yet was not considered an "independent" and had to take out 13,000 in loans!! The peer advising was more helpful to me than the academic advising through Letters and Sciences, although I did show up there quite frequently in my first year.
• academic advising was most helpful in setting a game plan for my time here.
• Academic advising for major check and seeing what classes to take.
• academic advising helped out a lot because I was new to the whole transfer scene, and I did not know what classes to take
• Advising was very helpful and is, indeed, a necessity. I haven't made use of CAPS but I'm sure it's really helpful to anyone in need of a little peer/mentoring support during stressful/emotional times. I don't qualify for financial aid, so I wouldn't know
• Academic advising must have been the most helpful, because it was the only one even remotely helpful. The only other one I've used was financial aid, which was really, really terrible. They just don't seem to give half a crap about anybody. Maybe the job?
• Financial aid was helpful because I would not have been able to leave my job to come to Davis without any financial assistance. Tutoring was extremely helpful, but there was no tutoring available for BIS2C, which I would have wanted to use. I feel that my assigned advisor was not helpful and I think there should be more options for students to be able to pick which advisor they would like to schedule appointments with.
• Orientation was helpful in the sense that we got a tour and we were able to meet with our department adviser. I also liked eating in the dining common and
meeting other transfer students. I didn't really think signing up for classes was very efficient and it took a long time to sign up because the internet wasn't responsive. I did not feel that I was given very good advice on what classes to take. CAPS was very helpful when I was going through a tough time concerning family issues and I was nice to be able to talk to someone and be given advice. Financial aid has been fantastic. Without it, I would not be able to go to school. The only downside with financial aid is that it always underestimates how much living expenses are and how much the family is contributing to my education. As a result, while my fees are paid and I get some extra money after everything is paid, I have very little left for food and no money for extras like going to the movies or joining friends for activities that cost money.

- CAPS was highly helpful because it made dealing with the change difficult. The quarter system is incredibly difficult and crams a lot in.
- ASA 198, the transfer student success orientation, Summer orientation, Financial Aid. They helped me be prepared for the UC system in terms of logistics and paperwork and to retain me on campus. SRRC was a big help too.
- Academic advising was the most helpful for without them I would of taken the wrong classes or not know that classes in my major list haven't been offered in years.
- academic advising: quick responses, give accurate replies, easy to reach, well-knowledge of academic policies and advising.
- Orientation and Tutoring
- i think the counselor from the Dean is most helpful.
- financial aid There's no way I can afford the expenses spent while studying in UCD without financial aid (especially, the tuition has increased a lot since I transferred in 2010)
- Academic advising, when advised by certain advisors, has been extremely helpful. XXX of Plant Sciences and XXX of Community and Regional Development have been and continue to be invaluable resources for course planning and major advising
- Financial aid has been invaluable and will continue to be so until I graduate. I could not have attended my dream school, UC Davis, without it. The academic advising was also very helpful to make sure I am taking the right classes and will graduate in a reasonable amount of time. Thank you for providing these services!
- Both academic advising and CAPS are quite helpful at UC Davis. It's awesome to learn from those that understand the system and can help me get through it. Financial aid is necessary to get through university with costs like this.
Q 2: What obstacle(s) did you face while utilizing any of the above mentioned support services? Please provide at least one example.

- I didn't get my financial aid in time for the beginning of this year because I didn't know when FAFSA was due until after the application date was passed. It would be nice to get an email reminder when the date approaches.
- Financial aid requires a lot of paperwork that must be mailed in. It would be easier if everything could be sent over the internet.
- Not only do I have the obstacle mentioned in my answer to the previous question, but I also commute from my home in Sacramento. My schedule is so tight that I could only budget time for class and that was it. I would have liked to take advantage of other.
- When I got my first paycheck from UC Davis, the man responsible for my pay roll DID NOT tax out taxes from my check AND REFUSED TO DO SO. he should be pepper sprayed and i wish his wife and children would leave him and he would be lonely and miserable for.
- N/A
- The only obstacles that I faced were in the ability to get to the select departments. Being limited in my mobility has been a problem that I've had to contend with my entire time at UCD
- class schedule or internship intervene
- None really
- none -- no obstacles.
- I wish I knew more about the tutoring program and I wish that I used the CAPS services sooner.
- Financial Aid wasn't able to provide me with the SMART grant so I struggled a lot financially in my last quarters.
- I would have liked to go in for language tutoring but the biggest obstacle was my time, since I work M-F 8 - 6 pm.
- The obstacles that I went through are explaining my reasons on why I need help or why I am seeking help. For example, It's hard to share your feelings when talking to a CAP's counselor.
- None.
- I came in with no knowledge of passes or SISWEB because it wasn't mentioned at all in orientation, i picked up a CSRG and learned it all for myself. CAPS, academic counseling and other were all fine.
- Long lines, unfriendly people.
- Long wait times for academic advising
- The obstacles with academic advising would be that there were limited appointments available and some advisers do not take into account that some transfer students do struggle especially the first quarter.
- I did not face any obstacles while utilizing any of the support services.
- Hard to find.
• Closed at 4pm some days, computer resources are reliable.
• clash with class schedule
• A lot of people were always using the service so sometimes it was hard to get an appointment. I resorted to tutoring services instead.
• Making an appointment with my faculty advisor was the hardest because he has a busy schedule. Tutoring was also difficult to fit into my schedule at times.
• Knowledge of these activities.
• CAPS: I am an older student with a child. It geared toward college aged people, and I felt that I was marginalized. Financial Aid: for students with dependents, additional application needs to be done after the disbursement, and it is very confusing. Tutoring: There was not any tutoring service for my major.
• None
• Time constraints do do the days I commuted and was in class. I really appreciate all the emails though!
• None
• I have never heard of any of the other services, only tutoring and financial aid.
• n/a
• Peer advisors really didn't have enough knowledge to be truly helpful. An instructor was more helpful with class suggestions than any advisor initially.
• I know little to nothing about the caps or tutoring services...how are we supposed to find out about these things?
• Advisor. Should be more openly informative about what is needed, what is expected etc... I was not told that I needed an upper division writing class. Adding Classes: Pass 1., I did not know that I only got a hour or two to enroll into my classes. We should be told. Emailed. Informed some how... Plus, we should be given better add dates. Did not get the classes I wanted. Really NEEDED an english class. Could not get in with my add dates. I did poorly on tests and essays, because I was not prepared for the quality of writing that was expected. BUT!!!!!! I could not get into the english class until I had taken enough classes to get a better add date. !?!
• I felt that counselors failed to inform me of important information that could have helped me along my academic path. No one helped me to outline an idea for a career, or gave me any direction to help me find an internship or job.
• Also tutoring is not readily available to students. At my community college we got free one on one tutoring here there is only group tutoring, but only for under devision classes. I realize its hard to find tutors for specialized classes but we are paying a ton to go to school here and if a community college can set up free tutoring so should an institution such as UC Davis.
• Limited hours of availability for peer advisers in my major.
• Having to schedule appointments and finding time to make it in there to wait was difficult.
• Some of the advisors were not aware of the TAG program so I was told that I needed a mini-minor when I did not, and it delayed my graduating by a year.
• Academic advising and tutoring knew nothing in regards to my major.
• Inept administration.
• I didn't know they existed.
• Advising appointments are frequently hard to book less than a week or so in advance, but it's not a big deal.
• I have not had any issues with services on campus
• the front desk of Economics department is suck, i remember i went there to make an appointment to see the counselor, the jerk just give me a sheet and told me go back and don't let me make the appointment.
• When I first transferred, I had trouble getting the SMART grant I was owed because the financial aid office told me it wasn't given to first-year transfers because they lacked a UC g.p.a. This turned out to be false, but it was a big hassle for me to finally get the grant.
• There has been some difficulty getting some issues straightened out now that my dept no longer has Professor Chandler because the Textiles major is being cut. I have had to email the peer adviser often. The Financial Aid office has odd hours and long line
• Paying back 50,000 in debt for two years at school is not going to be fun. So thanks for that.
• Trying to make my financial aid funds last until the end of the quarter is always an obstacle but I am grateful for it.
• It just depends on the person. SOme were very helpful and others, not as much.
• The orientation was horrible. I was put with someone who knew nothing about my major and ended up not getting into any of the classes I needed. Being a transfer student, I know how to register for classes. Being forced to have someone do it for me, ultimately made my schedule terrible, as well as increase my stress level. The advising services are not knowledgeable with transfer courses. They made a lot of mistakes, telling me I needed to take classes, which I had already taken before I transferred. If it weren't for my community college helping me and showing me how to use the website that shows equivalent classes at different schools, I would have repeated classes for no reason. I am not 100% sure how to exactly utilize CAPS for everyday stress...
• pre law advisor was very broad. not helpful enough.
• The student health center was just awful. I was extremely ill the week of finals last Spring quarter and they wouldn't see me/make an appointment because they claimed That made me very upset and unconfident with the UC health care system that I probably won't ever use their services in the future.
• For tutoring, the hours didn't match, so I couldn't attend them. I am a Peer Counselor at SADVC, so I didn't need to come to CAPS. If there were any psychological issues that I dealt with, I dealt it on my own or with the support of my family and co-workers.
Getting into classes an not waitlisting
I tried to visit CAPS about 3 or 4 times, but each time they were closed for a staff meeting, or unable to see me. They should hold staff meetings during off hours.
I live 50 miles away.
Writing center limits to a 30 min timelimit. Sometimes my essays aren't done, Sometimes the wait is two hours.
Finding them on campus, seeing which one specifically helped my needs as a student, and getting someone to talk to who had used those resources.
I didn't know CAPS was even there for me. My friend had to tell me.
Unfortunately, I could not use tutoring because I'm in class or lab. I wish some days that there was late tutoring after 6pm.
the transfer center could be open longer
Financial Assistance was not easy to work with. My first year it was very difficult to meet with someone and go over my financial situatation and as a result I received no aide and ended up taking out a loan. It was very stressful start.
My advisor was a dick and yelled at me for calling his office. Enough said.
sometimes the advisor told me false information
nothing.
In my academic Advising no one made a true attempt to really help me. I could not even add a class that I needed to graduate because they said it was reserved for freshman and sophomores. The registrar and the chem department and all academic advising bas
I was a little uncertain of how the services worked at first, like whether I needed an appt for advising or if I could just walk in, or where caertain services were located. The student(s) booking appointments at the central advising desk were less than helpful and a little rude, but thankfully the website was really helpful. But that was deterring, I wasn't amped to come back because I felt clueless.
Academic advisers often act as if you are wasting their time - that you should be able to look up all of the information that you need online. well actually, I can, but I want to see it written out and confirmed just in case I made a mistake. So they are helpful, yes, but their attitude makes it less desirable to go see them
Not having any money the first year, even after a ton of loans. Not getting proper information regarding a couple Anthropology classes from the College of Letters and Sciences. Not being informed of all the resources that were available to me until a year
I didn't face any obstacles.
Didn't really know about advising for specific majors. Had to seek them myself.
Just the general mood and level of helpfulness in financial aid. They don't care about extenuating circumstances, only the bottom line with a dollar sign. They would listen with bored looks on their faces and tell me nothing could be done, even though everybody I ever talked to about the circumstances outside of the financial aid office agreed that I should be accommodated. Shit, I just didn't want them to dismiss me so completely like they did.
- BIS 2C did not offer any tutoring services for this quarter. I used tutoring for BIS 2A and I found it very helpful, but this quarter I did poorly in the class without any tutoring services. Also, I feel that my advisor was not an asset to me because I learned more about services provided on campus through classmates.
- Like I mentioned before, signing up for classes during orientation was difficult. The internet was not working and I ended up signing up for classes on my orientation leaders iphone.
- CAPS is constantly booked, tutoring I received was only my TAs for classes, and as a transfer student I got hardly ANYTHING from my orientation in regards to getting signed up for list-serves, figuring out how to get into a research group, any of the university functions.
- Lack of advertising. I only found out about them because of the success seminar class.
- Financial aid hasn't been too helpful but then again I'm very proficient in financial aid policy and application.
- online appointment is sometimes full.
- Did not know about the Counseling services.
- not on student side.
- the advising in nutrition department was awful... I feel that I know more information than the peer advisers, and staff adviser was not really helpful either.
- See answer to previous question. XXXXXX as an academic advisor was an obstacle to achieving proper course guidance.
- The math and chemistry centers are very difficult to use because the rooms are very small, cramped and there are not enough resources available to facilitate the learning of everyone trying to use the centers.
- No serious obstacles, except maybe scheduling the first appointment in a quarter.

Q 3: How did you overcome the obstacles (if any)?

- i filled it out late and got my aid late
- I had to comply with the financial aid office's rules and send in the needed paperwork via the U.S. mail.
- Time management, email, and the phone. I really could not overcome my obstacles. I could only work with and around them.
- i didn't! he REFUSED to help me! i'm still angry and pissed off.
- N/A
- Using the MAS when necessary
- emailed and reschedules with tutors
- N/a
- none.
- I did my own research on the internet and went to the buildings where the service is provided and asked questions.
• NA
• Well, I've just had to do without tutoring, I guess that means studying more!
• I told myself that it's best to release it and the person helping me also helped me out.
• waited
• I waited for hours
• I figured everything out on my own, instead.
• Came back the next day, used the Hart computer lab.
• schedule an appointment
• I used tutoring services instead
• Just kept trying to reorganize my schedule.

• Much more awareness.
• NA
• email is great and having to find out on my own.
• I have none.
• n/a
• I did my own research and talked to other people, basically going outside my dept. (Animal) and looked at another one (Plant) for broader course ideas.
• Cried.
• I had to pay for private tutors $20/hr which is a lot of money on top of my tuition fees.
• I had to sign appointment books or skip meals to allow myself time to wait to see an advisor.
• I stayed an extra year and tried to work to alleviate the fiscal strain on my family.
• I utilized in College resources.
• went to someone else
• By waiting, or booking ahead of time.
• i find another counsellor
• I spent lots and lots of time on the phone. I did some yelling.
• By being persistent!
• I have had to borrow additional money from family.
• Called back, revisited, etc...
• I have had many problems since I have transferred. The only way I have overcome all of the issues I have encountered, is by going back to my community college, talking to other transfer students who have all experienced the same problems, and by asking other students who have graduated.
• Talked to an advisor and got involved in yoga offered through the health and wellness center and CAPS
• went out and talked to people other than them.
• Talked to family and friends.
• Yes
• I didn't, I just figured it out on my own.
• none
• Ended up taking out a loan so that my classes were not dropped my first quarter at UC Davis.
• I handled my own shit, and resolved to never talk to the man again.
• made my schedule myself
• none
• working my ass off
• Educating myself
• I did not.
• I took out loans for the first year I was here. I went to peer advising and was lucky enough to have enough time to transfer out of classes that I was told I needed to take, but actually didn't need.
• n/a
• Pfffft. Hella student loans and work, borrowing money from outside sources.
• Being awesome? Fellow students, ONCE I MADE FRIENDS were helpful.
• I relied on my own knowledge
• Having my family sacrifice themselves so I can pay the ridiculous amount of tuition I have to pay. I don't receive financial aid as an AB540 student and it's really difficult paying the ever-increasing tuition.
• Just drop-in and see if they are free.
• Found out about them through SRRC.
• well i figure out from others.
• When advised to "get creative" after being misinformed and inappropriately advised, I sent many hours evaluating my major requirements, and sending emails and waiting outside of potential future professors' offices trying to gain access to the courses I needed that quarter in order to graduate on time.
• I tried to go to the centers on off times but my class schedule made that difficult so I usually just studied at home. However, I would use the centers if they could serve my needs (space, quiet, knowledgeable staff and computers to do hw on).
• Time.
Q 4: What are some of the ways that you believe the student service provided to transfer students at UC Davis could be made more helpful?

- More outreach programs that inform transfer students of campus activities via email.
- Better hours, more publicity, more ways of contact like through email and phone conversations.
- PEPPER SPRAY EVERYONE EVERYDAY. WHY EVEN TRY TO HELP THE STUDENTS? YOU OBVIOUSLY HATE US
- More grad-related presentations.
- My only critique was that nobody explained to me that I needed to take so many upper division and so many lower division classes in order to graduate. I was instructed to take my major specific classes only which my Advisor thankfully corrected me about.
- to be advertised more so we can take advantage of it and have more time per student
- Make it mandatory to for transfers to take a first year seminar course. From one of those courses, I learned about and utilized many resources on campus that other transfers I know have not. Also, the format of this quiz could use improvement. As a transfer, I've only been at UC Davis two years, and there was no 'not applicable' option for some of the questions.
- more advertisement -- i hardly knew a lot of resources were available until my final year.
- More transfer students being introduced to other transfer students as well as more info about the campus and services available.
- Maybe have a little longer transfer orientation because it was so busy and kind of unorganized that I ended up not getting to eat a lunch that I paid for. Also, it might be helpful to provide more information to transfer students about the transfer center
- Most are very helpful already
- I think you guys are doing a great job, esp with the Transfer Center community to help facilitate. I have not participated in it regularly but know that if I need help I have those additional resources.
- I think they need to be more open and brand that they are out there to help students. I was told by someone to go see them or I saw it in little places but I think some students are scared to reach out their first year so they pile up a lot of stress on themselves when there's so many resources in campus.
- Sometimes advisers are not as knowledgeable regarding transfers/helping choose classes as they are to normal students. Some classes I took I did not need to take because they are waived for transfers and I was not made aware of this until it was too late.
- make them more relevant and show them all classes they need to take while at UC Davis
• More academic advisers to talk to
• Be more accessible, online appointments, easy to find info online, etc.
• Hold more social events at the start of the year. Help curate a list of organizations or activities that would help transfer students be more engrained in the community. Ex: AggieTV, Project Compost, Astronomy club.
• extend telephone service
• More activities geared towards transfer students, study halls for transfers, and a longer orientation.
• More then email. USPS mail, literature in designated areas around campus.
• Needs more service concerning students (undergrad) with dependents.
• more info on clubs
• More advertising to students. As simple as inviting people over and information. Otherwise they are all great already!
• The transfer center is very helpful because it is a good place to go to use the computers and print stuff out.
• I didn't know about the majority of them--so maybe telling the students would be a start.
• n/a
• have people at the orientation that are knowledgeable of all the majors. Also to have more upfront info on the class registration process. At least when trying to register for classes for the first time.
• reconfigure orientation. either make several shorter sessions where there is more direction or make it longer.
• Advisor should give advice. We walk in not knowing, and have to learn the hard way. Grades suffer etc...it's all needless...HAVE MORE ENGLISH CLASSES!
• I think student services should stress the importance of getting involved with clubs, work experience, internships, etc and help student utilize networking on campus.
• provide tutoring for upper division classes also. They told me only If i was an athlete can I recieve tutoring. I am a student just like athletes are and this is unfair to say the least.
• I think having mandatory advising times would be helpful. So the adviser and yourself are always on the same page academically.
• Advisors should be aware of the TAG and what requirements it fulfills. It would also be nice if the tours were organized by major, so the people giving the tours could answer any major-specific questions. When I was given the transfer tour, the tour guide was a poli-sci major and couldn't answer any of my psych questions while I was signing up for classes.
• pay administration less hire people who know what they are doing.
• I don't know.
• A financial aid counseling service to assist students on what the best options are to pay for school
• the orientation is not helpful too
• Financial aid workers should be more knowledgeable! Or at least more willing to look into things they're not sure about.
• Having a good adviser is so important. There are so many little administrative things to do when you start. My adviser really helped with that. Other than that, I think the campus is really good about getting transfer students acclimated.
• I don't think it would be to the transfer students specifically, but in general, if people knew more about what they were doing, it would be nice.
• They should be a lot more knowledgeable, the orientation should allow transfer students to register on their own, but provide the option for assistance if needed. There should also be more resources for help, specifically for transfer students. I know that there is transfer hour; however, that isn't very helpful for issues concerning the transfer experience. It is more an hour for support and others who are frustrated in the same way.
• For EOP students it would be helpful to give more information on how this service could be used.
• n/a
• I think that the first quarter after transfer was the most difficult for me because I felt like I was bombarded with midterms and assignments. Keeping that in mind, I feel like during orientation, advisors should enlighten students that the workload will be heavier than the workload at a community college. Also, it is important to let students know that not all professors in UCD are student-based. There are those who are only teaching because they are allowed to research—which is their primary preference. Students should know that in order to success in some class, they will have to do a lot of independent-study or group studies.
• Make everything easier to find, my friends and I still have no idea where the transfer center is, and we've looked for it, and asked for directions - to which we got vague directions.
• more students to help
• No one tells you how stressful it's going to be. They paint a rosey picture of university life at orientation but it's really difficult and time management is essential. Also, there needs to me more ways to rid ourselves of the stress we carry daily. Free yoga classes or meditation should be made available and convenient.
• I think it would be more helpful if students are informed more about the services available to them. Maybe provide a quick cheat-sheet of all the services in transfer orientation.
• Everything except a better orientation should be eliminated. The orientation sucked - it filled up before I could register for it, and I had to figure everything out on my own. This is a stupid, flawed design, you should minimally have at least as many spaces for orientation as you have transfer students incoming. Screwed me up really badly.
- we're fine without all the wasted money & several emails sent. we get TOO many emails about free lunches. instead, save that money.
- By actually making an effort to help. Legitimately getting off their seats and trying to find the best solution for the students
- Be nice and welcoming. I was intimidated by the size of UCD its services and size of the student body.
- UC Davis is an enormous business and I do not see how students, which are expected to be motivated and self-helping, should require any kind of help other than what they provide themselves. What can be done BEFORE a student transfers, is to warn him or her just how drastically everything will change (for the worse).
- I don't think that I learned enough about the resources that were available to me WITHIN my department. Because we were separated into our groups by department for the orientation registration time, I think that would have been an appropriate time to talk about everything available to me on a smaller scale.
- More advertising of the programs
- There could definitely be more frequent yoga/meditation classes offered through CAPS
- Respect, perhaps.
- The hours of the student services are extremely inconvenient. There is a transfer hour once each week and this one hour falls during the time that I have class, so there is no way that I can ever attend it, even though I am interested in attending.
- I think ways that would make services more helpful would be if transfer students were given more information about the services. The emails I have received in the past have been helpful but are a bit vague. Perhaps having schedules sent (by way of email) to transfer students will help us utilize more services.
- Make orientation more useful, and specified. Tell chemistry majors how to get research. Our orientation leader was an economy major -- a completely UNRELATED field. Even though we're in the college of letters and sciences, we are the SCIENCES part of that college. I really felt like I was hung out to dry when I started. I didn't know scholarship applications were due at the end of the first quarter so I missed that application and required financial aid. It's frustrating to not know these types of things. Research, Finances, Housing are all very difficult things to find in Davis and require either 'contacts' or specific instructions.
- TRV Helped so much. I believe their facility should be enlarged
- I like the services offered like the lounge and transfer hour but the times have never worked for me. I believe the services for students in general will be better with the move to SCC for the building is setup to allow more visibility
- Give mandatory academic advising for every transfer students, to make sure they have a complete understanding of how to fulfill all the requirements, in order to graduate. Give academic advising talk.
- Have a longer orientation to inform us more about the campus resources.
- The service should be advise more about how to choose classes.
- Instill a review system for academic advisors that includes student's input.
- Transfer orientation should send us to our academic advisors, or maybe give us their room number/email address so we can contact them on our own time. This is essential for getting in touch with the system. The TRV center is the most helpful part of UC Davis, taking up where all of the other services have not met my needs, or pointing me to them when I should go that way.
Appendix J

Open-Ended Responses for Alumni

Question 1: What student services (orientation, academic advising, tutoring, CAPS, or financial aid) at UC Davis you think were most helpful to you? In what ways?

- CAPS
  - The Academic advising provided me the information I needed to determine which academic opportunities best served my interests. I was able to identify whether or not to enroll in a graduate course I was invited to take, and to determine if participating in the UCDCD program would help me complete graduation requirements. I saved myself time not studying abroad and limiting the number of electives I took. My parents were unable to support me so financial aid was critical to enabling me to attend Davis. Financial aid also enabled me to work less then I would have so I could focus on my degree in Man Econ.

- Academic advising and helping me sort through transfer of credit from previous colleges.

- Academic advising for sure, because they really helped me stay on track and helped me pick the classes needed to graduate as quickly as possible, while meeting all requirements.

- Before starting at ucd I went to an orientation of how student transfers work and that was the best piece of information I needed to help me graduate. Iris not use any other services while attending college except for financial aid because tuition was so high.

- Though I didn't use tutoring as much except in discussion sections, it definitely helped. Advising helped streamline what I needed and gave me options, and counseling helped me manage stress when it felt like certain events in my life were causing things to spiral out of control.

- Transfer student student groups made me feel very supportive and offered a group of friends in a similarly awkward situation of not having connections made from the dorms.

- Financial aid. I wanted to focus on classes, projects, and student competitions rather than working 30 hours a week to pay for school. I did not use any of the other services. I think orientation would have been helpful, I was pretty lost the first year.

- I think the academic advising sessions were crucial because I was not familiar with the UC Davis system but the advisers helped me set everything up, explain exactly what I needed to get done and had easy to schedule/get to sessions. Incredibly helpful!!

- Academic advising and financial aid. I need guidance on what classed i needed to take at UC Davis to complete my major. I also need money to pay for tuition.
• Tutoring bc I used it for English
• None, academic advising services was full of information I already knew for medical school and full of cliche' advice. Tutoring was worthless because as a transfer student only doing upper division work because I had my IGETC there wasn't much help tutoring could give me. I went a few times to have my essays read, but the appointments were so hard to get and the student tutors were worthless as well. Orientation for me was an awful experience and actually was a huge motivation of why I became an Orientation Leader for UC Davis. I decided that I could at least help out other transfer students from receiving such an abysmal experience such as myself. My orientation leader actually signed me up for a fall quarter class that I did not qualify for!!
• Academic and career advising. I was able to figure out what steps I needed to graduate and to get into dental school.

academic advising
• Academic advising helped me make a road map of what i needed to do to graduate
• Financial Aid, without that I wouldn't have been able to pay for tuition or books or a laptop. Academic advising made sure I was on the path to graduate on time.
• Academic advising was most helpful in helping me figure out what requirements I needed to take to finish my degree while fitting in some of my personal interests.
• Academic was definitely helpful. It was hard to understand what classes we necessary sometimes and I also went aboard.
• Financial aid because without it I would not have been able to attend UC Davis
• Academic advising gives me helpful advices.
• Academic Advising was most helpful to me. My advisors helped me map out my college courses in order to graduate in two years.
• I think the financial aid I received from the veterans fee assistance program was the most helpful, because UC Davis is very expensive and without aid I might not have been able to afford it.
• After doing my own research in the General Catalog, I went to academic advising for them to confirm that I had done what I needed to for graduation.
• Academic advising kept me on track, reminding me of what courses I needed to complete. CAPS helped me remove the stress I had while I was at UC Davis.
• Financial Aid and academic advising. With financial aid, I was able to focus on my classes and goals. The academic advising center was able to properly guide me in selecting classes which fit my needs and interests.
• Academic advising. Without this, I wouldn't know what classes I needed to take to graduate on time. It was extremely helpful.
• academic advising was the most helpful since student life can get hectic and these are very distracting to staying on track with the right classes.
• I didn't have much contact with you guys. In fact, I didn't even know you existed until my last quarters at Davis. Perhaps you already do this, but you may want to
consider emailing students about the resources you offer. That would have really helped me see what was available.

- financial aid to pay the many expenses
- I think academic advising was most helpful because they were able to set goals for and lay out a plan for me. I am a goal orientated person so this is what I need to succeed. I also think tutoring was very helpful because it gave me another resource to use to learn the material.
- Having an academic advisor that I could meet with whenever I needed some direction about my classes choices was a blessing.
- Financial aid made it possible for me to graduate with minimal debt so that I wouldn't have to take a job I didn't want right when I graduated. CAPS enabled me to deal with multiple situations that might have made it impossible for me to graduate had I not received help.
- Academic advising was useful to choose classes and pick a good schedule.
- I never used any services from UC Davis at large. If I had a question about classes, I would just go to one of my professors or to the admin in my department (physics). If I needed extra help with homework I would go to office hours and work with other students in the class and know nothing about tutoring offered by Davis. I got full financial aid which was great. I would highly recommend giving more financial aid before giving money to any of these other services.
- Academic advising was very important and helpful during my undergraduate career. I transferred to UC Davis with an economics emphasis and changed it to a political science emphasis. After my second quarter, I was put on academic probation and after seeking services from my academic adviser, I focused on getting a second bachelor's degree in sociology which was my preferred degree at the time of graduation. My successful experience with academic advising in the Sociology department had a lot to due with my adviser, who was excellent. However, I had a different experience with my adviser at the political science department. My adviser didn't seem genuinely interested in my interests and goals which made me seek services only a couple times.
- Advising helped me select classes that went toward satisfying the requirements for my major. It also prevented me from making mistakes involving prerequisites. Before I started utilizing the advisers, I ran into problems with prerequisites. The system allowed registration for classes without verifying I met the prereq requirements. This forced me to drop classes my first quarter, triggering the next quarters to be load heavy to compensate.
- Academic advising helped me stay on track. My first quarter I made a plan for my two years and that helped me get a good start with things. When I decided to double major, academic advising was crucial in assisting me in the process. I couldn't have accomplished it without their guidance.
- Academic advising was the most helpful simply because I had to submit a petition to substitute one class for another I was required to take, otherwise I wouldn't have graduated on time. Thankfully they were able to comply with my request.
• Academic Advising to make sure all of my credits transferred properly and to make sure I was on target to graduate. Financial Aid is crucial to most students, because even going to a public university is outrageously expensive now, and its disgusting how much more expensive it's become even since my graduation in 2009.

• Dept of Sociology offered all students quarterly academic advising so I made a point of scheduling an appointment to see if I was taking the correct classes to ensure I graduate on time. They also provided one on one advising which was helpful if one wanted to pursue other class in other disciplines or independent studies and I would also make use of those opportunities—they were extremely helpful and willing to assist.

• None of these services were very helpful, on the contrary I received resistance, rejection and misinformation from most of these services, specifically academic advising.

• Financial aid was vital for me to be able to afford to attend and graduate UC Davis. Academic advising was helpful in selecting the correct courses and meeting graduation requirements but if my advisor could have told me when I arrived that being IGETC certified was a separate process from transferring it would have saved me a lot of trouble when I was applying for graduation.

• I didn't really use any of them because I found the information I got from other students was far superior to the information I got from advising. Only outside scholarships were given to me and no UC Davis financial aid was given to me because they said my parents had a high salary. As a result I worked my way through college.

• I didn't use any of these services.

• I didn't find student services to be helpful. Academic advising was inaccurate at best for what was needed to graduate on time, specifically, peer advisors really shouldn't be used. Orientation was a waste of time. Financial aid was bad at the time, now it's likely unserviceable.

• Financial aid was the most helpful, without it I would not have been able to afford to go to school. The more you work the more you are required to contribute to your education. Jobs without an education don't pay enough to support cost of living and school. It's a losing battle and a double standard! Academic advising, when XXXX was Nutrition Advisor, was amazing. You come in without a clue and leave with your whole two years planned out for you. Academic advising also has peer counselors that are generally a year or two ahead of you; so they can tell you, from their own experience, what courses and instructors are the best to take. Really comes in handy when you sign up for neurobiology and you were supposed to sign up for physiology! I'm not sure what you mean by tutoring. I didn't necessarily sign up for tutoring, but I attended the review sessions held by the graduate student TAs. Those were essential to passing tests successfully.

• Academic advising by counselors at the college of letters and sciences.
• orientation helped me know more about the campus and student services available for free.
• Tutoring, CAPS, and working for the First resort. My Orientation SUCKED, i know it has improved a lot bc I worked as an orientation leader years later, but when I did orientation as a transfer student it sucked and I was discouraged.
• I loved the academics one on one counseling to make sure I graduated on time.
• The academic advising because I learned so much more about my major its applications and possible ways it will play in the job market. Also it helped guide me through the classes I needed to take to finish my B.S. on time. Tutoring was nice because it help me get some extra time with trained professional who knew the subject and were able to transfer their knowledge to me. Financial aid helped because I didn't have to work full time to support myself though college making the education that much longer to complete.
• If it weren't for financial aid I definitely wouldn't have made it to graduation. I had to work throughout all of college but the money I made was strictly for personal expenses and financial aid was able to cover all tuition and some book expenses.
• Advising, since it helped me stay aware of course schedules.
• Financial aids was the most helpful to me. Without it I would not have been able to attend UC Davis.
• Financial aid because without it I wouldn't be able to attend uc Davis.
• financial aid- without it I couldn't afford to go to school.
• Academic advising really helped me stay on track and even graduate early. They were really clear about what I needed to do in order to graduate. CAPS helped me deal with transferring to a new school, place, and allowed me to explore old issues.
• I only took advantage of CAPS once, but just being able to talk to someone about my minor life event that wasn't part of my everyday life was a truly a great experience. CAPS is something that is only useful and makes you feel better just knowing its available for you and your friends if they need them.
• Orientation, it was the only service I used.
• Tutoring really helped, especially during the first year because the transition was a little rough. Having the support helped me focus and do well in school. Financial aid was also extremely helpful, without it I dont think would have been able to continue in school.
• Academic advising was most helpful for me to plan out major requirements classes necessary for graduation.
• The Academic Advising Center was extremely helpful. Also the Internship and Career Center was extremely helpful.
• Academic advising. I was completely lost and unaware of so many services that were at my disposal because I was a transfer student. During my first year I would only go to my classes and then straight back to my apartment. Fortunately I heard
about academic advising the summer after my first year which helped me greatly (academically and socially).

- Caps was helpful dealing with a stressful time, wouldn't have gotten through school without it
- I actually didn't go to summer orientation because I was out of country and only attended the Fall welcome orientation. I became an orientation leader in the summer of my second year because I think it would have been helpful if I had attend the summer orientation. I still stay in touch with some of the students I advised for orientation, no longer as their orientation leader but friends for life. I believe attending orientation helps to adapt to the environment, especially to meet people who come in as a transfer student. As for CAPS, I actually went to the House to speak to student counselors most of the time. I found it relaxing to share my feelings with a fellow student. It provided great emotional support for the two years in Davis.
- Tutoring for chem. CAPS for the emotional difficulties from being a transfer student
- Advising was most helpful, it helped me plan for graduation and stay on track.
- What was most helpful for me were the peer advisors that were available at the advising office. They seemed to give me more advise and encouragement that I needed due to the difficulties that I encountered.
- Both my Deans office advising and my major adviser were very helpful in getting all my classes lined up for me, I was part a part time student for almost 3 years
- Financial aid was the most helpful, yet it was not enough to attain the most from my education and succeed at my potential. I had to work 60 hrs a week, with the trade off less focus on my studies, to support my educational goals. The other services were not helpful or easily accessible. I feel I was failed by my academic advising from the beginning of my time at UCD.
- Financial aid was the most helpful for me. Without it, I wouldn't have been able to attend the university at all.
- Financial aid. Helped me pay for classes and living expenses, which allowed me to work less.
- Financial Aid, it allowed me to work less and focus on school.
- Transfer orientation was probably the biggest motivator, it gave an opportunity to talk to students who had time to experience and get used to get the school.
- Academic advising was very helpful because XXXX was my academic advisor and she was great. Her being the Plant Biology graduate students advisor made her a great undergraduate advisor for students majoring in Plant Biology because she knew exactly what was needed, what classes to take and with which professors. She was great at responding to emails, even after I graduated. Tutoring was in NO WAY helpful, I think UCD needs to put more funds in hiring tutors for the upper division undergraduate courses who know the material and are going to be able to actually tutor the students.
• I felt financial aid was the most helpful because without it, I may have had to work more hours which in turn would have forced me to take a lighter course load, or I may not have been about to attend at all.
• I would have probably chosen to withdraw from UC Davis rather then take out a large private student loan to continue to attend. I found the pell grant and undergraduate scholarship most helpful to me.
• Student loans enabled me to attend Davis. Without them, I could not afford the overwhelming fees and associated costs of a modern higher education and thus be able to receive the other listed services. Therefore, financial aid was by far the most helpful to me. Then again, it was the only service listed that left me with long-term negative effects in the form of insurmountable debt.
• Financial aid was the most helpful student service to me because it helped me pay for tuition and living expenses I otherwise could not have been able to afford. Overall, it was thanks to financial aid that I was able to attend UCD in the first place.
• I feel that financial aid was key to allowing me to spend time on classes and not working. However, it was a constant struggle with the financial aid department in getting it right every quarter. I felt, as if I had to constantly fight for it. Also, the orientation gave good insight into very little. I felt rushed and largely ignored by our group leader. Academic advising was crucial in taking the right classes and getting done in the shortest amount of time possible.
• CAPS, because i was very stressed and they helped me put things into perspective.
• Academic advising was most beneficial when given by student advisors because they had taken the courses, they could best relate.
• Academic advising ensured I completed the correct courses required for graduation. Advising also helped me design course schedules that were not overwhelming and feasibly completed in a timely manor with passing grades. Though I understand this was not always the case for most students, my adviser XXXXX was fantastic and very hands on.
• UC Davis was able to coordinate my financial aid package including aid, scholarships, and some loans better than any other school I applied to and made the process simple each term. Academic Advising helped in my final year to make sure I was meeting all of the graduation requirements and helped me register for spring graduation ceremony late when i found out my final classes were offered in the summer after the deadline for the ceremony registration. It was nice to be able to participate, so I appreciated the effort.
• I was never told anything about orientation. and I don't know they weren't very helpful. Caps was annoying to deal with. Academic advising told me different things. Financial aid was really well put together and always helped me with my issues and was straight forward.
• Financial aid- my father was laid off at the end of my first year of Davis and without aid I probably would not have been able to continue at Davis.
Financial aid is important because it gives more people the opportunity to educate themselves.

Tutoring! Everyone needs a little help now and then especially on a smaller student to teacher ratio

Academic advising was the most helpful. It helped me stay on track and I knew which/what courses I needed to take in order to graduate in two years.

Academic advising was a life saver for me. The reason being, is that I changed my major at the end of my first year and without the advising, I would not have taken the right classes or may have overlooked a specific class.

Financial aid was the most helpful, especially in the first two years after transferring

Academic advising was helpful in deciding which classes I needed and when I could graduate with my double major.

CAPS and Academic Advising were really important while I was attending UCD. CAPS helped me to deal with the major transition I went through and Academic Advising made sure that I was on track to graduate.

Advising was helpful for me to make my path on track. I was not aware that I needed to take UWP till I talk to them.

Financial Aid because i couldn't have finished school without it. :)

Orientation definitely helped me adjust to the new environment I was going into from a community college atmosphere. I think I was better prepared as a result of it, along with the people that I met during orientation, continue to be my friends to this day. Academic Advising was definitely a Plus since it allowed me to continually check to see if I was doing the right amount of classes, and what classes I still need to take, along with ensuring completion of the right amount of units to graduate. Financial Aid was another big Plus since that's what allowed me to stay and continue my studies, without the worry of working as hard outside of school, thus allowing me to concentrate in my studies.

academic advising, financial aid and CAPS. my mother was diagnosed with breast cancer while at school and so i was under an extreme amount of stress. i talked with a counselor at CAPS and they helped me organize myself so i could communicate with my professors as to my hardship, and speak with someone about my academic probation. without financial aid, I would not have been able to afford school as my mom could not work to help me pay my way.

Financial aid helped me pay for school. Otherwise, it would have been hard to afford school.

The psychology advisers were of the most help to me, in terms of seeing what classes to take, helping me with more information of the senior thesis, and also, to see how many units I needed, etc.

Tutoring was most helpful because I didn't have many peers to help me as a transfer student. It help me pass Calculus.

Academic Advising: As a transfer student, serious planning is needed in order to graduate on time. I utilized ICC often and received many good advises for health
profession and graduate school. Orientation information received the summer before Junior year did not provide insights into senior year so it was only helpful to get my started as an Aggie. Gaining financial aid was very helpful so I can focus solely on my studies instead of having to worry about money issues. I still would have continued my studies if I had to take out loans. It was just helpful not to have to pay back my tuition because of my financial situation.

- None of them were that helpful. Academic advising needs improvement (especially).
- Financial aid gave me loans, not grants, which enabled me to stay enrolled. I lived off campus, so everything else listed I rarely heard about.
- Advice on what classes to take to graduate quickly from academic advising was helpful. CAPS ability to diagnose and help get treatment for an illness was useful. Financial aid allowed me afford books and attend school.
- The College and Career center was useful and so was advising by the college of L&S. The Economic department advising was awful.
- Tutoring was most helpful. Graduate students from the Math Department were the best tutors and actually taught the material that the professors presented. Math Cafe at the Women's Center Library was a crucial part of my success at UC Davis.
- Financial Aid was the most helpful during my time at UC Davis. I would not have been able to attend without the aid.
- I would no have been able to attend UC Davis without financial aid. Orientation was very helpful as well. It allowed me to familiarize myself with the campus and some faculty.
- Academic advising was most helpful, though not all the people I spoke to were equally helpful. In general, advice that was tailored to my experiences as a transfer was most helpful. As a transfer with transcripts from 3 other universities, it was helpful when counselors were willing to look up equivalents and requirements and make it easier for me to graduate within 2 years rather than repeat courses.
- Academic advising was helpful in order to organise my schedule and graduate on time.
- I found my way through the UC Davis system through trial and error. Save the students tuition and eliminate all these positions.
- Academic Advising let me know which classes I did or did not need.
- Academic advising was helping to expose me to different options available (various classes, different minors/tracks, etc). I didn't make use of tutoring or CAPS although I should have, but that's my own fault. I have heard good reviews about them though. Receiving financial aid was never a problem for me.
- None of them - I was quite disappointed with them.
- If it were not for financial aid, it would have been impossible for me to attend UCD. Academic advisors were also very helpful. They seemed genuinely concerned about my desire to graduate and helped me greatly.
• I would usually just talk to the adviser from my department who basically just showed how to get in and how to get out. That is the ultimate goal...to get in and out and I was showed that.
• Academic advising and financial aid

• got financial aid i didn't know i was eligible for which was very nice
• I thought CAPS was really helpful, especially the Women's Group. I think that group therapy is a great idea for students.

Q2: What obstacle(s) did you encounter when using any of the above mentioned student services? Please provide at least one example.

• Academic advising was not helpful, plenty of times they don't know anything about the courses taken especially for the school of engineering. Is like they're trying to guess what class you are going to fit in when asking about electives, they have no clue.
• No major obstacles.
• Long wait.
• difficulties scheduling the appointments because there are so many students wanting to get an appointment.
• I did not feel like I was involved with the UC Davis atmosphere because I did have friends throughout my college years. I met many important people during my time there but it is hard to get involved in activities with people you don't know.
• I didn't know there was tutoring specifically for transfer students (was there?)
• Academic advising with peers was always worthless.
• None. The financial aid was excellent.
• Sometimes it was a little stressful to get advising sessions at a convenient time because I was A. taking classes and B. living off campus. I could usually schedule pretty convenient times though.
• Money has always been an issue.
• Hard to get time slot
• I already mentioned this in the previous section.
• None.
• it was hard to enroll in summer financial aid
• None.
• nono
• I just did not have time to go to all of the services.
• No obstacles with the services necessarilly. A couple hurdles transitioning post transfer from semesteres to quarters, but my advisors helped me with those as best they could.
• Some academic advisers do not know how to do their job; while others are excellent at it. I do not approve of them suggesting that we take classes we do not "need" to graduate (AKA filler classes or GPA booster classes).
• No obstacles.
• I was hesitant about using CAPS because of the stigma from using counseling/psychological counseling services. It wasn't difficult making appointments for the 2 services.
• My advisor from the first year was no longer there the second year.
• One of my transferrable classes from community college did not transfer with me. This became an ordeal when trying to figure out what GE classes I still needed to take. It resulted in me taking a class unnecessarily, which was a shame.
• Not enough advisors for the amount of student in my major
• Didn't know about most of them!
• I never got Calgrant for an unclear reason.
• One obstacle I encountered was one that every student faces: faces with a new environment...making friends and finding their way. At this level it it very difficult because you need to keep your grades up as well as your social skills so can function in society. Finding things to do outside of classes isn't hard, it was finding it within myself to grow. UC Davis does a great job of offering a variety of activities, but needs to advertise and be a little more hands on with the transfers. We come from very small schools and are very intimidated. It takes a lot of emotional strength for the transition.
• Sometimes the group leaders at orientation seemed as if they would rather not be there.
• The orientation was offered at a time that I was unable to attend, because of this I had difficulty navigating the registration process and choosing the correct course of study. I did not know that there were other options until the quarter I graduated.
• Nothing bad that I recall. There was a time where I needed to meet with an advisor within a day, but could not for at least a day or so, so I figured out the issue on my own.
• I can not remember having any trouble with the student services.
• The CAPS services were somewhat helpful. Again, I'm not sure I connected with the mental health workers so that could have influenced my negative experience.
• I mentioned this in the last question. The class registration system did not enforce prerequisite requirements, which caused problems for me.
• The academic advisors in the psych department were not always helpful. XXXX was the best, but some of the others seemed inexperience. Janet in the sociology department was instrumental in helping me double major.
• I never knew there was tutoring available. As far as CAPS, it was too intimidating to think about using this service because I was given too little information about it. Academic advising was helpful at times, however as far as organizing my schedule of classes to fulfill the graduation requirements by the end of my senior year, I was better off doing that myself. Also the academic advising for the
College of Biological Sciences was always incredibly busy and took way too long.

- I would say the accessibility of tutoring, but I am pretty sure it was just my (bad) decision to not use it.
- No obstacles.
- Academic advisers seemed intent on prolonging my class time at UC Davis and were unorganized and unhelpful, at times it seemed that they were more intent on keeping me from graduating on time than on my academics.
- The lack of communication from Academic Advising about what I needed to do to obtain actual IGETC certification because I had been told in order to transfer I had to be certified and when I arrived my advisor didn't tell me to go back and get the certification from my community college which caused a problem when I attempted to apply for graduation.
- My initial academic counselor gave me incorrect information about class prerequisites. As a result I was almost delayed a year in graduation. The only reason I wasn't delayed is that I found another class that technically met the prerequisite requirements even though it did not meet the content requirement. I succeeded in the class as a result of the support my fellow students showed.
- I didn't use these services because I didn't really know about them or what some of them were.
- Advising both before starting, and during enrollment, was inaccurate. If I followed their suggestions and course schedules I would not have graduated on time. Following my own reading of the catalog worked for me while unfortunately advising let down some of my peers.
- The registration office could really use some classes on customer service and listening. I was delayed a whole quarter because a staff person withdrew me from the winter quarter instead of deleting the wrong class I had registered. It must be nice to just say "oh well" and continue on with your day.
- I was not aware that most services were provided for students free of cost.
- Time. I am always busy with classes and part-time job.
- orientation I felt so lost in the numbers.
- it was hard to mingle with students.
- I did not know where they were, or that they even existed.
- I did not have full knowledge of all the programs Financial Aid provided to me. As a result I did not know I could get more financial aid so that would have to work while going to school. This would have helped me so much with GPA as I would not have to work while going to school to support myself. The only real bad thing about tutoring is that sometimes the classes get so crowded and many times I would have to sit on the floor just to get into the session. Academic advising was great program. Period.
- Financial aid was actually very accessible and distributed in a timely manner. I didn't encounter any major problems.
- At times, it was difficult to meet with someone, since it was in high demand.
• There was a dearth of information directly disseminated to transfer students prior to transferring.
• None advising office was inconsistent, one quarter they told me I needed one class to graduate and all other areas fulfilled, the next time (2 months later) I got a completely different list. The 2nd time, the advisor had no clue what she was talking about and I almost had to take an extra quarter... and she suggested I reduce my work hours and basically told me "that sucks" when I said that I was given different information and that I needed to work in order to pay for the ridiculously over priced education.
• CAPS had a limit on the number of times I could attend per quarter. Academic Advising was sometimes low on staff members but normally you just had to wait a bit, which was fine.
• I had a hard time getting a fairly specific question answered by the academic advisor, it took two visits and a number of phone calls being passed from one advisor to the next to find someone who was able to answer my question. In the end I think I figured it out on my own.
• N/A
• none
• I had some difficulty obtaining an appointment sometimes with academic advising, but usually the process was not too bad.
• Sometimes I felt like I didn't get enough time with my academic advisors. It felt like they were rushing through their work with students.
• I emailed the academic adviser for NPB one time with a question about a class. She was rude and unhelpful.
• I received little to no help and/or notifications of these services so I felt a huge disconnect from the school, campus life, etc. It got slightly better during my second year.
• The one "obstacle" was really to make friends. I found that it was more difficult for transfer students to make friends because everyone who came in as freshmen already have their group of friends.
• I did not encounter any obstacles while using the academic advising services.
• None of the academic advisors were helpful for choosing classes. Especially getting transfer students to graduate on time.
• Advising was never clear nor helpful. Seemed as if they didn't care about the students.
• Counselors seemed to always be in a rush and when I did get a chance to talk to them they were just showing me the negatives. Was told I would not be able to graduate on time and kept getting underestimated.
• None, they were always available to help me during appointments and walk ins
• Lack of commitment and knowledge provided by the academic advising office. The only advisor I found helpful was also the last advisor I utilized. Also, I had no idea until taking this survey that there were tutoring services available.
• I particularly do not like the use of students as academic peer advisors. I feel as though my academic records and personal information should not be available to students.

• Academic advising was often wrong and gave bad advice, not only to me but to others I talked to as well. Academic advising often contradicted what was in the student handbook and the catalog, and made getting accurate information difficult. Many times they would classify my transferred classes as a different class and then try to tell me I had to retake the classes, even though I didn't have to. If I had followed their advice I would have wasted a lot of money and an entire year retaking classes. I know other students who did follow their advice, and ended up wasting an entire year and a lot of money retaking classes. My wife was one of those who took their advice; she took the o-chem series twice because of them, and graduated a year later than she should have.

• The only major obstacle I encountered was the school did not receive my IGETC completion twice. I had to go pick up a copy and hand deliver it to the school.

• Tutoring services were not beneficial in any way because there were no tutors who knew how to help students with Biochemistry, Cell Metabolism and Function, and other difficult upper division undergrad courses. It would have been nice if there were more outlets to get help with these difficult classes because the one professor and one TA teaching it aren't always available. Also, CAPS services had some benefits, but that's when it wasn't a grad student practicing. I would have preferred to talk to professionals, who knew how to help me achieve my ready set goals that I wanted to accomplish because of attending counseling sessions.

• During orientation I was unable to nail down which classes I wanted because the group size was too large.

• As a student I lived off-campus and had to spend several hours per week simply traveling back and forth from school and home. I found those services unhelpful due to them seeming to require a student to be on campus to use them. Also I found the amount of mandatory homework for my classes so time intensive I did not have time to make use of many student services.

• Orientation was basically a waste of time and money. I was apparently transferred into the wrong major and the orientation advisor far less than unhelpful. She said I would have to take the lower physics series after I completed the upper series at my community college. When I asked her what major I needed to have a particular career, she was at a complete loss. I spent 3 days analyzing the catalog and found the right major, courses, etc. Also, the orientation was basically useless since I had to change all of my classes, the tours/guides were confusing and the flood of superficial information was overwhelming. I had to find all the activities and services I used on my own even though they did have bit spots in the info torrent called orientation. Also, the food was rather poor.

• I don't believe I encountered any obstacles while using these student services.
I was never made aware of many of the student services available at orientation. I feel I would have used more of them had I become aware of them earlier on in my Davis career.

stress

My academic staff advisor was not willing to take the time to really listen. She just wanted to put me in classes without trying to understand my needs, and what workload I could take on. She made many assumptions and just wrote out my schedule and sent me on my way. When things got tough I did not feel she was someone I could turn to for assistance as she was unhelpful from the beginning. I believe she should sit in on some of the classes to gain a better understanding of each course as well as each professor.

None, advisers and services were readily available.

I tried using the tutoring center once for organic chemistry, but the session was booked past capacity for it for the first few weeks.

they were annoying, unsure, unspecific.

Academic advising- having a new adviser review your transcripts doesn't allow for a relationship to build.

I found the orientation to be less helpful. It is very disorganized and made it difficult to process all the new information.

Academic advisors were not very friendly or knowledgeable. This needs to be more tailored to the individual student rather than a one size fits all academic plan

The chemical Engineering/Mat Sci adviser was let go during the 2nd year due to budgeting.

Only obstacle I ran into is getting academic advising for the right department. I had to wait X amount of quarters before I can switch my major.

Academic Advisors were not very helpful in planning out my course of study. I didn't get help figuring out how to get all the upper division credits I needed to graduate. I wasn't given any notice that I was behind in credits until it was too late and I had to do another quarter. Also, I ended up taking some unnecessary courses without knowing either.

It was, at times, difficult to get an appointment with a counselor. And some times they did not seem interested in me and my academic goals.

CAPS only allowed 10 appointments and then I had to pay for counseling out of pocket and find a suitable therapist close to school. That was definitely a struggle.

At the orientation, I felt really awkward because all the classes were already full, and I ended up taking classes I did not need just to satisfy the unit requirement. The person who helped me for the registration was NON science major therefore I registered to the wrong math course as well. (21 series instead of 16.) I really really wish I started my transfer year better way.

none

Academic Advising signed off on me allowing to complete my second major with the knowledge that I would be able to complete it while being over the unit cap,
and in the middle of my progress, I was told that I could not complete it; thus the third year of my studies being obsolete.

- Sometimes Fin Aid checks came in late and that was a hardship bc ilhad to scramble to find temporary funding for my classes on a budget that was already stretched to the limit. CAPS appointment calendar was always really full too, so sometimes I had to wait a long time for an appointment when it would have been more beneficial to be seen sooner rather than later.

- None.

- Sometimes, as a transfer student, it's already assumed we should know a lot of things. Quite simply, we don't find out about some of these services at all.

- The tutors didn't always have enough one on one time with students. There weren't enough qualified tutors. Also, not enough seats or maybe I was going to the wrong place for tutoring.

- Financial aid once lost my information and my tuition was not paid on time, causing enrolling problems. Turned out they put my loans towards another student's account. I did not receive an apology after the fact. I had to take out 25 thousand dollars in loans to attend UCD, and this is what I got in return.

- Difficult to coordinate schedule and appointment time

- The department adviser was hard to get in contact with. It was impossible to sit down with her to discuss what I needed to do to graduate in time.

- Overcrowded rooms with too many students and not enough tutors. Often times in the Math Department we would overcrowd the teaching assistant's office and have to move into a small lecture room which was not always available. Sometimes people were standing in the doorway and hallway trying to listen in on what the tutor was saying.

- I did not encounter any obstacles to use any student services I tried to use.

- My faculty advisor was very difficult to get in touch with. I only met with him during orientation and when I petitioned to graduate.

- Some of the people I spoke to regarding academic advising (not in the transfer center, but in the sociology department or the I&s dean's advising) were not knowledgeable enough about ways in which transfer students may have courses that are equivalent that they have already taken. They made me feel discouraged because they made it sound like it would take me a long time to graduate.

- I didn't know I had them or needed them. Outreach is below satisfactory. If I am paying for these services from my tuition I would expect them to do a better job.

- I did not use them.

- N/A

- There were a couple times when the advising service in my department provided me with confusing or wrong information. Both cases it was transfer related, I believe.

- Weren't available and went they were - they weren't knowledgeable enough

- None.
• The financial aid lines are terrible. They are discouraging. There needs to be more
people hired and more computers set up to accommodate the influx of students
during critical times of the financial aid process.
• financial aid has long lines
• The psychology department is really impacted, so it was difficult to get advising
appointments near the time I needed/wanted them.

Q3: How did you overcome the obstacles (if any)?

• CAPS and the support of friends.
• Patience
• I was just patient and tried to do initial legwork on my own for scheduling my
classes, before meeting with the advisor. And please note- the obstacle I
experienced was more so in the college of letters and science (psychology major).
I had no difficulties with getting advising for my minor (textiles and clothing).
• I did not participate in any activities at the school.
• I didn't.
• Did my own research online.
• Every time.
• more loans
• Go early to sign up
• Really, I had to use my own intuition and simply go to office hours for professors.
I found out in my second year at UC Davis that a significant portion of students
cheated and even though I did things honestly this was a large detriment to my
grades. Many classes within the larger lecture halls had many old tests floating
around. I earned a lot of B+'s and A-'s that really should have been higher. I got a
lot of my information from just meeting other students and figuring out the truths
from the mountain of lies. I currently have been accepted to medical school, but I
sadly cannot attribute this accomplishment to anything UC Davis did for me
besides the reputation associated with its name. I thrived because during my
community college career I finally figured out how to study and applied those
techniques to UC Davis where frankly, a lot more students are aptly lazier than
my community college counterparts.
• I enrolled earlier for summer school
• N/A
• I saw a different counselor.
• N/A
• I decided to use CAPS because the psychological counseling services are
confidential, and the other services included other people who were stressed out,
like me.
• Had a new advisor assigned.
• I was able to work with the Registrar's office to include this class on my
transcript. I still was taking an extra class though.
• prepare early and try to be the first one in.
• You just have to hit the ground running. I think that I just knew what I wanted to get out of my college experience, which motivated me through any obstacles I encountered. Asking/talking to other students that were interested in the same things I was is one of the resources I used the most.
• Had to do without certain things for lack of funds
• I found friends in similar classes. We studied together. I got over the "need/want" to do other stuff. I accepted the studying lifestyle. I had family and previous friends that were really close so I confided in them a lot. Some don't have this option.
• It was only one day of dealing with these people so it wasn't so bad.
• Just kept plugging along.
• It was class scheduling related, so I got the information by myself.
• Another obstacle I had was living costs at Davis. I did not find employment while doing my undergraduate work and it increased my stress levels. I'd suggest exposing transfer students to employment resources available on campus perhaps during orientation. In addition, perhaps having orientation be more of a social event for students to interact since meeting friends at a new campus lead me to isolation my first year. I was fortunate enough to meet my roommate during orientation and perhaps having an event to help find housing or meet friends/potential roommates would be helpful for transfer students.
• My own advising and asking other students.
• None.
• Not applicable
• I made a point to distrust anything I was told in advising and by finding different routes to achieve my academic goals.
• I went back to my community college and high school, paid for new official transcripts and had to make an appointment with a counselor at my community college for the following week, get the certification and have it sent over to Davis for approval.
• The camaraderie between students was my greatest aid at UC Davis.
• I did not have any obstacles except financial concerns.
• None
• Self reliance. Something UC Davis rarely preaches, but should.
• You have to just keep pushing on class after class. Stay in touch with your teachers and advisors. I gave birth to my baby boy during a school quarter and missed a midterm. The teacher worked it out with me to complete the course on independent learning. I passed the class with an A the following semester. But that's a situation that could have put me back a whole year because it was an A & B part class that you have to pass A to get into B. So it's really important to work with your instructors and not just let things go.
• N/A. Did not receive assistance from UCD campus services while working towards my undergraduate degree.
• I seldom participated in campus activities.
• I was lucky I worked for the first resort and later became an orientation leader and learned so much!
• I overcame the obstacles by seeking out and talking to anyone with knowledge about how the system works from professors to university works. However, I know a lot of people are too scared to ask, so they don't know about all the programs available to help them.
• N/A
• I made an appointment for a later date.
• Most obstacles specifically developing networks of academic, informational, and moral support were overcome with the help of friends who attended UC Davis starting their freshman year and helped me through the hoops.
• I had to talk to 4 different advisors in my major and in the college of letters and sciences before I was able to get anything consistent. I almost took another quarter because of the error which would have cost me a lot of money that I didn't have. After that I stopped listening to the advisors and gathered all my paperwork and figured out what I had to do on my own.
• I spent a number of hours reading the fine print of the guides on my own to find the answer to a question about some transfer specific requirements and what fulfilled them.
• The transition was difficult but after some time I adjusted.
• I tried to be flexible to make it work out.
• I tried to schedule several academic advising appointments and make sure I had all my questions ready when my appointment was scheduled.
• I followed the checklist of what classes I needed to graduate with a degree in NPB. I had no problems working out my schedule without help from the advising office.
• I proactively researched things to help me be a more active student. I wasn't doing well during my first (transfer) year at UCD so I was desperate to get some academic advising. This opened a lot of doors for me both academically and socially.
• Join student groups.
• N/A
• Talked to other transfer students.
• I set my mind to what I wanted to do regardless of what I was told
• Hard work and balancing tradeoffs (Food, shelter, and tuition versus academic excellence).
• I avoided receiving academic advising if I knew a peer advisor would be the one handling it.
• I made sure everything I needed to overcome was well researched and understood before I tackled the situation.
• I'm very persistent and just kept on trying and never gave up.
• I made an appointment with an academic counselor as soon as I could.
• I did not overcome them.
• I looked spoke to classmates, asked questions and looked online.
• Reaching out to students who started as freshmen helped me navigate my way around the Davis system.
• CAPS
• I began seeing student advisors
• I made it through without it.
• i used my brain.
• N/A
• I independently sought help from advisers and faculty.
• Seeked outside help
• None
• I took the necessary classes anyway and wanted until I could switch majors
• I had to take an extra quarter and those "unnecessary" courses ended up counting toward my upper div. totals but not for my major.
• I kept seeing counselors until I found the right one.
• I had to do my own research and use my parents insurance to pay for counseling. I also had to drive 45 minutes from Davis to attend counseling for my last year, and I switched therapists twice.
• n/a
• I decided to take the minor and forget the major as it was impossible to convince otherwise; along with being on Academic Probation twice, and being Academically Disqualified at the end of the year, and yet still getting a degree in the end; I think I did pretty well, considering now I work for Google! Thanks UC Davis!
• Never.
• One of the student groups I was in had a transfer-focused section that relayed information to the transfer students. Also, the campus' VA office sends out helpful emails.
• I didn't; I barely passed Calculus.
• I had to badger the financial aid staff for a week to find out what was wrong.
• Walked ins and scheduling weeks or months ahead of time
• I used the catalog.
• We would try to change locations to a larger room, but if that was not possible we would all do our best to share the small space that we had and arrange our bodies in a way that a maximum number of people could see and hear the tutor speak.
• N/A
• I had to "stalk" him, for lack of a better word, in order to get his signature on my petition to graduate
• By talking to other advisors who were knowledgeable about transfer students.
• By accomplishing things on my own. I wish I didn't have to spend so much money doing so.
• N/A
• Spoke with other students and sometimes professors
• Went to college own advisor
• not a problem
• I just waited for an appointment that was more in the future than I wanted it to be.

Q4: What are some of the ways that you believe the student services provided to transfer students at UC Davis could be made more helpful?

• Better academic advising
• For most transfer students who want to complete their degree on time, studying abroad is not a viable option. It would be nice if UCD could work on their agreements with partnering schools overseas to make studying abroad more available. It would be nice if the student CAAA could make payment options which better catered to transfer students.
• Faster service.
• I think just making them well-known to the students and reminding them that the resources are there. Sometimes they can forget.
• I think advising could be more effective with transfer students because my experience was frustrating and difficult to understand what classes I needed to graduate.
• Maybe if this survey was sent out after the first quarter or two instead of after four or five years.
• Probably integrating into the social community more- and I mean the community of non-transfer students. it's hard because a lot of people make friends during their freshman year and then move off campus. If there was some sort of party that had transfer and non-transfer students mingle it would be very helpful!
• They have been very helpful. Perhaps a bit of warning about the difference from a UC and a JC.
• Email reminders of special events or workshops
• Find some way to help with classes in upper division because outside of the writing tutoring everything else is worthless. 2. The transfer center needs better computers. For goodness sake, the equipment in there makes me feel like I've gone back to 1980. Outside of the free coffee that was offered once a week and the occasional free printing the transfer center was outdated.
• It would have been nice to be given more detailed instructions on how to go about finding relevant internship opportunities.
• More on campus jobs. I was working 30 hours a week in Sacramento and living there since its way cheaper so I only went to Davis when I had a class.
• It is helpful to know when our advisers go on vacation so we know when to visit them.
Have mentor-ship program. Transfer students need help to get used to new school.

Now, and more than ever, students need access to affordable education. Financial aid is a continually needed resource.

Just make sure that everyone in the academic advising offices knows how to do their job. They should want us to graduate within 2 years after transferring. They should lay it out in a straightforward way, "This is what you have to take to graduate with this degree". Students are very easily influenced by people they think have knowledge or authority on a topic and suggestions to take classes that aren't "needed" are unhelpful.

Have a transfer lounge where there can be hangouts to get in touch with other transfers and students offering respective services.

I think it is important to have transfer students to meet one-on-one with an academic advisor to plan their courses before their first quarter in UC Davis. I did not get a chance to and ended up taking courses that I did not need.

Send transfer students weekly updates with clubs and services that they could attend to meet other transfer students.

I think it would have been nice to have a check-in my second year at UC Davis. I didn't know if I was missing out on something that I could have been taking advantage of.

they can provide more faculty

Maybe put something/let the advisors in each department know about your services. I went to my advisor the most, but she never mentioned your services, maybe she wasn't aware of them?

Have more specialized help. Transfer students usually need information about their major or department since those are the only classes left for us to accomplish. I felt student services centered too much on general classes' information, which transfer students already finished in junior college.

more involved, better orientation. On orientation day, i had a person help me sign up for too many classes! i wish i had more guidance going in. i liked the website that we had initially. could be add a chat room/forum to ask questions on there? the student help given was quite worthless.

A more clear and complete mapping of transfer lower division classes would be useful. I had several classes for which I had a hard time negotiating the transfer status.

See previous.

I suppose you could make academic advising mandatory for transfer students. For some reason I thought I didn't need any help at the very beginning.

Making sure that advisors are well trained.

Just provide more information about these services... what EXACTLY they offer and how to use them, WHERE to go to get these services (perhaps give a tour of the buildings so students are more familiar with them). Perhaps send e-mails reminding students that they can use these services after the school year
has commenced. Maybe give student testimonials of how these services were helpful to them so new students can get a better idea of the different ways to use them.

- less transfer student ice cream socials etc more help for academics and navigation of the UC Davis school system.

- Communicate how transfer students are to meet their transfer requirements instead of just stating the requirements for transfer.

- More emphasis should be placed on preparing students for the working world rather than simply graduating with a degree. The current academic schedule for Aeronautical Engineering prevents a student from participating in 6 month co-ops, which are very common and extremely beneficial to engineering students.

- Better preparation on selecting courses for first quarter at UC Davis.

- They need a better way to inform the transfer students about these services. Ways for the less proactive students.

- Encourage students to rely on themselves. Understand where to find answers themselves instead of who they should talk to for answers.

- I'm not really familiar with all the services. The campus tour was really useful.

- In addition to orientation, UC Davis can hold more events for transfer students throughout the year, perhaps through different programs and colleges, and make the transfer student population more visible on campus. for example, booths set up on the quad at lunch, posters with information, etc.

- Provide assistance in finding off-campus apartments and/or roommate matching.

- I think the changes that have been made in Orientation have helped a lot, I think that also the fact that there are transfer housing is also good

- Better publication

- The main thing is help with financial aid and helping transfer students know what is out there for them, so that they can be a full time student and not have to work a part time job. Also it helped me a lot on learning how too choose classes for my major.

- There are many orientation opportunities. Personally, I feel I didn't participate in many because I wasn't really interested in that. Once I familiarized myself with the rhythm of quarter system, classes, my major, etc., I began to make friend and pick and choose the services and activities I was interested in.

- Perhaps scale the size of the services to the size of the student body, to increase availability.

- Student services could be made more helpful by providing more opportunities for networking between transfer students and with faculty and other students.

- orientation- NEED BIKE SAFETY AND RULES for being such a bike friendly town, no one understands the rules involved and I have seen more bike involved accidents than car-car accident because the biker didn't follow
the law, get better advisors that know what they are talking about and are consistent!!

- it would be nice if the advisors where a bit more aware of the transfer requirements. I was looked at like i had a 2nd head when i asked about language transfer requirements and grad requirements.
- Advertise the service better and focus it more on transfer students. Have transfer student forums.
- I believe more activities for transfer students (specific to them) would be very useful. I met many of my friends through transfer events or through my major. These events would help students in a similar situation connect with one another.
- I'm not sure. But I do think that UCD could improve their student services for transfer students. During my time at UCD most of the transfer students felt like they had a hard time integrating themselves into UCD life. Most felt like UCD had excellent student services for freshman students and less than stellar student services for transfer students. Possibly having a week long orientation for transfer students.
- More awareness to these services would be SUPER beneficial!
- They should be made clear at orientation and through follow up emails what is available
- I remember attending a coffee social in my second year, found that was nice to meet people from similar backgrounds. I think it would also be good to have a transfer adviser (not student) to keep transfer students in the loop of what's happening in Davis and how to get involved.
- Better orientation.
- I think UC Davis should put more time and money into helping students prepare for life after graduation. The economic climate is difficult and students need more help with job placement.
- Have more transfer student organizations. Seems as though there is a lot of energy and effort put in for the freshman's, but not the transfers. I felt as if I was thrown into school and no one was there to help guide me. Very tough the first year, I was dismissed because of a low gpa.
- Have peers who went through the same career paths available.
- Make students more aware that they should talk to their major adviser early to get their classes lined up
- Better funding and outreach. More information provided in an easy to access format online.
- If the academic advisors were more competent.
- Targetting transfer students and letting them know the types of services they offer would seem the most beneficial.
- Hire better tutors and a diverse group of tutors who will be able to help students who are struggling with their upper division core. Make tutoring more readily available, I didn't find out about tutoring until my second
quarter, so orientation should be a must for transfer students so we are informed right away of everything that is available to students. Maybe have a transfer day where all transfer students can meet at the beginning of each year or even every quarter, because not all students come in during the Fall.

- I think orientation could be more in depth. Talk about the systems the teachers use like sisweb. I had no idea what they were talking about my first day. Also, an orientation about classes and how to pick them in a smaller group with time for questions. So you don't feel like it is a mad rush.

- More online options for those who can't appear in person.

- Lower the cost of "public" education. If its not realistically accessible to most of the public, its not a public education. 2. Overhaul orientation. Simplify every aspect of it and get better food. I felt like a little kid being herded around, lectured to and fed a rather pathetic snack while having to pay a very high fee.

- I would like to see some student services for transfer students be provided for at the student's home school so that they don't have to wait until they actually arrive at UCD to use them.

- Provide more information! Flood the student with information early on; you can never be too informed on the services that are available to you. I don't want to know about the tutoring services half way through the quarter when I'm already failing.

- Orientation was far too rushed and not put together well. It needs to be more bullet pointed with key things for students to know. We were just told to sign up for any class we could get into, but there was no help with telling us which classes we should actually take.

- In some cases, transferring students needed more direction in the appropriate courses to take. Perhaps advisers could provide more help in explaining which classes transfer from their previous school and what courses they need at Davis in order to graduate. I encountered several students who did not do their research and were unaware that some units did not transfer. Others had bad advise from Davis advisers and were taking the wrong classes or too many units and were failing classes in their first year.

- One of the hardest things was securing and internship in my major. I was lucky enough to find one, but the postings through aggie link were usually already filled or got no reply from applying. So further maintenance of those listings to keep them relevant. Maybe encourage professors or others offering internships to consider transfer students. It's a challenge already to get personal interaction from a professor of a class of hundreds in 10 week quarters coming from much smaller classes sizes, much less a strong enough connection to hope to intern with them.

- been told what is possible, knowing just how much is offered. (there is a lot and no one tells you)
• Make transfer dorms more accessible to students without families. (Dorms are great way to meet people and feel included)
• I think it would be helpful to initiate social events for different majors. It would give new students a chance to get to know other students with similar interests.
• The academic agenda is so different between universities and junior colleges. I personally feel that transfer students need more help acclimating to the university life. Teaching, lecture, homework and exam styles are very different I felt like I want prepared for it.
• If there was more attention to CAPS and tutoring, I would have definitely taken the time to look into these services. I don't recall ever hearing about tutoring services when I transferred.
• More clear and honest about the requirements and the time frame in which it is reasonable to expect students to complete those requirements. Particularly upper div req. Which are hard for transfer students to cram into two-three years since they aren't available at all at Community College. More support from the counselors, and more friendly/welcoming office staff and counselors.
• No, I figured most of it out on my own.
• I think for transfer students at orientation have the employees from each department in academic advising at least supervising the students helping to make schedules for transfers. Because I had never been on a quarter system before and signed up for 7 classes and the peer advisor approved my schedule. Or the peer advisors at orientation need more training to advise transfers academically.
• When I transferred, I moved to Davis by myself and I really didn't know anyone. My first year in Davis was really miserable, because I felt no bonding to the school and people, and driving back to my old town every weekend. After my second year, I found out that many transfer students who have felt the same way. Maybe making a club and having party/meeting monthly might help to help those sad transfers... (If there's already a club like this, I obviously did not know about it. so... let transfers know about it?)
• More engaging with students, and have students be more involved with extra-curricular activities; bring the "freshman experience" to transfer students who did not experience that, and most of the time, they're actually very willing to partake in those same activities.
• I didn't actually know about tutoring until my third year, so publicize that more.
• I think the services are there; it needs to be made more explicit. I had to learn a lot from other students, and didn't know about a lot of the services offered (or what they did) until it was time to graduate from Davis.
• Instead of having social mixers maybe provide more tutoring. Or provide lists of transfers and their majors so we can meet people that we could study with.
• Make people more aware of the TRV center. I would not have known about it if I wasn't a peer advisor. May be have community colleges spread the words of what UCD has to offer so that they can be more prepared when coming in. Can advertise more during orientation day.
• Hire nicer people.
• A more active role on campus.
• The services could be open more hours, provide more information and advice regarding unpaid internships
• Include CAPS into the campus tour -- I never even saw the outside of the building in 2 years! Have a bicycle tour of UC Davis at orientation. Advocate for students to attend their TA's and professor's office hours; we pay for our education and we have a right to ask the teachers questions about the material presented in lecture.
• Nothing that I can think of at this time.
• There were not enough events for transfers for socializing. I think the hardest part about being a transfer student was not having met people in the dorms during the first year. It would have been nice to have more events for socializing (not as many events for telling us how to get around the university because no one goes to those).
• Student services should be eliminated so that financial aid and part-time work are unnecessary to earn a degree. Having a multitude of overlapping resources that are only used to perpetuate paychecks does not benefit the students.
• In providing more paid research activities to the students. Summer programs or semester or year-long programs.
• N/A
• By somehow getting students to feel more comfortable or open to making use of those services. That was my biggest (personal) trouble at Davis, but I didn't have that in my junior college. Might have just been the smaller scale and friendlier staff.
• Be nicer
• You just need to show students exactly what they need to satisfy their requirements to graduate.
• Before I transferred, I was unaware of the deadline to register for orientation until it had passed. An option for late registration might allow more people to participate in orientation.
• n/a
• Someone else mentioned the transfer center to me, but maybe you could advertise it more.
Q5: Do you think that your use of any (or combination) of the following student services (orientation, academic advising, tutoring, CAPS, or financial aid) played a positive role in your timely graduation from UC Davis? Please explain.

- CAPS is the only thing that helped me out.
- I majored in Managerial Economics. I made a point to discuss my plans with an academic advisor within the Ag Econ department at the beginning and end of every quarter. The advice I received was useful and timely. I did not use the peer advisors. They usually did not have the experience to provide thoughtful suggestions. However the staff advisors were very helpful.
- Academic advising. I took only the classes I needed to graduate and not much more.
- Definitely. These resources made me feel like I was not alone in planning my classes and involving myself in the school. These resources gave me a sense of community and belonging, which can be incredibly important for transfer students -especially those leaving home for the first time as transfer students, coming into a new environment where many students already did their transition two years ago for their Freshman year.
- The beginning orientation helped initially but there was no follow up.
- Yes, financial aid, for obvious reasons - though I still found myself getting distracted by wanting to work more and do internships. CAPS, because school, work, and life get stressful and at times, overwhelming. Advising balanced what I wanted to do with what I had to do.
- Yes! The orientation was helpful but definitely the student services (advising).
- Academic advising definitely was a key. I became friends with the advisers so I felt really comfortable stopping by if I had any questions.
- Yes, bc we have somewhere to go to for help
- I already answered this earlier, but the cliffnotes version would be - no.
- Just academic advising. We made a plan so that I was able to graduate on time.
- Financial Aid was huge.
- Academic advising helped me construct a class schedule that enabled me to graduate on time.
- Yes. Academic advising definitely helps since I can plan for the classes that I need to take so I can graduate.
- Again, Academic Advising. My advisors helped me map out my courses throughout my two years at UCD.
- My financial aid ensured that I graduated on time, because otherwise I would of had to work.
- I needed academic advising in order to graduate in a timely manner.
- Academic advisors helped me plan my courses each quarter based on what was required for the major and my interests. The counselors at CAPS taught me coping methods for stress which might have otherwise caused my grades to drop.
• Yes. All the services previously mentioned contributed to my success at UC Davis because I was able to focus on my studies and college life.
• Probably academic advising since I needed help in figuring out which classes to enroll in for timely graduation.
• Yes, they kept me on the right track to graduate on time. They helped me with all my academic work and obstacles that came my way. Financially I could not have done it without financial aid.
• I don't really know. Maybe orientation and advising, but I hadn't participated in any of the other services/programs.
• I only used it at the beginning of the first year, but yes, it did help. Thank you.
• The use of tutoring and advising helped me in my graduation because it gave me goals and ways to obtain them. I have the personality where I need goals and I am determined to obtain them. CAPS helped smooth out some of the emotional rolls I experienced and made it more pleasant, but I am sure I would have made it without them.
• Absolutely. Having these kinds of resources for students is imperative for student success.
• In general, the academic advising was helpful.
• Yes, academic advising primarily.
• Without academic advising, I would not have known about the yearly unit requirements.
• Yes, as indicated before, academic advising helped me stay on track and guided me well.
• The academic advising helped only because I had to petition to have a class substituted for another I was required to take after switching majors, otherwise I wouldn't have graduated on-time. If I hadn't been able to talk to the adviser about substituting the class, I would have just taken the other class and had a horrible schedule my final quarter.
• I'm not sure that anyone could successfully manage the transfer process without an academic counselor!!
• I think that my determination was a major contributor, however, the other services helped supplemented the process and made the transition as a returning, transfer student much easier. I totally forget-services that were made available for returning students were extremely help in that I was able to establish relationships with other returning students who were of similar or at least closer to my age. This was a great support.
• No, they did not, and I believe that they played a large role in preventing me from graduating on time.
• Yes, I studied abroad at the University of British Columbia my first year at Davis after transferring and financial aid and academic advising were extremely helpful in paying for that experience and transferring my credits back to Davis when I returned.
I never attended orientation. Academic advising put me at a disadvantage due to incorrect prerequisite information. There were very few tutors at the level of engineering I was at. I never went to CAPS. No financial aid was provided.

yes knowing what classes are needed in order to graduate on time

No

No. Academic advising would've had the opposite impact had I followed their suggestions.

As I said academic advising is crucial to graduating on time. I've signed up for the wrong class many times or not known that I was supposed to complete one course before the other. Or if you didn't get into one class that this other class, not listed, was a substitute. If I wasn't advised on these things it could potentially put me back a whole year because I'd have to wait for the class series to be offered the following year.

Academic advising was very helpful, the counselors actively help me plan courses for upcoming quarters and get in touch with faculty members in my program.

Financial aid helped as I was able to work less hours and save time for studying and do better in classes.

yes.

It really did. I needed financial aid to go to school and for rent. Academic counseling helped greatly to make sure I graduate on time, and even earlier than I was supposed to.

Sort of, the thing that help a lot was the tutoring classes for the hard classes.

Definitely academic advising (mostly peer advising) and financial aid were crucial for me. Financial aid was a major help, there is no other way I would have been able to go to college. With peer advising it became a gateway to my academic adviser, with the help of my major peers I was able to seek out help and guidance from faculty.

Yes, since the general catalogue goes out of date rather quickly. By using the academic advising service, I could plan my schedule such that I could graduate within two years of transfer.

Academic advising from my department, Dr. XXXX from the School of Education, and financial aid played a huge role in my timely graduation by providing me with accurate information on college and university graduation requirements, encouraging me to pursue a minor in Education to fulfill breadth area requirements, and by funding my college tuition and living expenses.

No when because I didn't use them much. I am grateful though for financial aid without the grants and loans I wouldn't have been able to graduate.

financial aid helped advising, if anything, put me behind because they kept telling me the wrong classes.

Yes, academic advising made it really clear what I needed.

I don't think it was quite as reliant on the services as I was on my friends.

Financial aid helped me pay for school.

Yes, tutoring played a key role on being able to succeed in classes and move on
• Academic advising definitely helped play a role in a timely graduation. An advisor helped me plan out each quarter according to recommendations and how I preferred to structure my time at Davis. I would think that the psychological services would be useful too, but never had the chance to utilize it.

• I think academic advising helped me graduate in a timely fashion from UCD. But I think it was because I made sure to schedule multiple appointments with the academic advising center. I wanted to be proactive in making sure I was on the right track to graduate after 2 yrs and a quarter.

• No

• Yes. When I eventually found out about them, they helped me improve my grades significantly. In particular, I would talk to Dr. XXXXX (sp?) from time to time who helped me improve my grades, join student groups, etc. I think if all transfer students had an advisor like Dr. XXXXXX, they would all be super successful. I went from getting a D in one of my cmn courses during my first year to getting an A- in it when I retook it during my 2nd year. This really was a result of the aid I got from her.

• I have mixed feelings about how academic advising played a role in my timely graduation from Davis. I was well connected with the first adviser I was meeting with and she left the job in the middle of the school year (during my first year), then I have met a few advisers that wasn't as helpful as the first one was. (Mainly wasn't as emotional supportive as the first one, I had to turn to the House/CAPS for that)

• To a certain extent yes. I only stayed for one extra quarter.

• Yes. The academic advising center helped me with my IGETC certification. I could not have graduated without meeting all of the requirements for it.

• No.

• I guess it wasn't very timely, I had to balance work and school so it took awhile, but academic advising helped

• I wouldn't give credit to any of the above for my timely graduation!

• Yes. Academic advising helped me create an academic plan in order to graduate on time, and financial aid made it possible for me to be able to obtain a degree.

• Financial aid.

• Yes, it helped me focus on school.

• Sure, I guess you can say academic advising is the only service that really helped me complete all my courses on time. Although, it would have been nice to be able to take more exciting Plant related courses rather than Biochemistry and other such courses that weren't necessarily related to my major. I think I would have been more successful in general if I had the opportunity to take the classes I wanted rather than the classes I had to in order to graduate.

• Yes. Financial aid allowed me to take full course loads and the academic advising ensured I was taking the correct classes. They advised me which classes were harder to get into and which were offered less so I could work to get into those ones first.
• Yes, I would have probably not graduated if not for the financial aid, pell grant, undergrad scholarship, I received.
• Without student loans, Davis wouldn't let me attend classes or graduate at all. Therefore, financial aid was by far the most influential of the listed options.
• Thanks to financial aid and academic advising I was able to graduate right on time since they helped me pay for school and plan my academics accordingly.
• Yes, I do believe that these services played a positive role in my success at Davis. CAPS helped me manage the stress of living away from home and going to a quarter system, financial aid allowed me to pay for my education when my parents didn't have the money to front it, and academic advising made sure I took the right classes at the right time to get me to graduation.
• Financial aid 100%. Without it I would have had to work fulltime thus forcing me to reduce my class/study hours. Although I did not use CAPS, I was seeking counseling privately. If I had not had the private counselor I would have utilized CAPS so I am very glad to know it is available.
• Yeah, the help I received from my adviser assured me of the direction I was going with my courses. She helped me determine what I still needed to take, and how to get those classes I needed. I had a positive interaction with the advising staff in my department.
• Financial Aid really helped me be able to prioritize school, i still had to work but could limit it to part time thanks to the assistance I received. I know I was luckier than others, and even i could not afford to stop working all together. Orientation had a positive role in my UCD experience, but I don't think it fully helped to have my graduate on time. Infact our peer counsellor for our biology group was not a science major and didn't understand how much upper division units transfer students need to fit in the 2 years. She tried to tell us to take it easy at first and take some PE classes to fill units when we were concerned about the lack of available required classes still open by the time of orientation.
• Financial Aid.
• Yes- I probably would have taken less units or dropped out entirely had I not had financial aid in my second year.
• Most definitely. I benefited from the use of academic advising and financial aid. Without advising, I would have been ill prepared for graduation. Without financial aid, I would have never even applied to UC Davis.
• Tutoring and financial aid definitely help keep me on a steady path to graduate in 2 years
• Yes. Academic advising and financial aid helped me stayed focus and on track in what I needed to complete.
• yes. Without the right advising, I might have stayed longer than 2 years and the only person I could pay for school is with financial aid.
• only a little bit. The academic advisors confused me at first and told me different things. But eventually I worked it out.
• summer sessions helped
• CAPS helped me to adjust psychologically to my environment and process what was going on and the academic advising helped me to stay on track with my classes which was obviously the most important part of why I was at UCD... to graduate.
• I have no idea. but financial aids definitely would. I know one transfer friend who needed to take some quarters off because he couldn't afford.
• I wish I had a clear path set in front of me when I started my program even as a transfer student because I ended up coming in with too many units and was limited in time as to what classes and how many units I could take to graduate before the 225 unit cap. was a class short of graduating with Honors and having a second (and very important) major degree.
• It allowed me to get my degree?
• I love you financial aid! You helped me graduate!
• I did not use any of them besides orientation (one day), and financial aid, so I would say no.
• Without financial aid, I could not have ever considered UC Davis at all.
• Yes, please see previous comments.
• Not so much orientation because I didn't know what to expect and I was overwhelmed with tons of information. AA, tutoring and financial aid were very helpful for me to help me focus on my studies.
• My graduation had nothing to do with those student services.
• Without financial aid, I would have not been able to attend.
• Yes. Without CAPS I wouldn't have been able to treat an illness which severely hindered my academic ability. Without academic advising I wouldn't be certain what courses to take in order to graduate quickly.
• Yes, academic advising kept me on track to graduate on time. Tutoring kept me actively involved in my education. Student loans and financial aid reminded me that I was paying gobs of money for a college education, and that I desired a timely graduation to save money. CAPS would have helped if I knew where the building was...
• Absolutely, without Orientation, Advising, and financial aid I would not have been able to attend and graduate from UC Davis.
• financial aid is the most important program returning students with no family help, like me.
• Academic advising and financial aid was immensely helpful. Especially financial aid because otherwise there was no way for me to afford college.
• Academic advising help me plan my schedule so that I could graduate on time. But overall, I didn't really use any of the student services and everything went fine.
• Financial Aid, but then again I'm paying for that now plus interest to make up for all the less than helpful services.
• No.
• Academic Advising told me I was taking two classes I didn't need to graduate. Otherwise, no role in my graduation.
• Yes, it was so helpful that I didn't have to worry about financial burdens, so being kept in the loop about my finance was great. Academic advising overall helped me take the classes I wanted and allowed me to graduate in the time I wanted.
• Financial aid is the only reason I graduated.
• Yes both financial aid and academic advisors. If it were not for the financial aid, I would have had to cut back the amount of time I allocated for school and replaced it with more work. The academic advisors were great about communicating with my community college to obtain the requirements.
• No not really. Once I found out the exact units and the exact classes I need to earn my diploma I just went for it and never looked back.
• Academic advising - I had thought that I needed to stay another quarter, but the EVE and CBS advisers helped me work out a schedule so that I could graduate on time. Financial aid - Without financial aid, I would have had to work to support myself and pay for school; in that case, I would have had to take a lighter course load and definitely would not have graduated on time.
• Yes, CAPS is great. Tutoring is great as well, small groups.
• Academic advising helped me in that they were able to tell me how many classes I needed to take to graduate on time. I did an internship for most of my time at Davis, and was receiving units for this. I had a close call with having too many internship units, but they were able to determine how many classes I needed. I had also messed up on my appointment date, and they squeezed me in right away to help me with this issue that was very pressing.
## Appendix K

### Three-Year Graduation Within Gender and Ethnicity

<table>
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<th>Gender</th>
<th>Three-Year Graduation</th>
<th>Ethnicity</th>
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<td>.0%</td>
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## Appendix L

### Two-Year Graduation with Ethnicity and Gender

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